

# The Greek Economy

Quarterly Bulletin

03/22



FOUNDATION FOR ECONOMIC & INDUSTRIAL RESEARCH

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ISSN 1108-1198

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## Foreword

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IOBE is publishing its third report for 2022, as part of the periodic reviews of the Greek economy. It contains four sections, accompanied by an annex of structural indicators, comparing the performance of Greece with that of the remaining countries in the Euro area. It is preceded by a text outlining the positive momentum of the economy in a difficult global environment. The remaining sections include the following:

The first section contains a brief overview of the report, setting out its main points, analysed in detail in the following sections. The second section outlines the broader economic environment and includes: a) analysis of the international environment in the second quarter of 2022 and the outlook for the rest of 2022, b) presentation of the economic climate in Greece in the third quarter of this year, according to the results of the business and consumer surveys of IOBE, c) assessment of the balance of the State Budget for January-August this year and d) developments in the domestic financial system up until August 2022.

The third section focuses on the performance of the Greek economy. It outlines the macroeconomic environment with an emphasis on the second quarter of 2022 and presents the forecasts for the current and the following year, based on assumptions and considering the latest available data. It analyses developments in key production sectors in the second quarter of this year and presents the export performance of the Greek economy for the same period, based on data from both the national accounts and the balance of payments. After that, it outlines developments in the labour market over the second quarter. It then analyses the inflation trends in the first eight months of 2022.

The fourth section presents the main findings from a recent IOBE study on demographic trends and the challenges they bear for the Greek economy. The current report contains two special text boxes, one showing the contribution of the current account components (section 3.3B) and one showing core inflation in Greece compared to other euro area countries (section 3.5).

This report refers to and is based on data available until 10/10/2022.

IOBE's next quarterly report on the Greek economy will be published in late January 2023.



# POSITIVE MOMENTUM OF THE ECONOMY IN A CHALLENGING GLOBAL ENVIRONMENT

The Greek economy is experiencing positive momentum this year, stronger than originally expected and compared to the average of the European economies. The growth of the economy is accompanied by an improvement in indicators, such as openness, that can signal its qualitative upgrade. But as the horizon in the global economy and especially in Europe deteriorates sharply, questions arise about the future course of the Greek economy. This is not just about slowing growth in the near term, which is in any case expected. Crucial questions also arise as to how to balance the country fiscally within a challenging broader context, to keep the financing costs low as well. At the same time, it is also uncertain whether there can be a systematic strengthening of the country's productive base, which, apart from the level of economic activity, also concerns its qualitative characteristics.

The Greek economy showed resilience

This year, the growth of the Greek economy is still very strong although it is gradually slowing down and is certainly weaker than in the previous year. The rate of growth in private consumption, despite very high inflation, is a positive surprise during this period. There is also a positive development in exports, mainly in tourism and other services but also more broadly. In parts of the economy, there is also a positive trend in investment. That said, the pace of inflation at levels above the euro area average is alarming. Also worrying is the systematic expansion of imports and, more generally, the evolution of the current account. These developments together define an economy that is dynamic but may be vulnerable to the turbulence of the external environment, while it has certainly not yet solved many structural problems that shape its long-standing features.

The crisis in the global economy has elements that are long-standing. Unconventional monetary policy measures have already been implemented for remarkably long periods, especially in Europe. During the two years of the pandemic, extreme imbalances in production and demand, as well as in state finances, have emerged. But instead of the wounds closing, there was an upsurge in geopolitical uncertainty, a storm in Europe's energy markets, and very high inflation.

Overall, the crisis will not pass quickly, nor is it easily addressed by individual policy measures. Monetary policy in Europe must be geared to harnessing inflation, but it risks pushing the economies into a recession. Fiscal space is now very tight, given the recent large deficits and the rise in financing costs. As for structural reforms that would increase productivity and incomes in the medium term, these require credibility and political capital, which in many European countries has been exhausted. At present, policy coordination at the

The new international crisis calls for coordinated action and structural changes

European level and in the Member States of the European Union, in terms of the energy crisis and more broadly, falls far short of what is desirable. It is difficult to envisage how in the near future there will be no reduction in real incomes in Europe, which will bring new policy challenges to the surface. Nor, of course, can one rule out a further spread of the crisis, with a large increase in the cost of financing.

If the course of the economic crisis does not change, ours is among the European economies that are in danger of losing the most. Even if in the current period it is more resilient than others, it has greater challenges ahead. With high public debt, a long-standing productivity gap, and unfavourable demographic characteristics, it can have a positive outlook in the medium term only if it attracts large-scale investments with innovative features. But the combination of rising interest rates, extremely expensive energy, and the prevailing global uncertainty are not conducive to investment. These will be directed only toward economies and sectors with specific characteristics.

So how incomes will grow in the country is not obvious. The negative impact of the external environment is expected to transpire in a tendency to recession and high financing costs. If there is no increase in investment in critical sectors, the economy can quickly fall into a recession trap. Next year, we can expect positive growth of our economy, but it will no longer be able to rely on further strengthening of private consumption, so support from investment will be crucial. In this respect, the contribution of the Recovery and Resilience Fund, as well as other European resources, is expected to be very important. Without this contribution, in a recessionary European environment, the growth of the economy next year will be anaemic.

The systematic growth of the economy and the rise in incomes in the country must be channelled through an increase in innovative investment and a systematic shift to the production of goods and services that are of high value and competitive globally. In particular, as unemployment gradually decreases and so does the scope for growth of the economy and employment in a relatively easy manner, the issue of innovation and attracting productive investment and human capital becomes crucial. In this regard, positive developments are recorded in individual sectors of the economy, both traditional and new. Overall, however, there is still too much room for improvement.

The evolution of the country's external balance is also a reflection of this challenge. The relative competitiveness gap leads to a large increase in imports, both of consumer and capital goods, as the economy grows. The import content of exports is also strong. The need to finance the economy, as well as the increased energy costs, are additional challenges. For an economy with long-standing deficits and high debt, this picture is a cause for concern, reflecting weak domestic savings, while showing systematic improvement is crucial.

Naturally, the high and persistent inflation that changes the economic landscape, both in terms of policy and everyday life, is of particular importance. Initially, also for individual parts of the economy, inflation may be favourable, albeit for a short time. For those who have borrowed on fixed terms, it is an indirect "haircut" that reduces the real burden of debt. In the Greek economy, both private and public debt are central issues, so this positive effect is not negligible. The effect, at least in the short term, on the

The Greek economy remains vulnerable

The external balance challenge



treasury is also positive. Much of the revenue is based on consumption, so receipts from indirect taxes increase nominally as prices rise. At the same time, as the tax scale is progressive, an increase in income leads even more to an increase in the corresponding receipts. As public wages and pensions increase less, a positive result is expected for the fiscal balance. More generally, if the level of inflation were positive but much lower, it would be a good ally in the transition from the extreme policies needed during the pandemic to a more normal period. However, the speed of adjustment to high levels poses a serious problem.

The inflation problem has different levels. First, and more immediately, a large share of the households come under pressure as the cost of basic goods increases. Many households are already in a difficult position to service old debts and cover basic energy costs. In addition, there is a rapid rise in interest rates, which will affect all economic activity. This is expected to reduce growth, burden all investment projects, and raise costs for those who have borrowed at interest rates that grow. As far as public debt is concerned, inflation may initially reduce its burden, but if it persists and undermines the growth rate of the economy, it will eventually turn into a problem.

Overall, and despite some conveniences it can offer, inflation is a serious problem for our economy and needs to be treated as such. Much of the problem inevitably depends on the energy crisis in Europe, but it is also clearly influenced by policy choices in the country, which are crucial to containing it, mainly by strengthening the supply of goods and competition.

The final question is whether and how our economy can exhibit features that will make it attractive for investment as well as for human capital, while the external context remains unfavourable. In other words, will it be able to move convincingly against the general negative trend? This cannot be done automatically, nor will it be easy. Over time, a complex and unclear institutional framework has led to introverted and shallow entrepreneurship and low-value employment, while there are strong internal pressures to maintain this situation. It is therefore crucial to accelerate the credible implementation of policies that change the sign of the economy and make it a pole of attraction. If not, the current positive momentum will be short-lived, and the general trend will soon drag the economy on a negative path.





# 1 BRIEF OVERVIEW

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## **Global environment: Synchronised slowdown in global economic activity**

Based on the latest OECD forecast (September 2022), the world economy is expected to grow at a rate of 3% in 2022, while for 2023 lower growth is projected than forecast in June (2.2% from 2.8%). Inflation in the developed economies, members of the OECD, reached double-digit rates in August, a peak of 39 years, with strong hikes in the prices of energy, raw materials, and food. The evolution and duration of the war in Ukraine is the major driver of the trends in inflation and economic activity. The global indicator of consumer confidence remains close to historic low levels. Monetary policy worldwide is becoming progressively restrictive, which increases the likelihood of a sudden 'landing' of economic activity. More detailed analysis is presented in section 2.1A.

## **European economy: Exposure to recession risk in 2023**

The global economic environment is deteriorating, with the risk of a recession in the euro area becoming increasingly visible. The ongoing energy crisis, the war in Ukraine, and broader inflationary pressures are major sources of uncertainty about the economic outlook. The potential partial scarcity of energy supply in the forthcoming winter season, especially for European economies with energy dependency on countries in conflict, creates risks and a need for coordinated planning of response actions. In this context, additional fiscal and monetary measures are likely to be needed at the collective level, beyond those already taken to address the consequences of the war.

Real GDP growth in the euro area in the second quarter of 2022 remained significantly positive, albeit slowing to 4.1%. Economic sentiment deteriorated further in Europe in the third quarter, while international organisations are revising their forecasts for the European economy in 2023. The ECB has already increased its key interest rates twice, while further hikes are expected in the coming quarters, with direct implications for financing costs and domestic demand. The trends in the European economy are detailed in Section 2.1B.



## Stronger-than-expected recovery in Greece in the first half of 2022

The annual recovery was stronger than expected, at 7.7 % (y-o-y) in Q2 2022, marginally weaker than the 8% recovery in the previous quarter. For another quarter, the resilient household consumption, which strengthened annually by 11%, following broadly similar quarterly growth in the previous quarter, had a significant contribution to the recovery. The strong rebound in the second quarter of 2022 was equally driven by a strong annual increase in exports of services, by 47.4%, compared with 22.8% in the first quarter of 2022, while the exports of goods grew by 3.3%. An increase of imports by 15.5%, from 18.1% in the first quarter, moderated the recovery trend, with the external deficit in national accounting terms decreasing year on year by around EUR 307 million or 1.1 percentage points of quarterly GDP. Investment showed a modest annual growth of 3.5% (y-o-y) in Q2 2022, compared with 20.3% in the previous quarter, which was solely due to the expansion of fixed capital formation by 8.7%, while stocks decreased. The macroeconomic performance of Greece in the second quarter of this year is presented in detail in Section 3.1A.

## Positive trends in key areas of activity in the third quarter as well

Industrial production strengthened systematically in the first seven months of 2022, by 4.1% on average, compared to a growth rate of 9.5% in 2021. Construction displayed strong output growth, at 23.9% in the first half of 2022, from 6.1% in the same period of 2021. Retail trade increased in volume by 5.1% in the first seven months of 2022, against an increase of 9.1% in 2021. However, there has been a deterioration of expectations in the course of 2022. In addition, six out of the thirteen sub-sectors of Services had a higher turnover in the first half of 2022. Short-term trends in key sectors of the Greek economy are highlighted in Section 3.2.

## Systematic increase in openness, but with a deterioration of the external balance

In 2022, exports and imports systematically expanded, the sum of which is now close to its all-time high for the Greek economy of 82% as a percentage of GDP. The exports of goods recorded a strong increase in nominal terms in the national accounts in the first seven months of 2022, at a rate of 39.8%. The increase in exports excluding petroleum products was milder, but still strong (+22.5%). An increase in nominal terms is observed across all product categories, with the highest growth registered in exports of fuels and industrial products. On the imports side, the increase in current prices was stronger than that of exports, at a rate of 49.0% in the first seven months. As a result, the trade deficit widened by 65.4% year on year, to EUR 20.7 billion.

In terms of the balance of payments, there was a significant increase in the current account deficit in the first seven months of 2022, to EUR 9.7 billion, from EUR 6.8 billion in 2021. The price effect on export and import values is significant, with hikes of at least 20%. The components that contributed most to the deterioration of the current account over the past 12 months are an increase in net imports of fuels and other goods, which was partly offset by an increase in net exports of tourism and transport services. At the same time, the goods and primary income accounts deteriorated, while the services – due to tourism and transport – and secondary income accounts improved. The developments in the external balance are described in more detail in Section 3.3.



## Slowdown of the progress in the labour market

The unemployment rate fell further to 12.4% in Q2 2022 from 15.8% in Q2 2021. The sectors with the largest increase in employment were tourism (+84,400 people), education (+30,400) and manufacturing (+27,900), while public administration was the sector with the strongest decline (-20,900 people). However, early signs of labour market fatigue are recorded in the third quarter, as the seasonally unadjusted unemployment rate increased marginally in August to 11.6%, from 11.5% in July 2022. The seasonally adjusted wage cost index increased slightly for the third consecutive quarter, yet it remained 0.9% lower in Q2 2022 than in Q2 2021, following its sharp decrease in mid-2021.

Employment is expected to be affected by stronger investment, the maturing of large infrastructure projects, the utilisation of the recovery fund resources, lower growth in consumption and exports, as well as hiring plans in the public sector. These factors are expected to partly offset the negative impact of monetary tightening and persistently high energy costs on firms' labour demand. Unemployment is expected to decline further in the coming quarters, albeit with a clear slowdown tendency. Considering the above effects, the unemployment rate in 2022 is expected to lie in the region of 12.3% and in the region of 11.5% in 2023. Recent labour market trend developments and expectations are outlined in Section 3.4.

## Strong and persistent inflationary pressures

International energy commodity prices, despite a small correction in September, continue to fluctuate at very high levels. The euro declined further against the dollar, to its lowest level of 20 years. On the domestic front, CPI increased in the first nine months of 2022 by 10.1 %, to a high record of 27 years, against inflation of only 0.2% a year earlier.

The price rise was mainly due to the upward impact of energy prices. In the first eight months of the year, Greece had the 7th highest annual rate of change in the HICP among the 19 countries of the euro area (see the annex), the 6th highest HICP energy inflation, and the 8th highest non-energy inflation, with constant taxes. Indicatively, the rate of change in HICP with constant taxes and excluding energy stood at 5.1% in the first eight months of 2022, against a decrease of 0.7% a year earlier. Regarding producer prices, Greece had the second-highest increase in the import price index in the euro area in the first eight months of the year. Section 3.5 describes in more detail recent trends in consumer and producer prices and expectations about their evolution in 2023.

Key assumptions for the inflation forecast are: (i) Brent oil price valued in euro declines by around 7% in 2023, (ii) total consumer demand expands significantly less strongly, and (iii) the supply side is affected by cost shocks and second-round effects from higher energy prices.

For 2022 as a whole, the Consumer Price Index is projected to increase by about 9.7%, mainly due to a strong increase in energy prices, but also to consumer demand. For 2023, the Consumer Price Index is projected to increase by about 4.2%.

## Domestic economic sentiment mildly deteriorates

A mild quarter-on-quarter decline was recorded in the Economic Sentiment Indicator in Greece in the third quarter of 2022 (102.9, from 105.6 percentage points). There is a marked decline compared with the corresponding quarter of last year (111.6 percentage points), although it steadied in August-September 2022. Business confidence declined in the third quarter of the year compared with the previous year in industry and construction, while it strengthened significantly in services and more moderately in retail trade. The Consumer Confidence Index declined marginally in July-September compared with the previous quarter, to -53.6 (from -53.0) points. At the same time, it is markedly lower than a year earlier (-33.6 percentage points). A detailed description of trends in the components of the economic sentiment indicator is provided in Section 2.2A.



## Expansionary within targets fiscal policy, with challenges for 2023

To address the energy crisis, EU countries put in place a broad framework of fiscal support for households and businesses at the national level. These measures were based on both revenue (tax cuts) and government expenditure (subsidies). In Greece, measures up to the third quarter of 2022 focused mainly on the expenditure side, i.e., subsidies with recycling revenue, which were either horizontal or targeted. At the same time, as the health crisis receded, the pressure for extraordinary public spending in response to the pandemic eased. Moreover, the high inflation lowers the real value of the stock of public debt, to the extent that most of it is based on fixed interest rates.

In this context, the budget execution is better than the initial targets for this year, but the outlook for 2023 has deteriorated. By way of illustration, on a cash basis, the state budget balance in January-August 2022 recorded a deficit of EUR 4.105 million, better than the deficit target of EUR 9.992 million and a deficit of EUR 10.519 million in the same period of 2021. Similarly, the primary balance of the state budget in the same period recorded a marginal surplus of EUR 19 million, significantly improved against a primary deficit target of EUR 5.942 million and against a primary deficit of EUR 6,381 million in the same period the previous year. The improvement was mainly driven by higher net revenue (+EUR 4.546 million or +13.1%) compared to last year. The Draft State Budget in 2023 reports a revised budgetary target for a primary surplus of -1.7% in 2022 (against -2.0%) and 0.7% in 2023 (against 1.1%). Recent fiscal developments are described in detail in Section 2.2B.

## The financial system shows resilience

The fundamentals of the banking system are improving, but the banks will face increasing challenges over the medium term. On the positive side, non-performing loans (NPLs) on banks' balance sheets declined further in the second quarter of 2022, to 10.0% of total loans, down to their lowest level since December 2009. Credit expansion to firms strengthened in June - August, offsetting the contraction of credit to households. At the same time, private deposits picked up in June-August, albeit at a slower pace than in the same period last year.

Regarding challenges, the growth of the cost of money accelerated as key interest rates were raised by the European Central Bank, with the aim of bringing inflation expectations close to the inflation target in the medium term. The conditions for financing from the capital markets have deteriorated significantly. The cost of new borrowing for the Greek State increased in the third quarter of 2022, while the spread with the "core" of the euro area widened. The cost of new bank lending in the private sector remained low, although a pick-up in housing credit was recorded. There is also a non-negligible risk of a new round of arrears due to the impact of the energy crisis on the repayment capacity of households and businesses.

The acceleration of the implementation of the loan component of the National Recovery and Resilience Plan is a crucial opportunity, also supported by the banking system, as it can enhance the prospects for credit expansion and investment boost. At the same time, the acceleration of the implementation of the new bankruptcy code could significantly further benefit banks' asset quality. Recent trends and challenges for the domestic financial system are described in detail in Section 2.2C.

## Macroeconomic forecasts for 2022 and 2023

Geopolitical instability in eastern Europe and the Mediterranean, growth slowdown in the euro area, high inflation, fiscal developments, and the implementation of the 'Greece 2.0' plan, are the major GDP drivers in 2022 and 2023.

The assumptions of the baseline scenario are detailed in Section 3.1B. They include (a) an easing of the impact of the pandemic, (b) no further intensification of geopolitical instability, (c) weak growth in the euro area in accordance with the ECB's baseline scenario, (d) a slight delay in the implementation of the plan "Greece 2.0", and (e) a small decline in tourism revenues in real terms.



The projections by GDP components are described in detail in Section 3.1B. In particular, IOBE revises upwards its 2022 recovery forecast to 6% at constant prices, due to stronger expansion of private consumption (8.1%) and exports (12.5%). The forecast for the year as a whole also includes an increase in imports of 13.5% and a milder than previously projected strengthening of investment (6.6%). For 2023, the IOBE expects a significantly slower annual growth, by 1.6% in real terms, due to a slowdown in the global economy and the persistence of inflation and uncertainty. In terms of components, only investment is expected to outdo this year's performance, with higher annual expansion in 2023 (10.%) while consumption is expected to slow down (0.6%). The current account is expected to deteriorate further slightly (from around 7% of GDP this year), with exports and imports increasing annually in 2023 by 3.8% and 4.8%, respectively.

The IOBE baseline macroeconomic forecast scenario (Table 1.1) points to a positive outlook for 2022 and a negative outlook for 2023. The main risks and prospects are discussed in detail in Section 3.1B.

**Table 1.1**

IOBE macroeconomic forecasts (October 2022) for 2022-2023

(in constant market prices, annual % changes, unless indicated otherwise)

	2021 (actual)	2022	2023
GDP	8,0%	6,0%	1,6%
Consumption	6,9%	6,9%	0,6%
Private consumption	8,1%	8,1%	0,8%
Public consumption	3,8%	2,2%	0,6%
Gross investment	9,2%	6,6%	10,5%
Exports	21,9%	12,5%	3,8%
Imports	16,4%	13,5%	4,8%
Inflation rate	1,2%	9,7%	4,2%
Unemployment (% labour force)	14,8%	12,3%	11,5%

### Special study: Demography challenges and policy proposals

The aim of the study is to highlight the demographic issue and its overall socio-economic impact in Greece. In particular, the study examines the trends, prospects, challenges, and impacts on the economy arising from population ageing. In addition, the study puts forward policy proposals to address and adapt to the dynamics that are emerging and to alleviate and reverse the demographic challenge.







## 2 ECONOMIC ENVIRONMENT

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### 2.1 Trends and Prospects of the Global Economy

#### A. The Global Environment

- Based on the latest (September) OECD forecast, the world economy is expected to grow at a rate of 3% in 2022, while for 2023 lower growth is projected than forecast in June (2.2% from 2.8%).
- Global inflation has risen to a peak of 39 years, with strong hikes in the prices of energy, raw materials, and food.
- The evolution and duration of the war in Ukraine is the major driver of the trends in inflation and economic activity.
- Monetary policy worldwide is becoming progressively restrictive, which increases the likelihood of a sudden 'landing' of economic activity.

The world economy is hit by Russia's invasion of Ukraine and the prospects worsen as the negative consequences of the war are expected to last. The OECD economies grew at an annual rate of 3.7% in the second quarter of 2022, after a 4.4% increase in GDP in the previous quarter and 13.3% growth in the same quarter of 2021. The annual rate of change in GDP in the major developed economies (G7) stood at 2.3%, compared with 3.8% in the previous quarter and growth of 12.9% in the same quarter of 2021. The 20 largest OECD economies grew at 2.8% in the second quarter of 2022, up from 4.5% in the previous quarter, after growth of 12% in the same quarter of 2021.

The war in Ukraine is ongoing, with no indication that it will end soon, becoming the most important source of uncertainty for the global economy. The major economic consequence of the war on a global scale is the rise in inflation, which in August in the 38 OECD countries reached 10.3%, its peak for the last 39 years. Structural inflation (excluding energy and food) reached 7.2% while energy and food prices rose by 30.2% and 15%, respectively.

As Russia and Ukraine are major exporters of energy goods and basic foodstuffs, energy and food prices have soared, affecting the lives of many people worldwide. The risk of a food crisis is evident, especially in the poorest and developing countries. The erosion of real household income because of



inflation and a deterioration in the standard of living affects consumption levels, while strong uncertainty leads to lower investment on the part of firms, creating risks to growth in the long term. All of this creates new challenges for policymakers, who were already facing a significant deterioration of public finances due to the pandemic and imbalances on the path of recovery from it. That said, high inflation partly contributes to debt reduction, both private and public.

Especially in Europe, with winter approaching, the need to replace Russian energy products is imperative, as both sanctions against Russia and the latter's effort to put pressure on the European states pose significant risks to energy sufficiency. Diversification of energy products, even with the increased use of certain polluting sources, such as lignite, and energy savings are at the heart of most countries' efforts. In addition, efforts are ongoing to find appropriately designed and targeted fiscal interventions to support households and businesses in order to limit the negative impact on growth, without significantly burdening the countries' fiscal balances. However, despite the progress made, Europe still faces strong uncertainty in the short and medium term.

The inflation rise to multi-year peaks and a strong labour market in many countries are leading monetary policy to gradually tighten its stance. Although the rise in inflation is due to supply-side constraints, which monetary policy cannot affect, most central banks around the world are turning to restrictive policies, trying to reduce demand, making clear their intention to tame high inflation on time, before it becomes established. Although the intention of the central banks of the major economies is to achieve a "smooth landing" of demand, the planned further interventions as well as the speed of the change in the level of their key interest rates increase the likelihood of a steeper than the intended landing of economic activity.

The rate of change in world GDP last year stood at 5.8%, while for 2022 3% growth is projected in the latest OECD report, as in the June forecast. Table 2.1 shows annual changes in GDP in 2021 and the latest OECD forecast (September 2022) for the annual changes in 2022 and 2023 in the world economy and in selected developed and developing countries.

The recent and expected trends in major economies and groups for this year and 2023 are analysed next.

Among the major developed countries, the United States recorded an annual growth rate of 1.7% in the second quarter of 2022, from 3.5% in the previous quarter and 10.2% in the same quarter of 2021. The slowdown reflects declining investment in inventories, fixed capital investment in housing, and government spending, partly offset by growth in exports and consumer spending. Inflation stood at 8.3% last August, lower than the 40-year high in June (9.1%). To control inflationary pressures, the FED has proceeded to successive hikes in its base rate by 300 basis points from March to September 2022 to 3.00%-3.25%, while it is expected to increase further to 4.25%-4.50% by the end of this year. In 2022, the US economy is now projected to grow at a rate of 0.5%, while for next year it is expected to move to a negative growth rate (-0.7%).

**Table 2.1**

Global Environment (annual % GDP growth, in real terms, unless stated otherwise)

Economy	2021	2022		2023	
		Forecast	Difference from previous forecast*	Forecast	Difference from previous forecast*
World	5.8	3.0	0.0	2.2	-0.6
USA	5.7	1.5	-1.0	0.5	-0.7
Japan	1.7	1.6	-0.1	1.4	-0.4
Canada	4.5	3.4	-0.4	1.5	-1.1
United Kingdom	7.4	3.4	-0.2	0.0	0.0
Eurozone	5.2	3.1	0.5	0.3	-1.3
Germany	2.6	1.2	-0.7	-0.7	-2.4
France	6.8	2.6	0.2	0.6	-0.8



<i>Italy</i>	6.6	3.4	0.9	0.4	-0.8
Turkey	11.0	5.4	1.7	3.0	0.0
China	8.1	3.2	-1.2	4.7	-0.2
India	8.7	6.9	0.0	5.7	-0.5
Brazil	4.9	2.5	1.9	0.8	-0.4
World trade	10.0	4.9	0.0	3.9	0.0

\* Difference in percentage points from previous OECD forecasts (OECD Economic Outlook, June 2022)

Source: OECD Economic Outlook, Interim Report, OECD, September 2022

The euro area economy grew 4.1% in the second quarter of 2022, up from 5.4% in the previous quarter and against a rate of 14.4% in the same quarter of 2021. Compared to the first quarter, there was a growth of 0.8% on a seasonally adjusted basis, mainly due to an increase in household expenditure by 1.3% and, secondarily, public expenditure (+0.6%) and fixed capital investments (+0.9%). Inflation climbed to a new historical high of 9.1% in the euro area last August, while recent provisional data show that September inflation is expected to stand at 10%. The ECB raised its base rate by 50 basis points in July and then by 75 basis points in September, to 0.75%. Further increases are expected by the end of the year, looking at high levels of inflation projected at 8.1% overall for 2022, before falling to 5.5% in 2023 and 2.3% in 2024. For 2022 as a whole, the euro area is projected to grow by 3.1%, from 5.2% last year, while for 2023 a further slowdown in growth is projected to 0.3%.

In the UK, GDP grew by 2.9% in the second quarter of the year, from 8.7% in the previous quarter, and growth of 24.5% a year ago. Growth of 3.4% is forecast for 2022 as a whole from 7.4% in the previous year, while stagnation is expected for next year.

In Japan, GDP grew 1.4% in the second quarter of 2022, after a 0.9% increase in the previous quarter and an increase of 7.3% a year ago. For 2022 as a whole, the Japanese economy is projected to grow at a rate of 1.6%, slightly lower than in 2021 (1.7%), while 1.4% growth is forecast for next year.

The current sub-section presents recent economic policy trends and challenges in five developing countries and economic regions, which generate almost a third of global GDP in total.

China's economy recorded a significant slowdown in growth in the second quarter of 2022, to 0.4%, from 4.8% in the previous quarter and 7.9% a year earlier. Widespread lockdowns due to the zero-COVID policy had a strong negative impact on both industrial activity and domestic demand. Overall, 3.2% growth is forecast for this year, from 8.1% in 2021, accelerating to 4.7% in 2023.

India's economy recorded strong growth of 13.5% in the second quarter of 2022, from 3.6% growth in the previous quarter and 19.9% growth a year ago. The strong growth rate in the second quarter is mainly a consequence of a lower base of comparison but also of repressed demand due to the spread of the omicron variant in the previous quarter. Growth of 6.9% is estimated for 2022 as a whole, while 5.7% growth is forecast for 2023.

The Turkish economy grew by 7.2% year-on-year in the second quarter of 2022 from 7.1% in the previous quarter, compared with 22.4% growth a year ago. Annual inflation rose to 80% last May, with the Turkish lira continuing to decline (an annual increase of 109% and 72% of the dollar and the euro, respectively, in exchange for the Turkish lira in August). However, the country's central bank reduced its base rate by a total of 200 basis points in August and September to 12%. For the whole of 2022, the Turkish economy is projected to grow at a rate of 5.4%, while growth of 3% is expected in 2023.

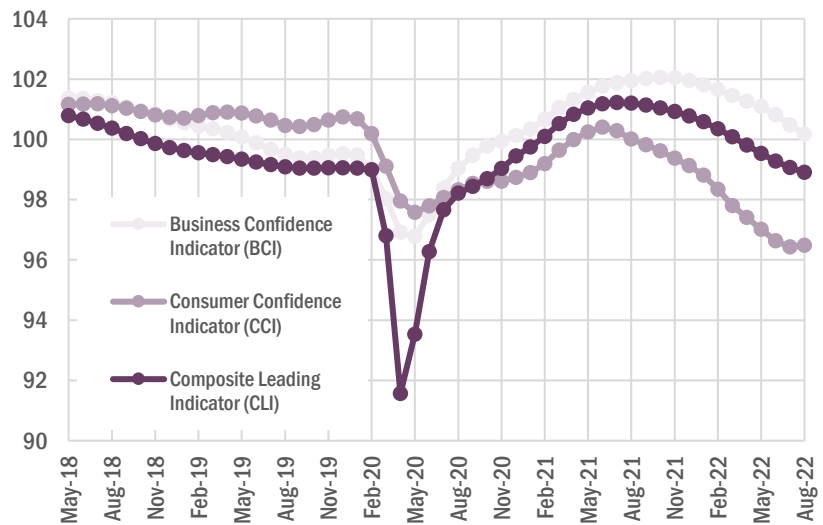
In Latin America, Brazil's economy grew 3.2% in the second quarter of 2022, up from 1.7% in the previous quarter and 12.3% in the same quarter of 2021. For the whole of this year, GDP is forecast to grow by 2.5% from 4.9% last year, while weak growth of 0.8% is projected for 2023.

**Figure 2.1**



Economic sentiment indicators and the Composite Leading Indicator for the OECD countries  
(seasonally adjusted data, long-term average = 100)

Stabilisation of the consumer confidence index worldwide, while the business confidence index and the leading indicator of economic activity continue to decline.



Source: OECD

The OECD's composite leading indicator for its member countries has continued to decline since September 2021, falling below its long-term average. The OECD's Business Confidence Indicator has been on a downward trajectory since December 2021 but remains above the long-term average. Consumer confidence remains weak, with the relative index stabilising after a 13-month fall and moving slightly upwards last August (Figure 2.1).

The growth of the volume of world trade is projected to slow to 4.9% in 2022, down from 10% last year, driven by continued lockdowns in China, weaker demand in Europe due to the Russian-Ukrainian war, and a shift in US demand from goods to services.

## B. The Economies of the EU and the Euro area

- Russia's invasion of Ukraine and the economic impact of sanctions on energy efficiency, inflation, and growth, are the most important policy challenges in the EU.
- Potential need for additional fiscal and monetary measures at the collective level, beyond those already taken to counter the consequences of the war.
- A significant positive annual rate of change in real GDP in the EU and the euro area in the second quarter of 2022, by 4.2% and 4.1% respectively.
- Lower growth and higher inflation are now expected for 2022 and a further slowdown in 2023.
- The halting of the ECB's expansionary monetary policy that lasted for almost a dozen years, with a gradual increase in key interest rates, is expected to continue.

Since the start of the war in Ukraine in February 2022, a new socio-economic crisis has begun in Europe, with very strong humanitarian implications, the displacement of millions of people from their homes, and an impact on people's lives, especially in neighbouring countries. The war also has many major economic consequences. For Europe, they are mainly related to its energy dependence on Russia. Before the outbreak of the war, a tendency to return to normality had begun to be felt, with the gradual lifting of various restrictive measures in many countries. In addition, the forecasts for the EU economy before the outbreak of the war contributed to the start of a strong expansion phase, notably through the implementation of the Recovery and Resilience Facility (RRF). At the economic policy level, the phasing out of exceptional monetary and fiscal measures in response to the pandemic was expected.



The 2020-2021 pandemic had a strong impact on demand, supply chains, labour supply, industrial production, prices, trade, and capital flows. The impact of the health crisis was exacerbated by the fact that at the onset of the pandemic, the European economy was relatively vulnerable to external shocks, as it had already slowed significantly in 2019, mainly due to some structural problems in branches of its Industry. The global supply constraints linked to disruptions in the functioning of economies due to the pandemic and the recovery in demand last year resulted in inflation widening but, before the start of the war, it was expected to begin to correct towards the end of the year. Economic activity would have been boosted through a stronger labour market, large accumulated savings, favourable financing conditions and the scaling up of the RRF.

To mitigate the impact of the health crisis, the European Commission has since its beginning implemented monetary and fiscal policy interventions. The most important of these are NextGenerationEU, with a budget of €1.85 trillion, and the reinforced EU budget for 2021-2027, close to €1.05 trillion.

However, the war radically changed the international environment, bringing new disruptions to global supply, fuelling further pressures on commodity prices, and raising uncertainty again. In particular, Russia and Ukraine are major producers and exporters of certain basic foods, some minerals and, above all, energy products. Especially in terms of gas consumption, in Western Europe, 40% comes from Russia. Combined with earlier rigidities in production and international trade due to restrictive measures to tackle the pandemic, Europe is approaching a new economic, energy, and perhaps food crisis in some of its poorest economies, with gas, oil, and grain prices reaching very high levels. Current trends in the European economy will depend mainly on the evolution of the war and, secondarily, on the emergence of SARS-CoV-2 mutations, with a strong spread among the population, which would exacerbate the health conditions.

Two of the most important problems facing the EU now are the energy crisis and the sharp rise in prices. According to the European Commission's press release published on 14 September 2022, an emergency intervention was proposed in Europe's energy markets. The EU is faced with the consequences of a serious mismatch between energy demand and supply, due to the constraints stemming from the war. The first response to address high prices is to reduce demand, so the Commission proposes an obligation to reduce electricity consumption by at least 5% during specified peak hours. The goal is to reduce energy prices by balancing the market.

Excessively high rises in energy and food prices, demand-side pressures due to the resumption of the economy after the expiry of the restrictive measures, and supply rigidities are contributing to a sustained rise in inflation, at least in the short term. With current inflation drivers weakening over time and monetary policy interventions transmitting to the economy and prices, inflation is expected to ease.

In particular, the trend in economic activity in the second quarter of 2022 in the European Union and the euro area saw a slowdown of growth compared to the previous quarter, to 4.2% and 4.1%, from 5.5% and 5.4% respectively, compared with a significant recovery of 13.9% and 14.4% in the EU and the EA respectively a year earlier. According to the European Commission's latest forecast report<sup>1</sup>, growth in the euro area is estimated at 5.3% for 2021, while a 2.6% recovery is projected for 2022, similarly for the European Union, growth in 2021 is estimated at 5.4% in 2021 and 2.7% this year.

Growth in the economies of the European Union between April and June 2022 was driven by growth in domestic demand, with the contribution of investment reaching 1.5% of GDP, slightly higher than in the previous quarter (1.3%). The contribution of consumption increased to 2.8%, compared with a higher contribution in the first quarter of 2022 of 4.1 percentage points of GDP. The effect of net exports on GDP change in the second quarter of 2022 was negative, at -0.4%, from -0.5% in the previous quarter. The trends in the composition of growth in the euro area economies are similar, with domestic demand the key growth factor (4.4 p.p. from 5.6 p.p. in the second quarter of this year). There was also a positive

<sup>1</sup> European Economic Forecasts Summer 2022, European Commission, July 2022



year-on-year contribution from investment (1.1% of GDP), more intensive than in the previous quarter (0.8% of GDP), while consumption had a positive impact, 2.9 p.p., from a higher impact in the first quarter of 4.1 percentage points. In addition, in that quarter, the contribution of net exports to the euro area was negative at -0.3%, with almost a similar change a quarter earlier at -0.2%.

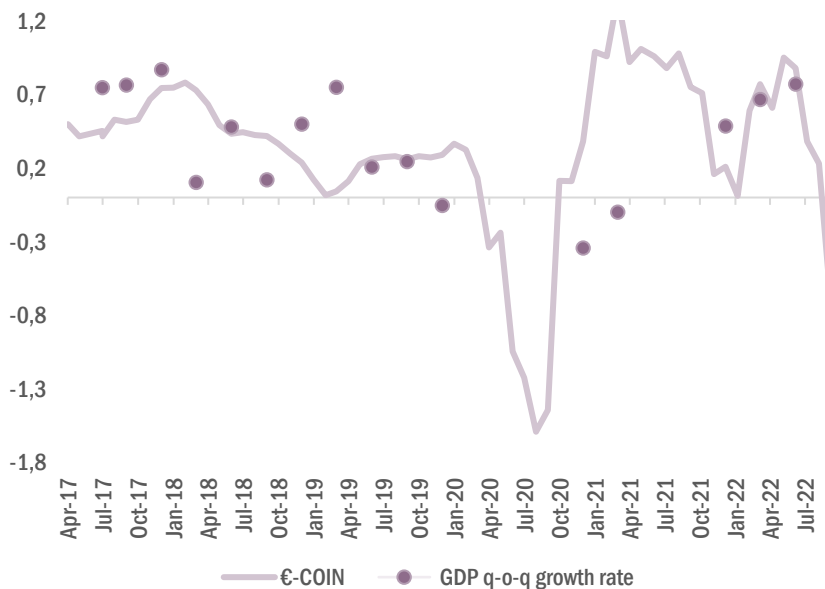
The composition of the GDP components on the expenditure side remains close in the EU-27 and the euro area, with private consumption accounting for 52.6% and 52.5% of GDP respectively, investment accounting for 23.0% and 22.3% of GDP, exports at 53.6% and 52.2% and imports at 50.7% and 48.8% of GDP.

The strongest growth (annual changes in seasonally adjusted data) among the EU countries in the second quarter of the year was recorded in Ireland, where the rate reached 10.8%. It was followed by Malta (8.9%), Slovenia (8.3%), and Croatia (7.8%). The countries with the lowest growth were Estonia (0.3%), Luxembourg (1.6%), and Slovakia (1.7%). On a rolling 12-month basis, Greece had a positive growth rate of 8.9%, well above the average yield in both the EU and the EA (4.6% and 4.5%). The country with the lowest growth, on a 12-month rolling basis, was Slovakia (1.8%), followed by Luxembourg (2.6%). By contrast, the country with the largest positive rolling rate in the EU was Ireland (11.5%), followed by Malta (10.7%) and Croatia (9.9%).

In terms of trends in the economic climate and in key leading indicators of economic activity in the euro area and the European Union, the €-COIN index declined significantly in the third quarter of this year to -0.4 points (Figure 2.2). In particular, the monthly performance was negative at 0.73 points in September 2022, diametrically opposed to September 2021 (0.75), indicating expectations of a decline in GDP.

Figure 2.2

Monthly €-COIN Index & Eurozone GDP\*



A vertical drop in the €-COIN index in the third quarter of this year, to -0.4 points, from 0.81 points a quarter earlier.

\* The Research Centre of Economic Policy Research in collaboration with the Bank of Italy estimates every month the leading indicator of economic activity €-COIN for the Eurozone. The indicator is a forecast of quarterly GDP growth and is derived from the synthesis of a variety of different data, such as the evolution of industrial production, prices, labour market data, as well as financial data. Source: CEPR and Bank of Italy

The European Commission's Economic Sentiment Indicator declined quarter on quarter in July — September 2022 by 7.7 points and 7.6 points in the EU-27 and the Eurozone respectively, while year on year it decreased by 20.4 and 20.3 points. As a result, the index reached 95.3 and 96.5 points. In September 2022, the economic sentiment indicator stood at 92.6 points in the EU-27 and 93.7 points in



the euro area, at a level lower than in the previous month. Meanwhile, it was 22.7 points lower year on year in both the EU-27 and the EA (Table 2.2).





**Table 2.2**  
Economic Sentiment Indicator EU-27 & Euro Area (av. 2000-2020=100)

Month	Oct - 20	Nov - 20	Dec - 20	Jan - 21	Feb - 21	Mar - 21	Apr - 21	May - 21	June - 21	Jul-21	Aug- 21	Sep-21
EU-27 (2020)	91.7	88.6	91.6	91.1	93.1	99.9	108.8	112.8	115.8	116.6	115.3	115.3
Euro area	92.5	89.3	92.4	91.5	93.4	100.9	109.4	113.4	116.7	117.6	116.3	116.4

Month	Oct - 21	Nov - 21	Dec - 21	Jan - 22	Feb - 22	Mar - 22	Apr - 22	May - 22	June - 22	Jul-22	Aug- 22	Sep-22
EU-27 (2020)	116.2	115.2	114	112.6	113.3	106.1	104.1	103.3	101.5	97.2	96.1	92.6
Euro area	117.2	116.2	114.3	113.1	114.1	106.3	104.6	104.4	103.3	98.5	97.3	93.7

Source: European Commission (DG ECFIN), September 2022

Among the EU’s largest economies, in France in the third quarter of 2022, the index declined quarter on quarter (-3.3 points), while compared with the third quarter of 2021 it was lower by 13.3 points. In Germany, the indicator declined by 9.6 points quarter on quarter and by 20.0 points year on year. In Italy, the index decreased by 6.3 points compared to the previous quarter and by 17.9 points compared to the same quarter in the previous year. Finally, in the period July — September 2022, the Economic Sentiment Indicator decreased in Greece by 2.7 points quarter on quarter, to 102.9 points, which is about 8.1 points lower than a year earlier (111.0 points).

More detailed information on changes in GDP components and the other macroeconomic variables, as well as the estimated trends therein, for the euro area and EU in the first quarter of 2022, is provided next in this sub-section.

The forecasts for the period 2022-2023 for the EU and the euro area are presented in the latest forecast report of the European Commission (Table 2.3). A summary of key macroeconomic variables per euro area member country is presented in the Annex.

In detail, according to Eurostat data for the second quarter of 2022 (annual changes in seasonally adjusted data), private consumption in the European Union increased by 5.5%, compared to growth by 8.0% in the previous quarter, while in the same period of 2021 its trend was strongly positive (12.2%). In the euro area, household consumption rose by 5.6%, from a stronger increase of 8.1% in the previous quarter, while a year earlier it had increased by 12.3%. The European Commission predicted an increase in household consumption in the whole of 2022 in the EU by 3.3% last May and a slowdown in 2023 to 2.7%. For the euro area, it predicted an increase in private consumption by 3.2% this year and an expansion of 2.6% next year (Table 2.3). At the country level, private consumption in Germany was 6.4% higher in the second quarter of this year, while the previous quarter saw an increase of 9.1%. In France, consumption growth was weaker (5.5%). In Italy, it grew by 5.0%, down from 6.8% a quarter earlier, while in Spain it increased by 2.4% against an increase of 3.4% in the previous quarter. In Greece, private consumption rose 11.0%, from a similar increase of 11.9% in the previous quarter, while in the same period of 2021, it had risen by 15.0%.



**Table 2.3**

Key macroeconomic figures, EU-27 and the Euro area (annual % change in real terms, unless indicated otherwise)

	EU			Eurozone		
	2021	2022	2023	2021	2022	2023
GDP*	5.4	2.7	1.5	5.3	2.6	1.4
Private Consumption	3.8	3.3	2.7	3.5	3.2	2.6
Public Consumption	3.8	0.8	0.4	3.9	0.8	0.5
Gross Investment	4.2	3.1	3.6	4.2	3.1	3.5
Exports of Goods and Services	10.7	5	4.6	11	5.1	4.7
Imports of Goods and Services	9.3	5	4.7	8.8	5.1	4.8
Employment	0.7	1.2	0.7	1.1	1.3	0.8
Unemployment (% labour force)	7	6.7	6.5	7.7	7.3	7
Inflation	2.9	6.8	3.2	2.6	6.1	2.7
Balance of General Government (% GDP)	-4.7	-3.6	-2.5	-5.1	-3.7	-2.5
Debt of General Government (% GDP)	89.7	87.1	85.2	97.4	94.7	92.7
Current Account Balance (% GDP)	3.0	2.1	2.6	3.2	2.4	2.9

Source: European Economic Forecasts, Spring 2022, European Commission, May 2022

\*Source: European Economic Forecasts Summer 2022, European Commission, July 2022

Public consumption increased in the EU and the euro area in the second quarter of 2022 by 1.4% and 1.6% respectively, from an increase of 2.8% and 3.0% a quarter earlier. In the same quarter of 2021, public consumption had increased by 7.9% in the EU and 8.5% in the euro area. For 2022, the European Commission expected in May a sharp slowdown in EU public consumption growth compared to 2021, primarily due to fewer measures to address the impact of the health crisis, to 0.8% from 3.8%. The same growth was estimated for the euro area (0.8%, compared with 3.9%). In 2023, the expansion will weaken to 0.4% and 0.5% in the EU and the EA respectively.

Investment rose between April and June 2022 in the EU by 6.4%, slightly stronger than in the previous quarter (5.6%). Similarly in the euro area, the rise was 5.1%, compared with a 3.4% increase in the first quarter of last year. In the same quarter of 2021, investment increased by 16.4% in the EU and 16.2% in the euro area. The European Commission forecast an increase of 3.1% for 2022 and 3.6% for 2023 in the EU and 3.1% and 3.5% in the euro area. In the first quarter of 2022, investment in Germany rose by 0.5% after a modest contraction of 0.9% in the previous quarter, while Italy recorded a sharp increase of 17.3%, from a weaker rise of 12.6%, in the quarter of January — March 2022. The rate of change in investment in France was positive, 1.9%, from an increase of 1.8% in the previous quarter.

Significant growth was recorded in exports of goods and services in the EU (7.2%), and the euro area (7.4%), compared with slightly stronger growth, by 7.9% and 8.7% respectively, in the previous quarter and significantly stronger growth in the second quarter of 2021 (26.2% and 26.1%). For 2022, the European Commission forecast an increase in exports in the EU-27 compared to 2021 by 5.0% and a smaller increase next year of 4.6%. For the euro area, it expected an expansion of 5.1% for the whole of 2022 and an increase of 4.7% in 2023. At the country level, Germany saw export growth in the second quarter of 2022 by 2.1%, down from 2.7% in the second quarter of the year. The increase of exports in France in the second quarter of this year reached 8.4%, down from a 10.3% growth a quarter earlier. Italy saw an increase of 11.4%, from a higher rise of 14.1% a quarter earlier. A strong export expansion was recorded in Spain by 23.1%, following a similar rise of 19.9% in the previous quarter, as in Cyprus (17.1%), following an increase of 22.4% in the second quarter of 2021.

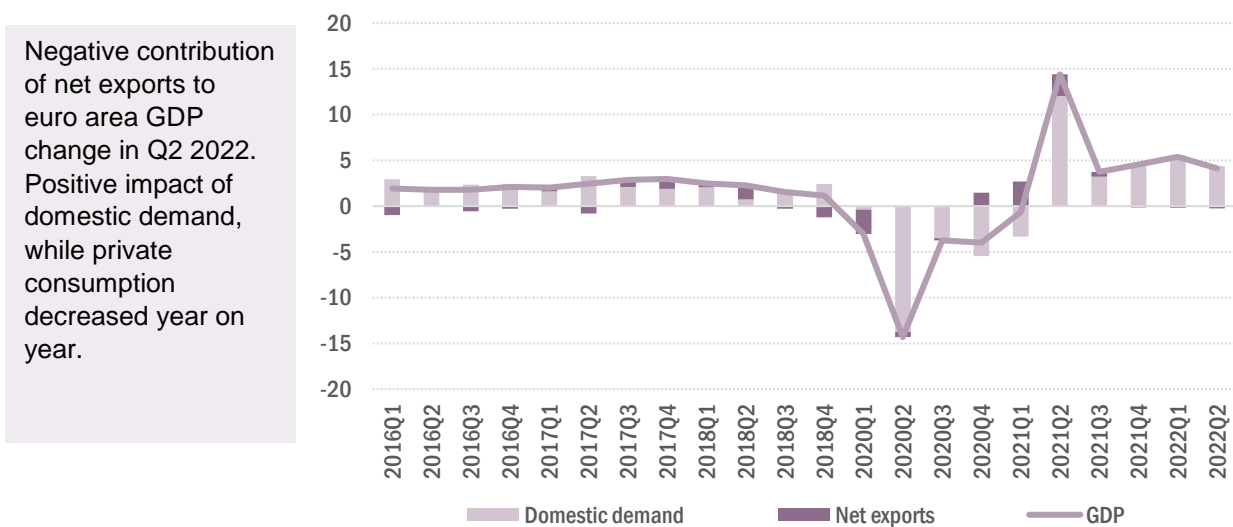
For another quarter, import growth was strong in the second quarter of 2022 in the EU, by 8.6%, albeit milder than a quarter earlier (9.6%). A similar change was observed in the EA, by 8.6%, from a 9.9%



increase in the second quarter of 2022. A year earlier there had been a significant increase of 22.8% and 21.9% respectively. For the years 2022 and 2023, the European Commission has forecast for the EU an increase of 5.0% and 4.7% respectively. For the euro area, it expects a 5.1% increase in 2022 and a growth of 4.8% in 2023. At the country level, in the second quarter of 2022 imports increased to Spain by 8.8%, against a higher rise of 12.2% in the previous quarter. France expanded by 7.6% from 9.5% a quarter ago, while Italy saw an increase of 16.9% from 15.8%. A significant positive rate was recorded in Germany (7.2%), compared to a similar boost in the first quarter of 2022.

**Figure 2.3**

Eurozone GDP change – Contribution of components to the real annual rate of change (in percentage points)



Source: Eurostat

Based on the developments in the euro area GDP components (Figure 2.3), the contribution of net exports was negative (-0.3%), compared with a marginal negative effect in the previous quarter (-0.2%). The slightly negative contribution of net exports in the second quarter of this year came from a simultaneous slight decrease in the contribution of exports, from 4.4% in the first quarter to 3.8%, combined a similar change in the negative effects of imports, from 4.6% in the first quarter to 4.0% in the next quarter. As already mentioned, the contribution of domestic demand was 4.4% of GDP, from a positive impact of 5.6 percentage points in the previous quarter. Most of the contribution came mainly from private consumption, which acted positively in the second quarter of 2022 by 2.9% of GDP, while in the first quarter, its positive contribution stood at 4.1 percentage points.

Harmonised inflation rose in the second quarter of 2022 in the EU and the euro area, recording a rate of 8.8% and 8.0%, from 6.5% and 6.1% respectively a quarter earlier. In the second quarter of 2021, harmonised inflation stood at 2.2% in the EU and 1.8% in the EA respectively. Overall, for 2022, the European Commission recently forecast (July 2022) that inflation will rise sharply in 2022 in the EA to 7.6% from 2.6%, but also in the EU, to 8.3% from 2.9%, while in 2023 it will decline to 4.0% and 4.6% respectively.

A milder increase in employment was recorded in the second quarter of 2022, by 2.4% in the EU and 2.7% in the EA, from 2.9% and 3.1% in the EU and EA respectively a quarter earlier, while in the same period of 2021, there was a 2.2% increase in jobs in both regions. The European Commission forecast an increase in job creation in the EU for 2022 and 2023, by 1.2%, and 0.7% respectively. For the euro area, it also predicted employment growth this year, by 1.3%, and an increase (0.8%) in 2023. In the second quarter of 2022, employment expanded most in Ireland (8.8%), Lithuania (7.0%), Estonia (5.6%),



and Malta (5.5%). It declined in Romania (-0.6%) while the lowest employment growth occurred in Poland and Latvia (1.2%).

Unemployment in the second quarter of 2022 fell to 6.1% in the EU and 6.6% in the euro area, from 6.2% and 6.8% respectively in the first quarter. In the second quarter of 2021, it stood at 7.3% in the EU and 8.0% in the EZ. For 2021, the European Commission has estimated a decline in unemployment rates in the EU-27 and euro area compared to the previous year, to 6.7% and 7.3%, while for 2023 it expects unemployment rates of 6.5% and 7.0%. Between April and June 2022, the highest unemployment rate was recorded in Spain (12.5%), with Greece (12.2%) and Italy (8.1%) coming next, while in France unemployment was around 7.5%.

In the area of fiscal performance, the general government deficit in the EU-27 stood at 3.1% of GDP in the first quarter of 2022, compared to 2.9% in the fourth quarter of 2021. The European Commission has projected the budget deficit to be at 3.6% and 2.5% of GDP respectively in 2022 and 2023. The euro area budget deficit is expected to average 3.7% of GDP in 2022 and 2.5% in 2023, from 7.1% last year. Public debt in the euro area countries totalled 95.6% of GDP in the first quarter of 2021, while it is expected to average 94.7% in 2022, falling to 92.7% of GDP in the following year. Government debt, as a percentage of GDP, fell in the fourth quarter of 2021 in many member countries, with its highest level recorded in Greece (189.3%), Italy (152.6%), Portugal (127.0%), Spain (117.7%) and France (114.4%).

As regards the monetary policy framework, according to the ECB's announcement of 8 September 2022, the ECB increased its three key interest rates by 75 basis points, with a view to ensuring a timely return of inflation to the ECB's medium-term objective of 2.0%. In addition, it is expected to raise interest rates further in order to mitigate demand and avoid the risk of heightened inflation expectations. Consequently, the interest rate on the main refinancing operations as well as the interest rates on the marginal lending facility and the deposit facility increased in September to 1.25%, 1.50%, and 0.75%. Amounts from securities acquired under the APP repaid at maturity will continue to be reinvested as long as necessary to maintain liquidity conditions. As regards the PEPP scheme, the ECB will reinvest the capital from maturing securities acquired under the scheme until at least the end of 2024. In any event, the future roll-off of the PEPP portfolio will be regulated in a manner consistent with monetary policy. Finally, the Transmission Protection Instrument (TPI) is available to offset undesirable, disorderly market developments that may negatively affect the transmission of monetary policy in the euro area with a view to price stability.

In brief, the economy in Europe, and in particular in the euro area, is currently facing several challenges. The main ones are:

- Russia's invasion of Ukraine and the economic impact of sanctions on growth and inflation. The war has already led to strong turmoil in the markets for basic foodstuffs (e.g., cereals), minerals, and energy products, with oil, gas, and wheat prices reaching peaks not seen for many years.
- Rapid increase in inflation and indications of further price pressures in different parts of the production chain. Recent EU forecasts show lower growth and higher inflation, especially for 2022. Under adverse sets of assumptions by international organisations, such as the ECB, for the evolution of international prices and the availability of energy, the risk of recession in the coming year is notable.
- The energy crisis and the demand interventions by the EU.
- A possible need for additional fiscal and monetary measures at the collective level, in addition to those taken to counter the consequences of the war.
- Risk of food crisis in some poor countries due to severe restrictive export interventions.
- Managing the COVID-19 pandemic remains a global challenge mainly in tackling variants.





## 2.2 The Economic Environment in Greece

### A. Economic Sentiment

- Mild quarter-on-quarter decline in the Economic Sentiment Indicator in Greece in the third quarter of 2022 (102.9 from 105.6 points). Marked decline compared to the corresponding quarter of the previous year (111.6 points).
- Business expectations weakened quarter on quarter in the recent quarter in Industry and Construction, strengthening significantly in Services and more mildly in Retail Trade
- The Consumer Confidence Indicator decreased marginally quarter on quarter in July-September, to -53.6 (from — 53.0) points. At the same time, it is significantly lower than a year earlier (-33.6 points).

*The IOBE business and consumer surveys offer significant indications on the developments of the economy in the past few months, from the perspective of both the enterprises and the consumers. In addition, the indicators used in the surveys constitute leading indicators for various economic variables and can be used to predict near-term developments and even the course of GDP.<sup>2</sup>*

In the third quarter of 2022, the Economic Sentiment Indicator declined quarter on quarter by 2.7 points. Meanwhile, the Consumer Confidence Indicator was marginally lower than in the previous quarter, at -53.6 (from -53.0) points. The deterioration came from a fall in expectations in Construction and Industry, while expectations in Services and Retail Trade strengthened. The industrial and construction sectors are currently affected by rising prices in energy and other raw materials due to the war, as well as difficulties in the operation of international supply chains. These trends are likely to continue at least in the next quarter, as the war continues and sanctions on Russia escalate, and it will not be possible to accomplish supply chain restructuring to address current disruptions. The strong momentum of international tourism that gradually emerged from the middle of the previous quarter propped up the services and retail trade sectors in the quarter under review. On the household side, the successive packages of policy interventions for the energy crisis and the ever-increasing inflationary pressures raise concerns about their economic situation in the near future, according to the relative balance in the consumer surveys. The impact of the health conditions, although affecting developments in the coming period, seems to no longer have as much weight as other drivers in the economy.

In detail, the Economic Sentiment Indicator in Greece in the July-September quarter mildly weakened compared to the previous quarter (Figure 2.4), to 102.9 from 105.6 points, while it was significantly lower than the corresponding average of last year (111.6 points).

In Europe, the corresponding indicator was significantly lower on average quarter on quarter, both in the EU and in the euro area. In particular, the Economic Sentiment Indicator stood in the third quarter of 2022 at 95.3 (from 103.0) points in the EU, and at 96.5 (from 104.1) points in the euro area.

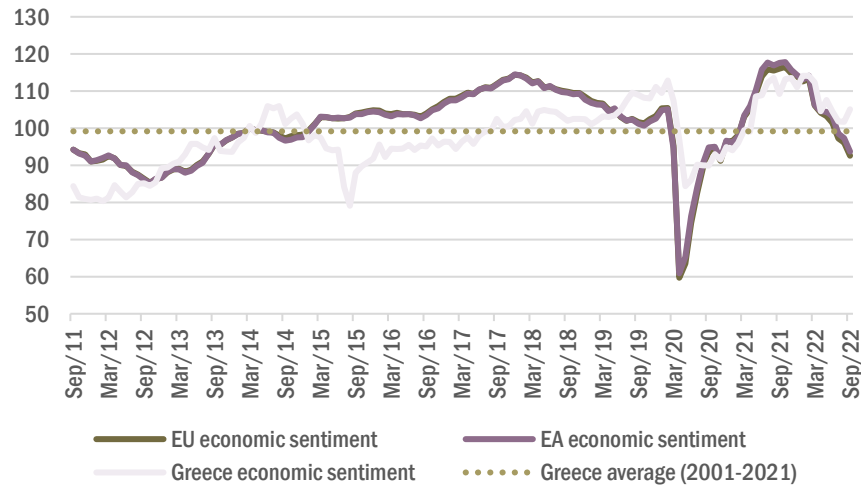
**Figure 2.4**

Economic Sentiment Indicators: EU-27, Euro area and Greece (2000-2020=100, seasonally adjusted data)

<sup>2</sup> Note that since March 2018, the base period of the series presented in the sectoral business sentiment indicators, i.e., the indicators in Manufacturing, Retail Trade, Services and Construction, has changed. In particular, the 2000-2010 period was designated as a new base (= 100). Until February 2018, the indicator was referenced to average values from the 1996-2006 period. The historical series of the indicators are fully revised, to ensure that the data series are comparable. As a result, the indicators with the new base period are overall higher compared with those with the older base period. The change in the base period by IOBE has not affected the overall economic sentiment indicator for Greece or any other country.



The Economic Sentiment Indicator declined quarter on quarter in the third quarter of 2022 by 2.7 points.



Source: Commission, DG ECFIN

As a result, business expectations in Greece declined in Industry and Construction, strengthening significantly in Services and more mildly in Retail trade. On the consumer side, the Consumer Confidence Indicator declined marginally compared with the previous quarter. Compared to the same quarter last year, the indicators declined on average significantly in Industry, Retail Trade, and Services, while they fell sharply in Construction. In more detail:

The Consumer Confidence Indicator in Greece in the July-September quarter of 2022 stood marginally lower on average compared to the second quarter of 2022, at -53.6 from -53.0 points, a level much lower year on year (-33.6 points). The corresponding indicator declined markedly in the EU on average to -27.9 (from -22.8) points, as well as in the euro area (-27.0 from -22.3 points). These levels are much lower year on year (-5.9 and -4.2 points, respectively).

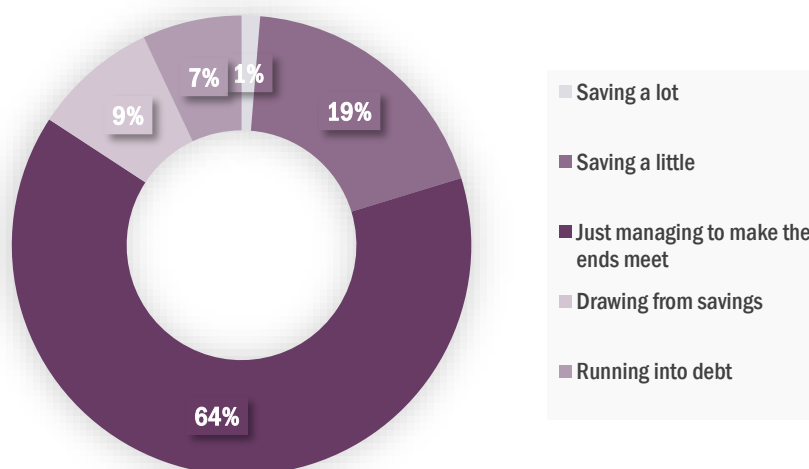
The quarter-on-quarter trends in the constituent key balances of answers that make up the overall indicator were mainly negative in the third quarter of 2022. The pessimistic expectations of consumers in Greece for the financial situation of their households over the next 12 months, as well as those for the country's economic situation, slightly intensified. At the same time, household assessment of their current situation deteriorated marginally, while the intention for major purchases in the near future improved slightly.

More specifically, the percentage of those who are pessimistic about the financial situation of their household in the next 12 months increased mildly, to 67 % (from 65 % in the previous quarter), while the percentage of those who say the opposite increased to 4 % (from 3 %). At the same time, 76 % (from 74 %) increased the proportion of consumers in Greece making ominous forecasts about the country's economic situation, with 6 % expecting an improvement. Regarding the intention to save, the proportion of households that do not assess savings as probable over the next 12 months increased to 85 % (from 83 %), while marginally the proportion of those who consider it likely to fall to 14 %. In the unemployment forecasts, the proportion of those who estimated the situation to deteriorate to 59 % (from 54 %) deteriorated, with 12 % (from 17 %) on average expressing an opposite view. The proportion of consumers reporting to be "indebted" in the third quarter of 2022 fell to 7 %, to the same level as in the same quarter of 2021. In addition, 18 % of respondents who say they save little (from 21 % in the corresponding quarter of 2021) were maintained. Finally, the percentage of those reporting that "once they get through" was maintained at 64 % and the percentage of households reporting that they are "drawing from their savings" stood again at 9 %, with the corresponding figure for 2021 being only 6 % (Figure 2.5).

Figure 2.5



## Consumer survey data on the financial situation of households (July-September 2022)



Source: IOBE

The Business Sentiment Indicator in Industry stood at 99.6 points in the third quarter of 2022 (down from 102.0 points in the second quarter of 2022), significantly lower than in the corresponding quarter of 2021 (119.6 points). In the key activity data, the short-term output expectations indicator declined from +24.9 points in the second quarter of 2022 and averaged +12.3 points in the third quarter under review from +24.9 points in the second quarter of 2022 and averaged +12.3 points at the same time, the mildly negative estimates for the level of orders and demand fell by 7.4 points from -8.0 points). The estimates for the stocks of finished products (at +13.8 from +3.5 points), while the trends in the export indicators are mixed, the short-term export expectations for the following quarter weakened significantly (+12.3 from +24.9 points) at the same time the current assessment for exports of the sector markedly improved (+17.1 points), with the assessment of orders and foreign demand moderately improved (+9.9 points). In the employment expectations, the relevant average quarterly balance remained unchanged, at +0.8 (from +1.4) points on average. The utilisation rate of plant capacity was considerably lower, at 73.9% (from 77.2%), while the months of secured production fell slightly to 4.5 (from 4.8) months on average.

The percentage stating that they were just making ends meet remained unchanged compared to the second quarter of 2022 (64%). A small decline in the percentage of those stating that they were running into debt.

In Retail Trade, the Business Sentiment Indicator was slightly higher than in the previous quarter, at 88.3 (from 87.9) points, a performance significantly weaker than in the same quarter of last year (102.0 points). Among the main variables of the indicator, the average balance for the assessment of current sales improved slightly to -12 (from -16) points. Among the companies in the sector, 39% (from 44%) reported falling sales, with 26% (from 29%) providing the opposite response. In terms of projected sales, the indicator fell slightly from -4 to -11 points, with stocks slightly de-escalating (to -5 points). Of the remaining activity data, the balance of expectations for orders to suppliers decreased to -9 points (from -7 points), while at the same time, in terms of sector employment, the average expectations balance deteriorated significantly, but remained marginally positive, at +1 (from +11) points. Finally, in terms of prices, the corresponding balance declined slightly (+61 from +67 points), with only 3% of the companies expecting prices to fall and 64% (from 69%) anticipating the opposite development. An improvement in business expectations was recorded in the third quarter of 2022 in all individual retail sectors except for the department stores sector, where there was a sharp decline.

Business expectations in Construction declined significantly in the third quarter of 2022, with the relative balance standing at 99.2 points on average, down from 119.6 points in the previous quarter, the largest change among the main sectors of activity. This performance is at a significantly lower level than in the corresponding quarter of 2021 (144.7 points). In the key variables, the sector's employment





expectations declined sharply, with the relative balance falling from +16 points to -8 points, as 30% (from 33%) of the enterprises were expecting job creation, while 38% (from 17%) were anticipating employment to fall. The firms' negative expectations for planned work deteriorated (at -58 from -47 points), while the assessment of the current level of work improved significantly (at +24 from +6 points).

The months of booked activity of the companies in the sector weakened slightly to 7.0, while the balance of price expectations rose mildly to +23 (from +18) points, with 8% (from 19%) of the enterprises expecting prices to decline in the short term and 31% (from 37%) anticipating their increase. Finally, the percentage of enterprises reporting no obstacles to their operation fell to 9%, while of the rest, 42% (from 22%) reported as main obstacles to their operation the shortage of labour, 14% (from 24%) low demand, 25% (from 28%) insufficient funding, and only 5% factors such as the general economic situation of the country, high prices of raw materials, lack of projects, delays in payments by the state, etc. At the sectoral level, business expectations deteriorated strongly in the private construction sector, in contrast to the public construction sector which so a milder decline.

The Business Sentiment Indicator in Services in the quarter under review was significantly higher than in the previous quarter, at 112.3 points (from 97.9), albeit lower year on year (123.4 points in the corresponding quarter of 2021). Of the key variables, the current demand assessment strengthened significantly, with the relative indicator gaining 19 points on average and reaching +27 points. There was a strong positive trend in the assessment of the current conditions (+42 from +6 on average), with the balance of the short-term demand expectations falling slightly (+24 from +29 points). Among the remaining activity data, the employment expectations declined slightly to +18 points, while in prices the average expectations indicator declined slightly to +25 (from +31) points. Finally, the share of respondents reporting smooth business operations increased significantly on average to 37% (from 27%), with 18% declaring as the main obstacle to their operation labour shortages, 12% demand shortages, 5% insufficient working capital, and 22% (out of 27%) other factors linked to the general economic situation, such as energy prices, the war in Ukraine, etc. The indicators declined slightly in the third quarter of 2022 in Hotels-Restaurant-Travel Agencies, IT and Financial Intermediaries, while the remaining subsectors saw a marked improvement.

**Table 2.4**

Economic Sentiment Indicators

Time Period	Economic Sentiment Indicator			Business Expectations Index (Greece)				Consumer Confidence Index (Greece)
	EU-27	Eurozone	Greece	Industry	Construction	Retail Trade	Services	
2010	98.6	98.3	85.5	79.9	52.2	61.3	68.1	-57.9
2011	98.3	98.4	83.9	81.1	37.7	60.9	66.1	-69.8
2012	89.0	89.0	83.6	81.4	47.5	59.1	58.8	-73.8
2013	91.9	91.8	93.6	92.6	71.5	72.6	75.3	-69.7
2014	98.6	98.3	101.7	99.7	88.4	92.3	93.3	-53.0
2015	102.9	102.8	91.6	86.3	62.0	83.9	78.2	-51.6
2016	104.4	104.1	95.0	96.1	61.3	101.4	79.3	-61.3
2017	110.7	110.5	98.5	98.1	55.4	94.6	92.7	-58.0
2018	111.1	110.9	103.3	102.8	58.1	104.5	97.0	-44.1
Q1 2019	106.9	106.5	102.1	101.8	56.7	105.8	85.7	-32.8
Q2 2019	104.3	104.3	103.8	103.8	54.8	97.8	92.6	-30.9
Q3 2019	102.0	101.9	108.7	104.8	52.7	115.5	108.2	-10.6
Q4 2019	102.3	101.7	109.1	104.1	68.1	119.1	104.4	-4.2
Q1 2020	102.0	101.5	109.9	108.6	84.9	115.1	106.5	-14.4





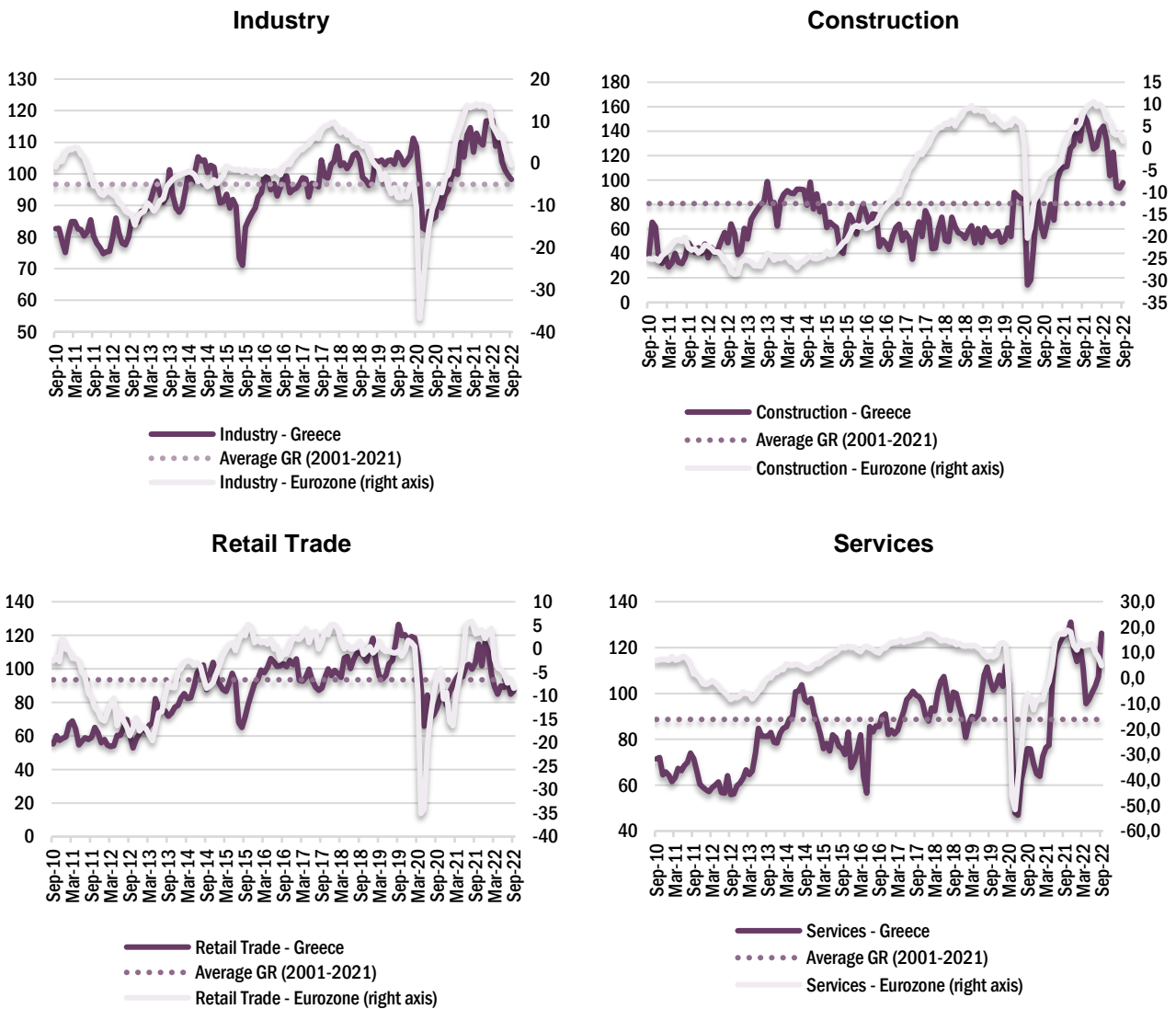
Q2 2020	65.9	67.5	89.1	87.6	28.1	80.3	58.6	-38.3
Q3 2020	88.5	89.8	90.0	86.7	67.0	73.5	68.8	-37.0
Q4 2020	93.9	94.5	93.1	92.6	70.7	83.0	70.0	-40.2
Q1 2021	99.2	99.1	96.5	98.2	106.2	90.2	70.9	-40.7
Q2 2021	109.5	110.6	105.5	105.0	121.9	97.9	99.3	-28.3
Q3 2021	115.8	117.4	111.6	111.3	144.7	102.0	123.4	-33.6
Q4 2021	115.1	115.9	112.6	110.7	137.2	110.7	125.4	-38.8
Q1 2022	110.7	111.2	113.5	116.9	137.2	98.8	115.7	-43.6
Q2 2022	103.0	104.1	105.6	108.0	119.6	87.9	97.9	-53.0
Q3 2022	95.3	96.5	102.9	99.6	95.2	88.3	112.3	-53.6

Sources: European Commission, DG ECFIN, IOBE



Figure 2.6

Business Confidence Indicators



Source: IOBE

Business expectations deteriorated quarter on quarter in Q3 of 2022 in Industry and Construction and strengthened significantly in Services and more mildly in Retail Trade.



## B. Fiscal developments

- State Budget Balance, January-August 2022: deficit of EUR 4.105 million, against a deficit target of EUR 9.992 million and a deficit of EUR 10.519 million in the same period of 2021.
- State Budget primary balance, Jan-August 2022: surplus of EUR 19 million, against a primary deficit target of EUR 5.942 million and a primary deficit of EUR 6.381 million in the same period last year.
- The improvement was mainly driven by an increase in net revenue (+EUR 4.546 million or +13.1%) compared with last year.

### Execution of the 2022 budget (January – August)

The international energy crisis is causing severe shocks to household purchasing power and the sustainability of many businesses. Against this background, global fiscal policy makers are taking expansionary measures to cushion the negative effects of high inflation. In EU countries, a broad framework of measures was implemented at the national level to address high energy prices, both on the side of revenues (reducing taxes) and public expenditure (subsidies).

Considering these developments at the international level, successive packages have been adopted by the Greek government since the beginning of January. In Greece, the measures were mainly concentrated on the expenditure side (subsidies with recurring revenues). They concern support for the consumption of electricity and gas by households, as well as on all non-household tariffs (rural, commercial, industrial, professional, etc.). An additional deduction to households for gas is granted by suppliers. In April, a fuel card for individuals (fuel pass) with an annual household income of up to EUR 30,000 was introduced for April-June. In September there was an upward revision of the income cap (to EUR 45,000). Transfers to vulnerable social groups (low-pension beneficiaries, disabled, minimum-income beneficiaries, etc.) have been introduced. In mid-June, the energy pass was activated, through which beneficiaries (households with an income of up to EUR 45,000) can receive an electricity subsidy of up to EUR 600, for a primary residence or student home accounts issued between 1 December 2021 and 31 May 2022. In addition, at the end of August, the reimbursement of farmers' motor fuel excise duty expired, while the adjustment clause on electricity tariffs was suspended from 1 August 2022 to 1 July 2023, with a view to bringing the accounts back to the levels from before the energy crisis. Further government support measures were announced at the Thessaloniki international fair, bringing the net cost for 2022 to EUR 4.3 billion. The annual cost of the measures announced in the fair for 2023 and 2024 is EUR 3.2 billion and EUR 3.6 billion respectively.

Understandably, as long as energy prices remain high, to the extent that fiscal space is available, support measures for households and firms will continue to be in place, with adjustments, possibly including new additions. The burden on the fiscal balance of support measures already implemented or announced is large and may widen. This effect is mitigated by higher-than-expected revenues from indirect taxes on energy products in the 2022 Budget, due to their high prices, as well as the stronger economic activity, as also indicated by the budget execution data discussed below. A stronger boost to fiscal revenues is also attributable to the growth of tourist flows in 2022, based on international arrivals at international airports (+0.9% in June and +0.1% compared to 2019 respectively), despite the war. The boost mainly concerns revenue from indirect taxes, but also income tax in this sector.

### State Budget Balance and Primary Balance

According to State budget execution data, on a modified cash basis, for January-August 2022, the State budget balance had a deficit of EUR 4,105 million against a deficit target of EUR 9,992 million included for the same period of 2022 in the explanatory report to the 2022 Budget and a deficit of EUR 10,519 million in the corresponding period of 2021. The primary balance had a surplus of EUR 19 million, against a primary deficit target of EUR 5,942 million and a primary deficit of EUR 6,381 million in the



same period of 2021. The improvement in the state budget balance compared with last year is mainly due to higher net revenue (+13.1% or +EUR 4.55 billion, Table 2.5).

**Table 2.5**

State Budget execution: January-August 2022\* (million €)

	Jan. – August		% Change 22/21	2021*	2022* Budget	% Change 22E/21
	2021*	2022*				
I. SB NET REVENUE (1+2)	34,686	39,232	13.1	54,878	57,101	4.1
1. Net OB revenue	28,972	35,593	22.9	47,999	47,736	-0.5
OB revenue before tax refunds	31,796	39,168	23.2	53,102	55,172	3.9
Less Tax refunds	2,824	3,575	26.6	5,103	4,957	-2.9
2. PIP revenue +RRF <sup>3</sup>	5,714	3,639	-36.3	6,879	7,436	8.1
of which: revenue from EU	45,205	43,337	-4.1	69,750	67,929	-2.6
II. SB EXPENDITURE (3+4)	39,504	37,144	-6.0	60,749	54,595	-10.1
3. OB expenditure	35,188	32,990	-6.3	55,876	49,995	-10.5
Primary expenditure OB	4,316	4,154	-3.8	4,873	4,600	-5.6
Interest	5,701	6,193	8.6	9,001	10,999	22.2
4. PIP expenditure + RRF <sup>4</sup>	-10,519	-4,105		-14,872	-10,827	
III. SB Deficit (-)/Surplus (+)	-5.9	-2.2		-8.4	-5.8	
% of GDP	-6,381	19		-10,327	--6,257	
IV. SB Primary Balance	-3.6	0.0		-5.8	-3.3	
% of GDP	177,608	187,278	5.4	177,608	187,278	5.4

Source: Monthly SB Execution Bulletin August 2022, Ministry of Finance, September 2022. \* On a modified cash basis. According to the new revenue classification in force since 01/01/2019.

**Ordinary budget revenue**

The State budget’s net revenue in January-August 2022 amounted to EUR 39,232 million, an increase of EUR 5,695 million or 17% compared to the estimate for the corresponding period included in the explanatory report to the 2022 Budget and EUR 4,546 million or 13.1% over the previous year, despite the reduced revenue of the Public Investment Programme. The total revenue of the state budget amounted to EUR 42,808 million, which is EUR 6,399 million or 17.6% higher than the target.

Most categories increased compared with last year. Ordinary Budget revenue increased by 23.2%, while the net revenue of the ordinary budget increased by 22.9%, with tax refunds rising by 26.6%. Revenue from income tax increased by 24.0% compared to last year, mainly due to the increase in corporate tax revenues (+86.2%), while the increase in personal income tax was significant. Tax revenues from goods and services expanded from last year by 20.4%, primarily because of a 25.1% increase in VAT revenue. Tax revenue, in general, is also higher than the target included in the explanatory report to the 2022 Budget (+18.2%). This increase is due to better efficiency of the collection of previous year taxes paid in instalments until the end of February 2022, the extension of the deadline for payment of road taxes until the end of February 2022, and a better yield in the collection of the current year’s taxes.

**Table 2.6**

State Budget Revenue: January-August 2022\* (million €)

	Jan.– August		% Change 22/21	2021*	2022* Budget	% Change 22E/21
	2021*	2022*				
Net SB revenue	34,686	39,232	13.1	54,878	57,101	4.1
Net OB revenue	28,972	35,593	22.9	47,999	47,736	-0.5
Tax refunds	31,796	39,168	23.2	53,102	55,172	3.9
OB revenue	2,824	3,575	26.6	5,103	4,957	-2.9
Income tax, of which:	8,669	10,750	24.0	14,697	15,683	6.7
--Personal	6,707	7,577	13.0	10,173	10,410	2.3
--Corporate	1,234	2,298	86.2	3,374	4,076	20.8

<sup>3</sup> The PIP category now includes the flows of the Recovery and Resilience Fund for 2021 and 2022

<sup>4</sup> As above



Property tax	715	2,079	190.8	2,652	2,631	-0.8
Taxes on donations, inheritance etc.	125	147	17.6	198	170	-14.1
Tariffs	186	298	60.2	305	297	-2.6
Taxes on goods and services, of which:	16,911	20,362	20.4	26,736	28,462	6.5
--VAT	11,128	13,924	25.1	17,431	18,735	7.5
--Excise duties	4,226	4,511	6.7	6,659	7,065	6.1
Other production taxes	764	896	17.3	1,086	991	-8.7
Other current taxes	1,346	1,203	-10.6	2,452	2,209	-9.9
Social contributions	37	37	0.0	55	55	0.0
Transfers	6,762	4,318	-36.1	8,690	7,377	-15.1
Sales of goods and services, of which:	392	555	41.6	611	2,104	244.4
Other current revenue	1,599	2,155	34.7	2,495	2,067	-17.2
Sales of fixed assets	4	7	75.0	4	13	225
PIP Revenue <sup>5</sup>	5,714	3,639	-36.3	6,879	7,436	8.1

Source: Monthly SB Execution Bulletin August 2022, Ministry of Finance, September 2022. \* On a modified cash basis. According to the new revenue classification in force since 01/01/2019.

Revenue from property taxes is 190.8% higher than last year as by the end of August four out of eight ENFIA instalments were collected, expected earlier to be collected from September to December. Significant increases were also observed in import duties and taxes (+60.2%), the sales of goods and services (+41.6%), and other current revenue (+34.7%). By contrast, transfers fell by 36.1% due to lower revenue in the PIP+RRF (Table 2.6).

### Ordinary Budget Expenditure

State budget expenditure in January-August 2022 amounted to EUR 43,337 million, lower by EUR 192 million than the target (EUR 43,529 million) included in the explanatory report to the 2022 budget and by EUR 1,868 million or 4.13% compared to last year. Under the Ordinary Budget, payments were lower both in relation to the target (by EUR 864 million) and compared with last year (-5.97%). This development is mainly due to the delayed payments of military procurement programmes by EUR 803 million. Primary expenditure fell by 6.25% while interest payments declined by 3.8%.

Despite the overall expenditure restraint, employee and social benefits increased compared to last year, by 1.4% and 6.1% respectively (Table 2.7). The largest expansion of expenditure, in both relative and absolute terms, took place in purchases of goods and services (+EUR 178 million or +19.3%), subsidies (+656.3%), and other expenditure (+33.3%). The significant increase in subsidies is likely to be due to the energy support measures detailed below. The largest fall was observed in transfers (-10.4%) and purchases of fixed assets (-10.3%). The fall in transfers would have been wider in the absence of exceptional expenditure payments related to interventions in response to the energy crisis.

**Table 2.7**

State Budget Expenditure: January-August 2022\* (million €)

	January- August		% change 22/21	2021*	2022* Budget	% change 22E/21
	2021*	2022*				
SB Expenditure (1+2+3)	45,205	43,337	-4.13	69,750	67,929	-2.6
OB Expenditure (1+2)	39,504	37,144	-5.97	60,749	54,595	-10.1
1.Primary OB Expenditure	35,188	32,990	-6.25	55,876	49,995	-10.5
Compensation of employees	8,874	8,997	1.4	13,494	13,610	0.9
Social benefits	147	156	6.1	281	221	-21.4
Transfers	23,276	20,852	-10.4	37,038	30,583	-17.4
(of which SSFs)	12,595	13,613	8.1	21,574	20,441	-5.3
Purchase of goods and services	924	1,102	19.3	1,992	1,355	-32.0

<sup>5</sup> The PIP category includes the flows of the Resilience and Recovery Fund for 2021 and 2022.



Subsidies	16	121	656.3	346	80	-76.9
Other current expenditure	30	40	33.3	52	101	94.2
Non allocated expenditure	0	0	0.0	0	2,923	-
Purchase of fixed assets	1,921	1,723	-10.3	2,672	3,456	29.3
2. Interest (gross basis)	4,316	4,154	-3.8	4,873	4,600	-5.6
3. PIP Expenditure <sup>6</sup>	5,701	6,193	8.6	9,001	10,999	22.2

Source: Monthly SB Execution Bulletin August 2022, Ministry of Finance, September 2022. \* On a modified cash basis. According to the new revenue classification in force since 01/01/2019.

The major payments related to measures against the pandemic in January-August included: (a) aid to small and micro-enterprises affected by COVID-19 in the regions amounting to EUR 160 million from the Public Investment Programme; (b) State's contribution to the repayment of business loans to affected borrowers of EUR 83 million from the Public Investment Programme; (c) EUR 42 million operating capital subsidy to tourism enterprises from the Public Investment Programme; (d) support to regional health institutions with ancillary personnel of EUR 62 million from the Public Investment Programme; (e) exceptional grant of EUR 44 million to businesses affected by the pandemic from the Public Investment Programme; (f) a special-purpose allowance of EUR 149 million, paid by the Ministry of Labour and Social Affairs (transfers category); (g) additional subsidies to the national health authority of EUR 100 million and to hospitals and regional health authorities of EUR 91 million, as well as the purchase of vaccines of EUR 269 million, h) the EUR 400 million additional grant to DYPA (formerly OAED) to cover the loss of revenue due to the reduction of employees' social security contributions and the grant to e-EFKA of EUR 150 million to cover a loss of revenue from the reduction in the contributions paid to DYPA and (i) the State compensation of property-owners of EUR 49 million due to reduced rents they receive. It should be noted that the total (EUR 1.6 billion) is much smaller than a year earlier (EUR 6.65 billion), which is reflected in the sharp decline in transfers mentioned above.

As regards the energy crisis measures, the situation is as follows: (a) a grant of EUR 207 million to OPEKA, broken down into: EUR 120 million for the extraordinary instalment of the child allowance, EUR 46 million for the payment of the increase in income support to beneficiaries of the minimum guaranteed income, EUR 33 million for the exceptional financial support for persons with disabilities and EUR 7 million to supplement the pension of uninsured elderly; (b) a grant to e-EFKA of EUR 135 million for the exceptional financial support to vulnerable pensioners; (c) a grant to the Information Society to support individuals and self-employed persons with a view to countering the increase in the cost of transport fuels (fuel pass) of EUR 301 million and for support from higher electricity bills of EUR 280 million, (d) a grant of EUR 50 million to OPEKEPE to deal with the consequences to Greek livestock due to the international developments; (e) a special allowance for support for taxi operators and drivers of EUR 5 million; and (f) a motor diesel subsidy of EUR 102 million.

### Public Investment Programme (PIP)

The revenue of the Public Investment Programme (PIP) and the revenue of the Recovery and Resilience Facility (measured together according to the new classification) totalled EUR 3,639 million, a decrease of 36.3% compared with the previous year. However, without considering the disbursement of the RRF instalment, the revenue of the Public Investment Programme amounted to EUR 1,921 million, i.e., 43.6% lower than in the previous year. Expenditure reached EUR 6,139 million, an increase of 8.6% compared with the previous year, mainly due to the large increase in RRF expenditure (from EUR 72 million to EUR 1.25 billion). The RRF expenditure increased significantly as the implementation of many of the "Greece 2.0" projects started in early 2022.

<sup>6</sup> The PIP category now includes the flows of the Recovery and Resilience Fund for 2021 and 2022





## C. Financial developments

- The European Central Bank accelerated its path of raising key interest rates with the aim of curbing inflation expectations close to the inflation target over the medium term.
- The cost of new borrowing for the Greek State increased in the third quarter of 2022 and the spread widened with the “core” of the euro area. The cost of new borrowing in the private sector remained low, although mortgage rates picked up.
- Non-performing loans (NPLs) on the banks’ balance sheets decreased further in the second quarter of 2022 to 10.0% of total loans, down to their lowest level since December 2009.
- Credit expansion to firms strengthened, offsetting the contraction of credit to households.
- Private deposits strengthened in June-August, but at a slower pace than in the same period of last year.
- Speeding up the implementation of the loan component of the National Recovery and Resilience Plan, with the support of the banking system, can enhance the prospects for credit growth and investment.

High inflation, the prospect of a slowdown in economic activity, and heightened uncertainty also pose challenges to the financial system. The international monetary environment is becoming tighter more rapidly than expected, with central banks systematically raising key interest rates with a view to curbing medium-term inflation expectations. The first interest rate increase by the ECB after 11 years, by 50 basis points in July 2022, was followed by a second hike, by 75 bps, in September, with markets anticipating up to an equally large increase at the end of October and further – possibly smaller – increases until spring 2023.

The investment climate in financial markets deteriorated in September and the financial sector was not an exception. After a two-year period of high volatility, following two successive external disruptions (pandemic-war), the banking index at the end of September was about 40% lower than in early 2020 and 30% lower than in mid-February this year, before the outbreak of the war in Ukraine.

Risks and uncertainty about the real economy are also affecting the financial sector’s outlook, including in terms of asset quality and profitability. Challenges from the past include the high share of non-performing loans (NPLs), which has declined significantly, the high share of deferred taxes in their equity capital, and weak profitability.

On the monetary policy side, in addition to the first interest rate hike, the ECB ended the net new purchases under the PEPP and the APP in March and June 2022 respectively. However, reinvestments of the relevant maturing bonds continue. In the case of Greece, the ECB had announced that there is scope for the exceptional continuation of net new PEPP purchases in order to continue the smooth transition of monetary policy in all Member States. Following the energy crisis, in July 2022 the ECB announced the creation of a monetary policy Transmission Protection Instrument (TPI), with the aim of ensuring a smooth and effective transmission of monetary policy in each member country, subject to certain minimum conditions.

Among the positive trends in bank fundamentals, credit expansion to firms is strengthening, private deposits remain elevated, while the NPLs on banks’ balance sheets continue to decline. The timely implementation of the National Recovery and Resilience Plan creates opportunities to boost credit for productive investment in the medium term.

Among the negative trends, uncertainty due to the war worsened the broader investment climate, while there was a significant rise in the cost of new borrowing by the Greek government, and to a lesser extent by the private sector. Sovereign bond yields reached 5% in the case of the 10-year bond in late September, returning to 2017 levels. Similarly, the spread against German bond yields widened,

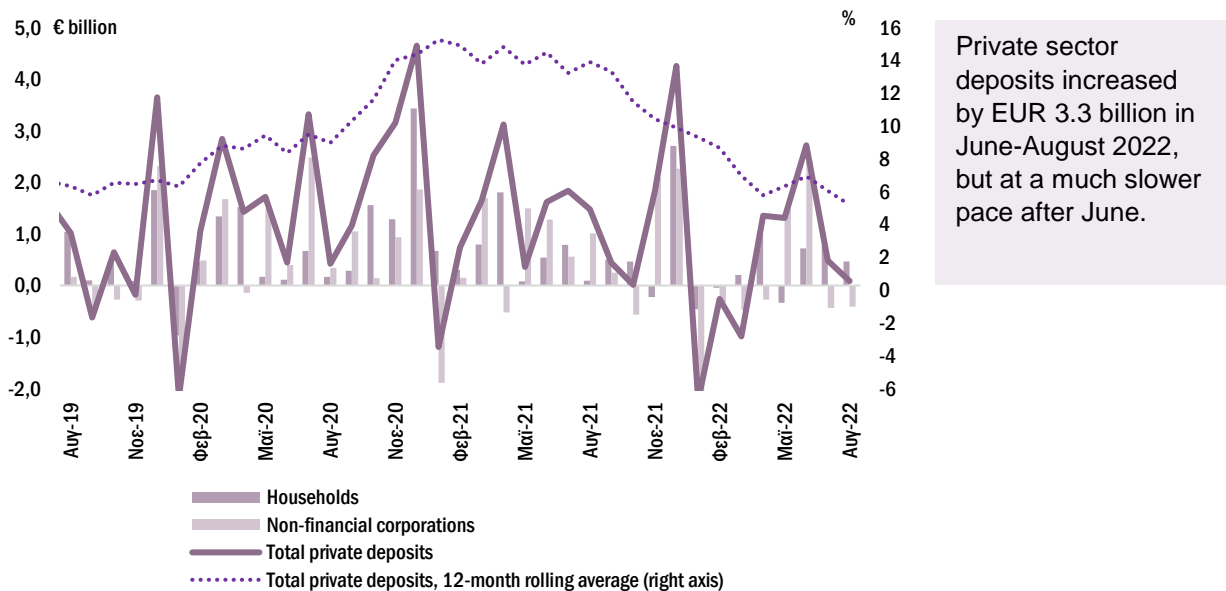


exceeding 270 basis points in the case of the 10-year bond. Credit contraction to households continued unabated.

On the bank liabilities side, private deposits increased by EUR 3.3 billion in June-August 2022, of which EUR 2.0 billion of inflows came from households (Figure 2.7). However, their growth shows signs of slowing down, as in August it was only marginal, by EUR 0.1 billion. The year-on-year rate of change fell to 5.2% in August, compared with an average rate of 9.0% over the two-year period from 2020 to 2021, against the backdrop of a pandemic and an increase in savings. Cumulatively since March 2020, private deposits have increased by EUR 40.3 billion, of which EUR 21.4 billion come from households.

Figure 2.7

Monthly net flow of private deposits at Greek banks



Source: Bank of Greece

For the fourth quarter of 2022 and in early 2023, the trend in private deposits is expected to decelerate significantly or even change sign. As inflation gains strength and duration, while fiscal constraints gradually reduce the extent of financial support measures, real disposable income and household and corporate savings are expected to shrink further.

The second part of the banks' liabilities relates to Eurosystem funding. The financing of banks with low-cost loans from the Eurosystem has increased during the pandemic crisis since February 2020 by at least EUR 43.3 billion (Figure 2.8). Long-term low-cost financing operations for banks (e.g., LTROs, PELTROs, TLTROs) provide significant liquidity, reaching EUR 50.9 billion in Q3 2022 or 27.8% of GDP (2021), the second highest among the euro area member countries. At the same time, the assets of the domestic banking system that are eligible as collateral for monetary policy operations, as reflected in the Bank of Greece's financial statements, increased over the same period, reaching EUR 68.9 billion in August. However, geopolitical instability and the energy crisis halted the recovery of financing through the capital markets.

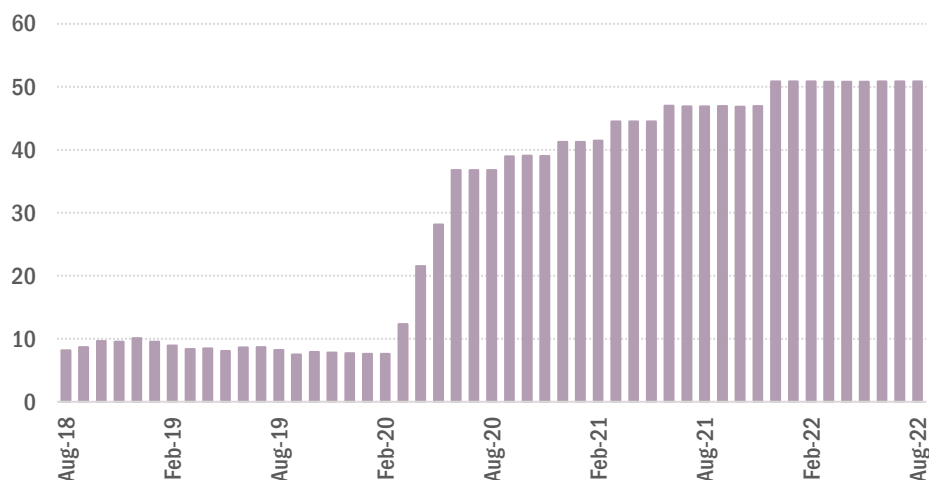
Figure 2.8

Long-term financing of the Greek banks from the Eurosystem (billion €)





Low-cost liquidity from the Eurosystem to Greek banks stabilised at EUR 50.9 billion in mid-2022, up by EUR 43.3 billion since the start of the pandemic.



Source: Bank of Greece

**Table 2.8**

Domestic banking finance per sector (annual % change of 12-month flows\*)

Quarter/Year	3/21	4/21	1/22	2/22	Jul 22	Aug 22
Total private sector	0.9	1.1	1.3	3.5	5.5	5.8
Households & NPIs	-2.6	-2.4	-2.2	-2.1	-2.1	-2.1
Consumer credit	-2.0	-0.8	0.0	0.7	1.1	1.2
Mortgage credit	-2.8	-2.9	-2.9	-3.0	-3.1	-3.1
Sole proprietors and unincorporated partnerships	2.4	1.8	0.9	0.6	0.7	0.3
Non-financial corporations	3.4	3.3	3.0	7.7	10.9	11.5
Interest rates on new loans (period average, %)						
Consumer credit	10.4	10.3	10.5	10.3	10.7	10.5
Mortgage credit	2.85	2.77	2.83	2.95	3.01	3.14
Loans to non-financial corporations	3.11	2.87	2.88	3.22	2.72	3.13

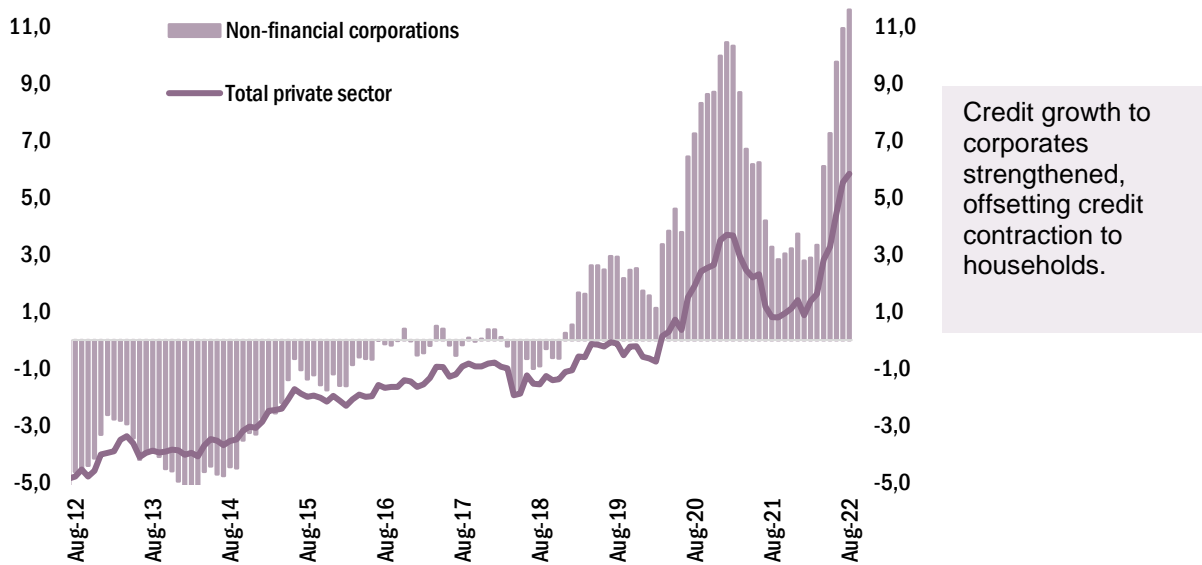
Source: Bank of Greece.

\* The flows result from changes of outstanding balances corrected for loan write-offs, re-evaluation of securities, foreign exchange differences and reclassification/transfer of loans.

On the bank assets side, the 12-month growth rate of credit to the domestic private sector increased to 5.3% in June-August 2022. The corresponding rate to non-financial corporations (NFCs) increased to a double-digit level 10.5% over the same period (Figure 2.9). Credit growth to sole proprietors and freelancers remained weak, at rates close to 0.6%, while the contraction of credit to households was sustained, with an annual change rate of around -2.1%. As a result, the 12-month rate of change in lending to the private sector as a whole, net of loan write-offs, rebounded in mid-2022, reaching 5.8% in August, following a systematic decline over the past year (Table 2.8).

**Figure 2.9**

Bank financing of the domestic private sector 2012-2022 (annual % change of flows\*)



Source: Bank of Greece

\* The flows result from changes of outstanding balances corrected for loan write-offs, re-evaluation of securities, foreign exchange differences and reclassification/transfer of loans.

These trends in private sector financing are driven by changes in both supply and demand for loans, under the influence of the pandemic. On the supply side, the rapid reduction of NPLs and the launch of the Recovery and Resilience Plan have a positive impact on the NFCs. On the demand side, the new escalation of uncertainty acts as a deterrent to new investments, yet it is offset by projects already planned to be included in the recovery plan. The Bank of Greece's bank lending survey in the first quarter of 2022 recorded an increase in expectations of demand for new loans, especially in business and consumer credit, with a slight decline in housing credit. The credit criteria remained stagnant, not expected to change in the short term either.

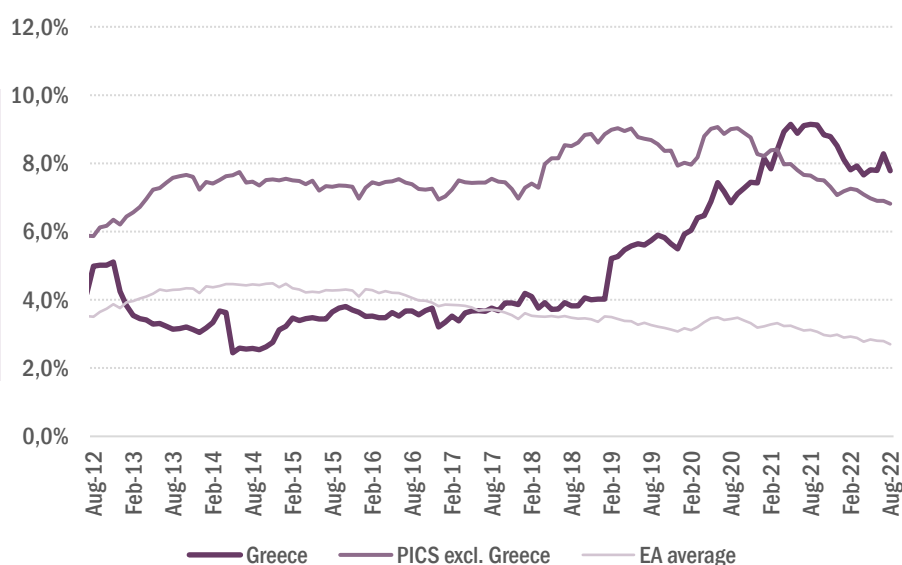
During the pandemic, the role of the Greek government in absorbing resources of the domestic banking system intensified. In terms of new bank financing, the annual rate of credit expansion to the General Government remained high in August, at 10.9 % on a 12-month rolling basis, albeit significantly lower from the 55.0% recorded in the same month last year. On the assets side, banks maintained their exposure to sovereign debt in mid-2022, amounting to EUR 26.1 billion in August 2022, or 7.8% of their total assets. Thus, the share of total assets of Greek banks placed in sovereign bonds is slightly higher than that of the rest of the "south" of the euro area, but significantly higher than the corresponding share for the euro area average (Figure 2.10).



Figure 2.10

Banks' government bond holdings over total assets (%)

Greek banks' exposure to sovereign bonds remained stable in mid-2022, above the euro area average.



Source: ECB

The non-performing loans (NPLs) recorded a further decline in the second quarter of 2022, by 2.1 p.p. or EUR 2.9 billion<sup>7</sup>, reaching EUR 14.8 billion or 10.9% of total loans in June 2022 (Figure 2.11), the lowest rate since the end of 2009. The overall level of NPLs remains higher than in the remaining European countries, where it is at low single-digit rates. In business credit, the share of NPLs fell in the second quarter of 2022 to 9.4% of related loans, from 12.1% in the previous quarter, as in consumer loans, from 20.1% to 18.4%. By contrast, the NPL rate in housing loans stagnated at 10.2%.

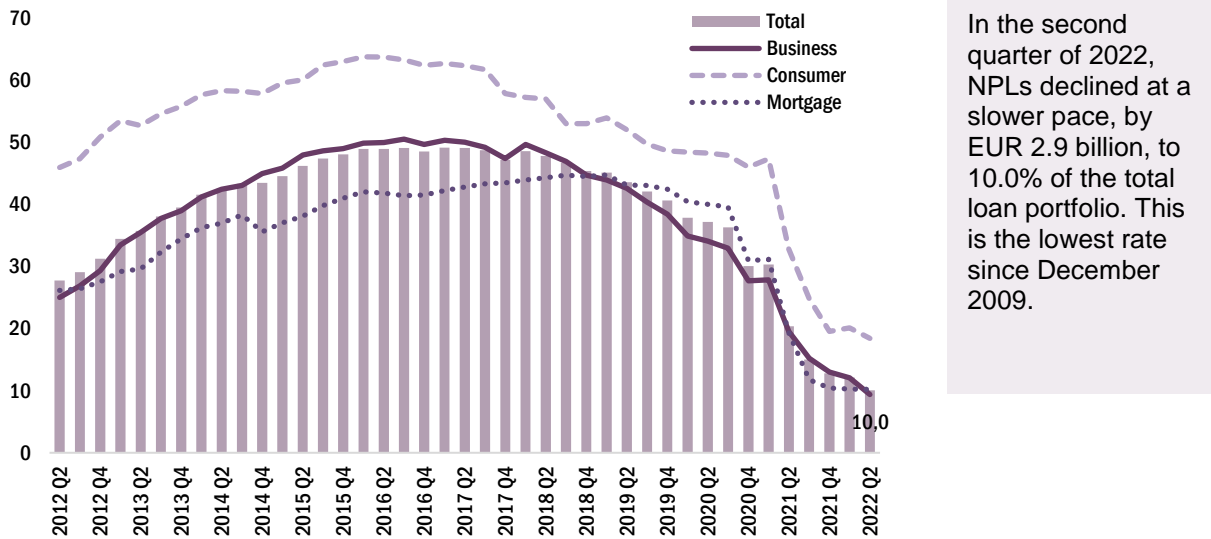
Despite the adverse economic conditions of successive external shocks, such as the pandemic, the war in Ukraine, and the energy crisis, the banks have made significant progress on the issue of NPLs since early 2020 when the implementation of the State Guaranteed Securitisation Programme (Hercules) began, dramatically reducing the NPL stock by EUR 53.7 billion or 30.6 p.p. However, the stock of non-performing private debt, both on and off the balance sheets of the banking system, remains high. As a result, the successful implementation of reforms in relation to the Bankruptcy Code and the out-of-court debt settlement mechanism is considered key to its management and reduction. The Hercules securitisation programme is expected to be in place until October 2022.

Over the medium term, the reduction in NPLs is expected to continue at a weaker pace, driven by further securitisations of portfolios that carry such loans out of the banks' balance sheets. In the short term, the decline in NPLs is likely to be partially offset by shocks from the impact of the new energy crisis and the high inflation affecting both households and businesses, especially in the energy-intensive sectors. The shocks may also be linked to the phasing out of temporary measures to assist borrowers affected by the health crisis (Bridge I, II as well as the termination of payment moratoriums), as well as to an increase in interest rates on floating-rate loans due to successive increases in key ECB interest rates.

Figure 2.11

Non-Performing Loans, % of total loans by category\*

<sup>7</sup> The presented data for NPLs include only on-balance sheet items, on a non-consolidated basis.



Source: Bank of Greece

\* On-balance-sheet loans (before provisions) for all Greek banks on a non-consolidated level.

In terms of new credit, credit to households is expected to continue to contract, while inflows from the European recovery fund and the relevant leverage of private investment are expected to significantly boost credit growth to businesses. Banks are invited to have a key co-financing role in the loan arm of the RRF, amounting to EUR 12.7 billion for Greece by 2026. The disbursement of the first tranche of the fund, totalling EUR 3.6 billion, took place in early April, of which EUR 1.84 billion relates to the loan arm. The request for a second, equal disbursement was submitted by the Greek authorities to the European Commission at the end of September and is expected to be examined by the EU by the end of this year.

Interest rates for new deposits remained at extremely low levels in July-August 2022, at 0.01% and 0.04% for non-financial corporations (NFCs) and households respectively, from 0.02% and 0.07% respectively in 2021 as a whole. In the same two months, the average interest rate on new loans was 3.9%, at around 5.1% for individuals, 5.3% for freelancers, and 2.9% for NFCs. The difference in the average interest rate on loans and deposits (rate margin) increased to 4.0% in August, compared to 3.8% in the whole of 2021.

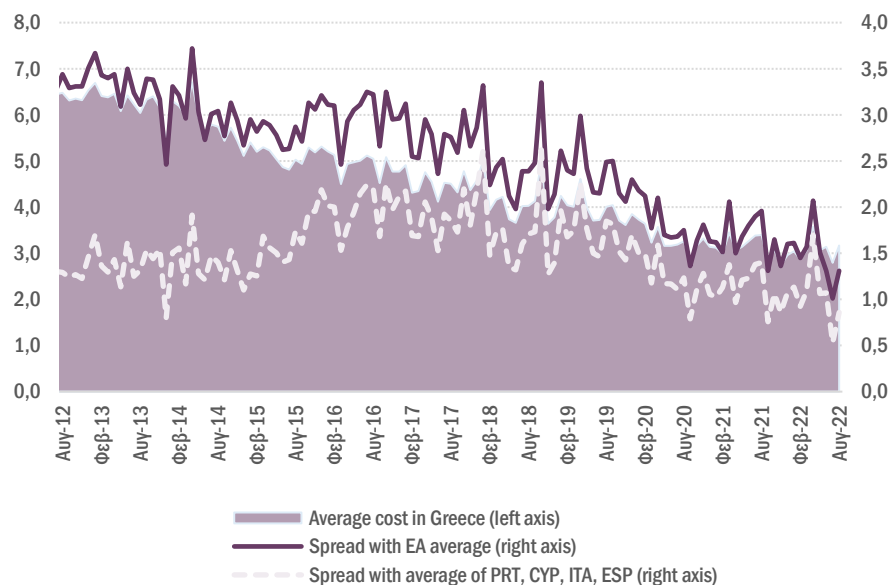
The average cost of new bank financing of private sector NFCs rose to 3.2% in August, yet it remains low compared to before 2020 (Figure 2.12). However, the cost of financing Greek businesses is higher than in the rest of the euro area. In particular, according to the ECB's composite cost of borrowing index, the cost for non-financial corporations in August 2022 stood at 1.5% in the Eurozone, 1.7% in Germany, and 2.0% in the countries of the "south" of the Eurozone (Portugal, Italy, Cyprus, Spain). As a result, the spread of borrowing costs for Greek businesses compared to the average of the Euro Area and of other countries in its "south" reached recorded at 175 bp. and 123 bp. respectively. Comparing it with the pre-fiscal crisis level of 2010, the spread of borrowing costs for Greek businesses compared to the average of other countries in the Eurozone "south" remains significantly higher.

**Figure 2.12**

Composite cost of borrowing for non-financial corporations (%)



Interest rates for new private sector borrowing remained low, despite increasing to 3.2% in August, with the spread from average borrowing costs in the euro area's "south" countries widening to 131 bp.



Source: ECB

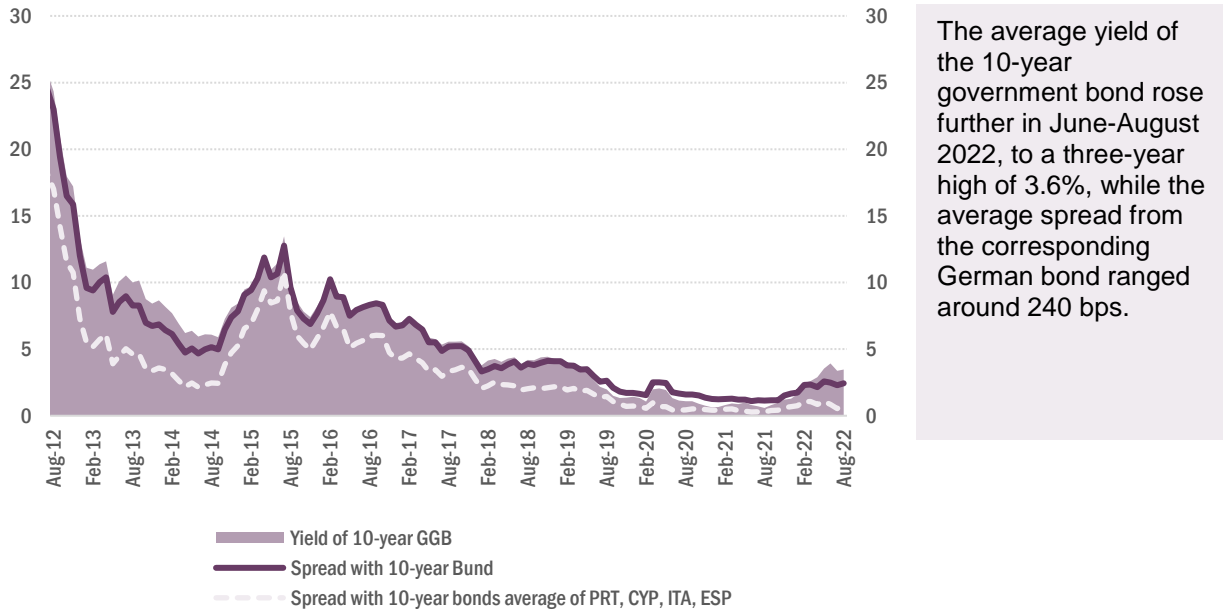
Greek government bond yields recorded a significant further increase in mid-2022, under the negative impact of the uncertainty caused by the energy crisis, inflation, and geopolitical instability. Thus, for the 10-year bonds, the average yield rose to 3.5% in August, while at the end of September it reached 5%, which is a five-year high (Figure 2.13). The spread of the new 10-year borrowing costs of the Greek government compared to the rest of the Eurozone countries also increased mid-year, reaching 243 bps and 79 bps relative to the German bond and the average of the countries of the "south" of the Eurozone, respectively, in August, from 110 bps and 28 bps in mid-2021. As a result, the spread remains significantly higher than the average for the first decade of the country's accession to the Eurozone (54 bps and 2 bps respectively).

As part of the financing strategy of the Greek government, in 2021, a total of EUR 14 billion was raised from the markets through six successful long-term issues. In 2022, due to worsening international conditions and the existence of alternative financing options, the Greek State is expected to raise significantly lower volumes of capital from the markets (estimated at EUR 7-10 billion) than in the previous year. In addition to small reissues of long-term securities and regular short-term issues, the Greek State has already made one issue in January (10-year, EUR 3.0 billion, 1.8%), one in April (7-year, EUR 1.5 billion, 2.4%) and a reissue in July (10-year, EUR 0.5 billion, 3.67%). For 2023, the Greek government's target of raising capital from the markets is expected to fluctuate close to the 2022 level, in line with current conditions and expectations.



Figure 2.13

Yield and spread of the 10-year Greek sovereign bond (%)



Source: ECB

Following the escalation of geopolitical tensions in eastern Europe, combined with the energy crisis, there has been a systematic and remarkable rise in sovereign bond yields since the beginning of 2022, with a slightly stronger increase in yields for countries in the “periphery”, such as Greece. In this context, the Greek securities have not yet managed to recover the intended “investment grade” from the international rating agencies, with three of them (S&P, DBRS, R&I) assessing the Hellenic Republic just one notch lower, with the relevant objective set for 2023. The amount of Greek public debt as a percentage of GDP remains among the highest internationally. Countervailing this quantitative feature are its qualitative characteristics, such as the high average repayment term and the large share of fixed and low-interest rate debt to international organisations, which improve its long-term sustainability outlook.



## 3 PERFORMANCE AND OUTLOOK

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### 3.1 GDP components

#### A. Recent developments

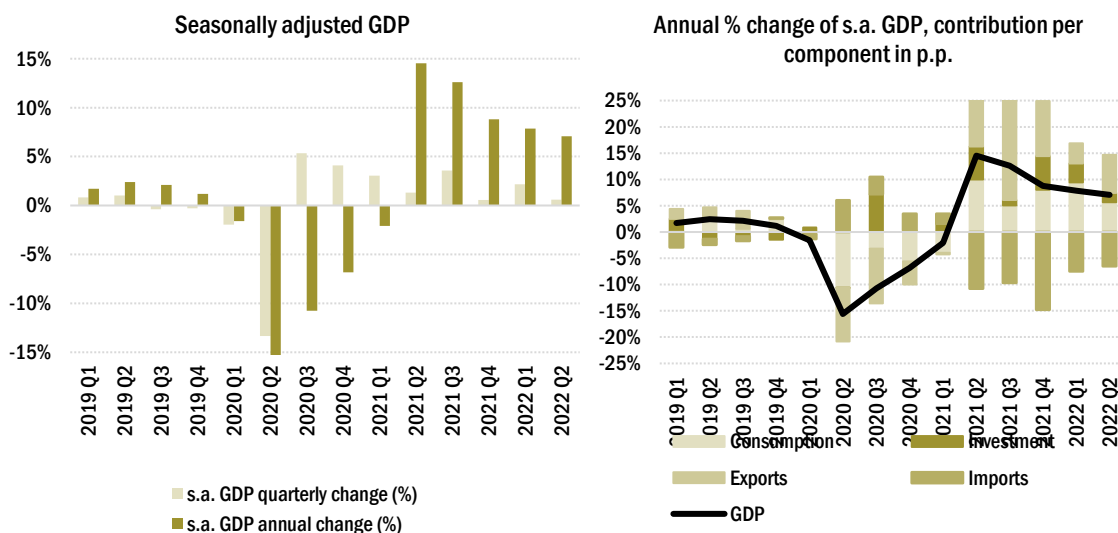
- Stronger than expected annual recovery of 7.7 % (y-o-y) in Q2 2022, marginally weaker than the 8% recovery in the previous quarter.
- The recovery in Q2 2022 was mainly driven by significant annual growth in exports of services by 47.4% (y-o-y), compared with 22.8% in Q1 2022.
- Due to the slowdown in the corresponding annual growth rate of imports (15.5% from 18.1%), the external balance deficit in national accounting terms decreased from a year ago by around EUR 307 million or 1.1 percentage points of quarterly GDP.
- Household consumption had a significant contribution to the recovery for yet another quarter, as it increased by 11% (y-o-y), after a similar increase in the previous quarter.
- Investment showed a modest annual growth of 3.5% (y-o-y) in Q2 2022, compared with 20.3% in the previous quarter, which was solely due to the expansion of fixed capital formation by 8.7%, while stocks decreased.

## Recent macroeconomic developments in Greece

Although the recovery of the Greek economy significantly exceeded expectations, it slowed slightly in the second quarter of 2022 compared to the previous one. In particular, GDP grew between April and June of 2022 at an annual rate of 7.7%, from 8.0% in the previous quarter, while a year earlier it had increased by 15% with the restart of the Greek economy after the lifting of the Covid-19 measures. The renewed significant recovery was mainly driven by an increase in the rate of growth of exports, which outweighed the corresponding growth rate of imports, improving the external balance deficit in national accounting terms. Household consumption contributed significantly to the recovery for another quarter, with investment growth, which came solely from the expansion of fixed capital formation, coming next (Figure 3.1).

**Figure 3.1**

Evolution of GDP and the contribution of its components



Source: ELSTAT, Data processing IOBE

Exports and consumption are the main recovery drivers.

In terms of precise developments in GDP components in the second quarter of 2022, domestic consumption increased by 8.1% (y-o-y), lower than the 10.2% increase in the previous quarter. The increase came almost exclusively from the continued growth in private consumption (+11%), after similar growth in the previous quarter. Despite rising inflation, the decline in accumulated savings since the pandemic, combined with fiscal support measures and employment growth, boosted consumption spending during the tourist season, which operated without any notable health restrictions. Public consumption also saw a small annual increase, of 0.8%, having declined marginally, by -0.1%, a quarter earlier.

The annual growth rate of investment slowed down abruptly, as it increased by just 3.5%, compared with 20.3% in the previous quarter and 20.5% a year earlier. In contrast to the previous quarter, in this quarter the increase came exclusively from the expansion of fixed capital formation by 8.7%, while stocks declined.

The residential and construction sectors, as well as mechanical and transport equipment, contributed positively and almost equally to the increase in fixed capital investment, while the contribution of other products was negative, albeit marginal (in the order of -0.2% - Figure 3.2). In more detail in the individual categories of fixed capital investment, the annual rate of change in housing, other construction, and

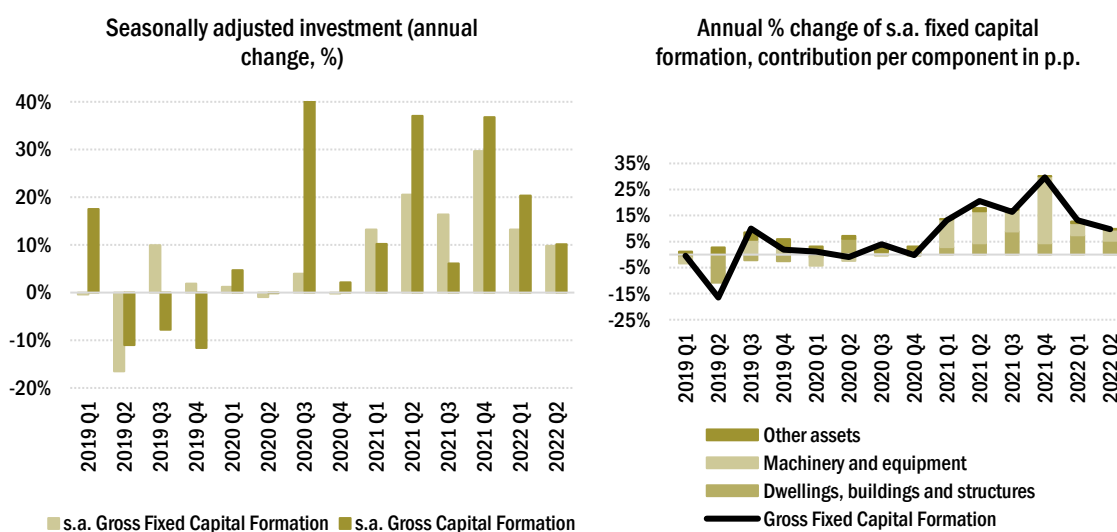




machinery - equipment remained at positive double-digit levels while investment in transport and ICT equipment, as well as in agricultural products, contracted. In particular, for yet another quarter, the most intense annual boost was recorded in machinery- equipment-weapon systems (+25.4%), which may be partly due to the recording of procurement of defence systems. The second largest annual increase was recorded in dwellings (+16%), followed by other constructions (+10.2%). A year earlier, the annual growth was lower in both categories, at 11.5% and 6% respectively. By contrast, the largest annual decline in investment was recorded for yet another quarter, albeit at a lower rate, in ICT equipment, by -14.9%, compared with -36.4% in the previous quarter. The annual decline of investment in agricultural products (-7.7 %) and transport equipment (-5.4 %) was considerably weaker.

**Figure 3.2**

Evolution of investment and the contribution of its components



Source: ELSTAT, Data processing IOBE

A slowdown in the annual growth rate of investment. Positive trends in the residential and construction sectors, as well as in machinery and transport equipment.

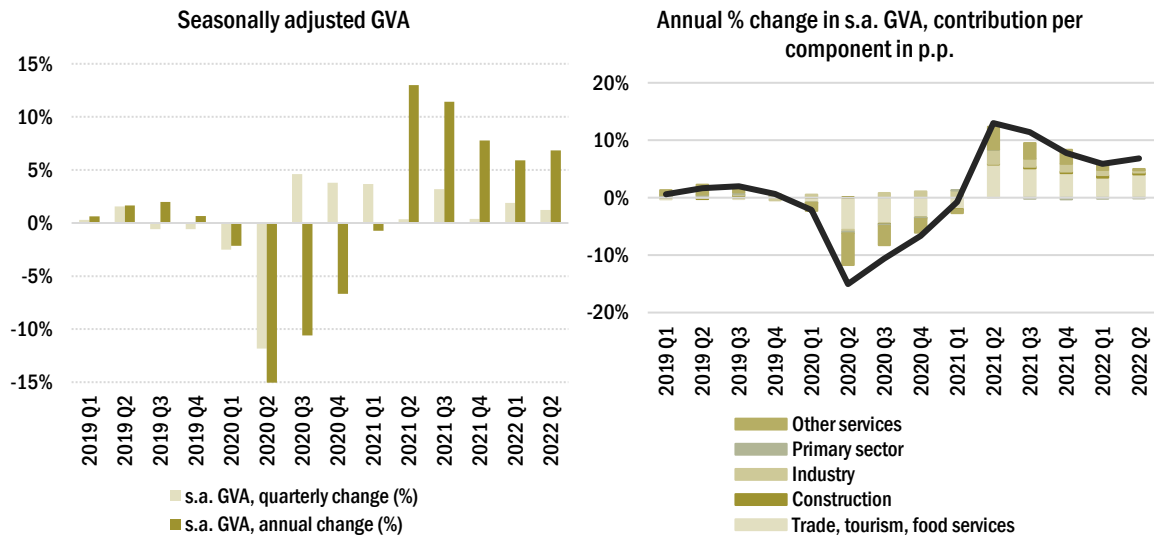
Regarding developments in the external balance of the economy, the absence of restrictions on international travel and the wider functioning of economies led to a strong annual boost of international tourism and international transport during the second quarter of 2022, with exports making the largest contribution to domestic recovery. In particular, the annual growth in exports of services (+47.4%) was twice as high as in the previous quarter (+22.8%). The exports of products increased annually (+3.3%), marginally stronger than a quarter earlier (+2.9%), despite the continuation of the war and the problems it creates in supply chains. Overall, exports expanded significantly by 20.8% (y-o-y), compared with 9.8% in the first quarter of the year.

Due to the increase in the annual growth rate of exports and the slowdown in the corresponding growth rate of imports (+15.5% from +18.1%), the external balance deficit in national accounting terms decreased from a year ago by around EUR 307 million or 1.1 p.p. of quarterly GDP. Unlike exports, the rise in imports was stronger in the goods segment than in services (+17.8% and +9.3% respectively). The systematic strengthening of the openness of the domestic economy, with the annual percentage of the total import-export to GDP ratio of 82% in Q2 2022, is also worth noting.

On the supply side, domestic gross value added (GVA) expanded in the first quarter less than GDP, by 6.9% (y-o-y), as subsidies on products, which are accounted in GDP but are not domestic production, increased annually by 21.1% compared with a decrease of 46.8% in the previous quarter.

**Figure 3.3**

Evolution of GVA and the contribution of its components



Source: ELSTAT, Data processing IOBE

At the sectoral level, Tourism-Transport-Trade (wholesale and retail) had the largest contribution to GVA growth.

At the sectoral level, the tourism, transport, and trade (wholesale and retail) sectors made the largest contribution to the growth of GVA, followed with a significantly lower share by the secondary sectors of Industry and Construction. The contribution of the Other Services sector was negative, albeit marginal, due to the significant annual decline in financial and insurance activities (-28.7%), which exceeded the activity growth in Arts-Entertainment- Recreation (+27.3% - Figure 3.3). In more detail in the individual sectors of production, six of the ten main sectors of the Greek economy posted an annual expansion of their activity. In three of them, the growth was milder than in the previous quarter, while in two it was essentially unchanged. In particular, the biggest boost quarter on quarter took place in Wholesale-Retail Trade, which increased by 23.2% compared to 17.2% a quarter earlier, mainly reflecting a strong rebound in household consumer demand. A strong expansion of 27.3%, but milder than the 49.9% from the previous quarter, was recorded for another quarter in Arts-Entertainment-Recreation, which was strongly affected a year earlier by public health protection measures. The activity in the industry and construction sectors also increased less than in the previous quarter, by 2.7% and 15.3% year on year (compared to 5.8% and 16.8% in the previous quarter). A marginal year-on-year increase was also recorded in Information-Communications (+1.4%), following a decline by 1.6% in the previous quarter. The activity in Real Estate (+0.3%) and Professional-Scientific-Technical-Administrative activities (+9.2%) remained unchanged compared to the Jan.-Mar. quarter.

**Table 3.1**

Trends in key macroeconomic figures – National Accounts (seasonally adjusted data, 2015 constant prices), provisional data

Quarter	GDP		Final Consumption		Investment		Exports		Imports	
	million €	Annual rate of change	million €	Annual rate of change	million €	Annual rate of change	million €	Annual rate of change	million €	Annual rate of change
2010	216,357	-9.5%	191,295	-13.0%	37,513	-13.1%	47,721	-0.1%	61,433	-14.3%
2011	194,452	-10.1%	175,803	-8.1%	25,608	-31.7%	48,026	-0.6%	56,085	-8.7%
2012	180,406	-7.2%	163,352	-7.1%	20,222	-21.0%	48,968	2.0%	52,855	-5.8%



<b>2013</b>	<b>175,948</b>	<b>-2.5%</b>	<b>156,897</b>	<b>-4.0%</b>	<b>19,589</b>	<b>-3.1%</b>	<b>49,843</b>	<b>1.8%</b>	<b>50,623</b>	<b>-4.2%</b>
<b>2014</b>	<b>176,942</b>	<b>0.6%</b>	<b>156,797</b>	<b>-0.1%</b>	<b>20,440</b>	<b>4.3%</b>	<b>53,954</b>	<b>8.2%</b>	<b>54,048</b>	<b>6.8%</b>
<b>2015</b>	<b>176,402</b>	<b>-0.3%</b>	<b>156,615</b>	<b>-0.1%</b>	<b>21,377</b>	<b>4.6%</b>	<b>56,661</b>	<b>5.0%</b>	<b>58,302</b>	<b>7.9%</b>
<b>2016</b>	<b>175,568</b>	<b>-0.5%</b>	<b>156,076</b>	<b>-0.3%</b>	<b>22,780</b>	<b>6.6%</b>	<b>56,426</b>	<b>-0.4%</b>	<b>59,963</b>	<b>2.8%</b>
<b>2017</b>	<b>177,424</b>	<b>1.1%</b>	<b>158,957</b>	<b>1.8%</b>	<b>21,646</b>	<b>-5.0%</b>	<b>61,229</b>	<b>8.5%</b>	<b>64,528</b>	<b>7.6%</b>
2018 Q1	44,976	2.1%	40,230	2.1%	5,281	-9.5%	16,091	8.5%	16,468	4.6%
2018 Q2	45,040	1.7%	39,770	0.2%	6,157	16.3%	16,991	8.0%	17,228	8.4%
2018 Q3	44,917	0.4%	39,910	0.2%	5,544	-0.7%	16,839	6.8%	17,804	8.9%
2018 Q4	45,219	2.0%	39,886	-0.4%	6,332	28.5%	16,890	13.4%	17,661	6.8%
<b>2018</b>	<b>180,152</b>	<b>1.5%</b>	<b>159,797</b>	<b>0.5%</b>	<b>23,315</b>	<b>7.7%</b>	<b>66,812</b>	<b>9.1%</b>	<b>69,161</b>	<b>7.2%</b>
2019 Q1	45,505	1.2%	40,322	0.2%	6,041	14.4%	17,144	6.5%	17,878	8.6%
2019 Q2	46,010	2.2%	40,629	2.2%	5,436	-11.7%	17,864	5.1%	17,689	2.7%
2019 Q3	45,965	2.3%	40,113	0.5%	5,142	-7.2%	18,212	8.2%	17,928	0.7%
2019 Q4	45,842	1.4%	40,867	2.5%	5,968	-5.7%	16,856	-0.2%	17,782	0.7%
<b>2019</b>	<b>183,322</b>	<b>1.8%</b>	<b>161,933</b>	<b>1.3%</b>	<b>22,588</b>	<b>-3.1%</b>	<b>70,076</b>	<b>4.9%</b>	<b>71,277</b>	<b>3.1%</b>
2020 Q1	44,861	-1.4%	40,577	0.6%	6,333	4.8%	16,667	-2.8%	17,934	0.3%
2020 Q2	38,887	-15.5%	36,003	-11.4%	5,800	6.7%	12,061	-32.5%	15,204	-14.1%
2020 Q3	41,001	-10.8%	38,320	-4.5%	7,295	41.9%	11,511	-36.8%	16,690	-6.9%
2020 Q4	42,697	-6.9%	38,622	-5.5%	5,520	-7.5%	14,740	-12.6%	15,834	-11.0%
<b>2020</b>	<b>167,446</b>	<b>-8.7%</b>	<b>153,523</b>	<b>-5.2%</b>	<b>24,948</b>	<b>10.4%</b>	<b>54,978</b>	<b>-21.5%</b>	<b>65,662</b>	<b>-7.9%</b>
2021 Q1	44,061	-1.8%	39,480	-2.7%	6,522	3.0%	16,328	-2.0%	16,997	-5.2%
2021 Q2	44,728	15.0%	40,732	13.1%	6,989	20.5%	15,211	26.1%	18,384	20.9%
2021 Q3	45,816	11.7%	41,456	8.2%	6,324	-13.3%	17,217	49.6%	19,941	19.5%
2021 Q4	46,240	8.3%	42,504	10.1%	7,410	34.2%	18,284	24.0%	21,103	33.3%
<b>2021</b>	<b>180,846</b>	<b>8.0%</b>	<b>164,172</b>	<b>6.9%</b>	<b>27,244</b>	<b>9.2%</b>	<b>67,040</b>	<b>21.9%</b>	<b>76,425</b>	<b>16.4%</b>
2022 Q1	47,568	8.0%	43,587	10.2%	7,844	20.3%	17,923	9.8%	20,069	18.1%
2022 Q2	48,153	7.7%	44,052	8.1%	7232	3.5%	18,376	20.8%	21,242	15.5%

\* provisional data

Source: Quarterly National Accounts, ELSTAT, September 2022

By contrast, the strongest year-on-year output contraction was recorded for yet another quarter in Financial-Insurance Activities, by -28.7%, significantly stronger than the decrease of -18.6% from the previous quarter. Agriculture-Forestry-Fisheries came next, with a decline of -3.1%, continuing the negative trend from previous quarters, while Public Administration-Defence-Compulsory Social Security decreased by 2.4%, after a marginal increase of 0.6% in the previous quarter.

Finally, on the income side, the remuneration of both labour and capital increases substantially, with the growth rate in the latter being almost double that in the former.

In summary, the structure of the recovery of the Greek economy changed slightly in the second quarter of this year compared with the previous one, with exports of services having a key role, as despite the new outbreak of the pandemic, no restrictive measures were implemented in the tourism sector and the economy as a whole. Due to the boost in export growth and the slowdown in the growth of imports, the external balance deficit in national accounting terms improved. Household consumption contributed significantly to the recovery for yet another quarter, followed by the strengthening of fixed capital formation.

## B. Assumptions and forecasts

### Medium-term outlook



- Geopolitical instability in eastern Europe and the Mediterranean, growth slowdown in the euro area, high inflation, fiscal developments, and the implementation of the 'Greece 2.0' plan, are the major GDP drivers in 2022 and 2023.
- Projections for inflation at 9.7% for 2022 and 4.2% for 2023, and unemployment at 12.3% and 11.5% respectively.
- Upward revision of recovery to 6% at constant prices for 2022, due to a stronger expansion of private consumption (8.1%) and exports (12.5%). Increase in imports by 13.5% and milder than previously forecast investment growth (6.6%).
- Notably slower growth of 1.6% in 2023, due to a slowdown in the world economy and sustained inflation and uncertainty.
- Only investment is expected to accelerate year on year, with a higher annual expansion in 2023 (10.5%), while consumption is expected to slow down (0.6%).
- A likely deterioration in the current account, with exports and imports increasing annually in 2023, by 3.8% and 4.8% respectively.

Uncertainty is growing internationally, acting as the major driver of economic and geopolitical developments at least in the current and possibly in the coming years. The war is escalating between Russia and Ukraine, two countries particularly important for supplying the world economy with energy and food products, while achieving energy sufficiency and the transition to cleaner energy takes time.

## High and persistent inflation

The most important economic consequence of the war on a global scale is the spike in energy prices and the broader inflation, which shrinks demand, eroding the real incomes of all economic factors. The OECD's recent report estimates that, due to high inflation, real incomes may be around \$2.8 trillion lower in 2022 than projected a year ago, equivalent to 2% of global GDP based on purchasing power parities. Inflation in the 38 OECD countries reached 10.3% in August, the highest in 39 years. The rise in inflation is mainly driven by under-production due to high prices of energy, raw materials, and food (energy and food prices rose by 30.2% and 15% respectively in August 2022), but also by high demand mainly in parts of the economy that rebounded following the lifting of the coronavirus restrictions.

In the Eurozone, inflation climbed to a new historic high of 9.1% last August, while in Greece it stood at 11.4% over the same period. Higher domestic inflation than in the euro area can be partly explained by the Greek economy's dependence on energy imports and intermediate goods, as well as by deficiencies in the domestic energy market compared to those of other eurozone countries. The fall in the unemployment rate, as well as the significant increase in foreign direct investment, has led to an upward impact on structural inflation, which has boosted property prices.

In addition to the possible effects of the war, the prices of energy products internationally will depend on the actions of the remaining producer countries. According to the International Energy Agency, global oil demand is up from last year and exceeds the corresponding expansion in supply, resulting in an average international price of Brent oil in September at \$89.7 per barrel, up 20.5% year on year, while it is expected to decline by about 7% in 2023. The OECD also estimates that if winter is heavy, the price of oil will rise by 10% as early as in the first quarter of 2023, while the price of natural gas and fertilisers will go up by 50% and 25%.

The interventions of the ECB and the European Commission, which decided to reduce the use of natural gas by up to 15%, are expected to play an important role in reducing inflation while the price cap is being discussed. Inflation is likely to begin to ease gradually by the end of the year, after the expected weakening of demand, reinforced subsequently by the base effect. According to recent Eurosystem forecasts, inflation in the euro area is expected to be close to 8.1% at the end of 2022 and to fall to 5.5% in 2023, while the OECD forecasts higher inflation at 6.2% for 2023. In Greece, inflation is projected to



be higher than the Eurozone average for 2022, at 9.7% and at 4.2% for 2023, negatively affecting the competitiveness of the domestic economy. A more comprehensive analysis of inflation, its key determinants, as well as a special text box highlighting the trend of structural inflation in Greece relative to the rest of the euro area, can be found in section 3.5.

### **Weakening of global economic activity**

Due to inflationary pressures and the wider impact of the Russian-Ukrainian war, which are gradually becoming more noticeable and worsening the economic outlook, there is a continuous slowdown in the growth rate worldwide. The OECD economies grew at an annual rate of 3.7% in the second quarter of 2022, compared with 4.4% in the previous quarter, while the annual rate of change in GDP in the most developed economies (G7) stood at 2.3%, compared with 3.8% in the previous quarter.

Focusing on the EU and the euro area, in the second quarter of 2022, annual real growth remained stable at 4.2% and 5.5% respectively (from 4.1% and 5.4% in the previous quarter), with Greece showing an annual positive growth rate of 7.7%, above the average performance in the euro area. Greece's main export partners experienced a milder recovery in the second quarter of 2022, with the annual rate of change in real GDP as shown in OECD data, at 4.7% in Italy, 1.7% in Germany, 7.2% in Türkiye, 5.8% in Cyprus, 4% in Bulgaria and 4.2% in France (more information on changes in key macroeconomic aggregates of EU countries and worldwide is presented in sections 2.1.A and 2.1.B).

According to the OECD's September forecast, global growth is projected at 3% for 2022 and 2.2% for 2023. In the euro area, the European Commission forecasts growth of 2.6% for 2022, from 5.2% last year, while for 2023 it forecasts a further slowdown in growth to 1.4%. The ECB estimates growth of 3.1% in the euro area in 2022 and presents two scenarios for 2023, with the baseline scenario expecting growth of 0.9% and inflation of 5.5%. The ECB's unfavourable scenario, in which it assumes a complete disruption of the flow of Russian gas to the euro area with narrow margins of access to alternative sources of gas, higher commodity prices, and worsening financing conditions, economic activity will suffer stronger shocks, with an expected recession of -0.9% in 2023 and higher inflation at 6.9%. The consequences of war and high inflation are expected to be even more dramatic for poorer economies, with a food crisis now more likely.

### **Restrictive monetary policy from the ECB**

Despite slowing growth in most of the world's economies, rising inflation to multi-year peaks and low unemployment in many countries have led Central Banks to switch to less expansionary policies to achieve their primary objective, namely price stability. In particular, the Fed raised its base rate by 75 basis points in September to 3.00%-3.25%, after an equal increase in June, while preparing for a future rate increase if required. The rise in interest rates by the FED resulted in a depreciation of the euro against the dollar.

The ECB decided at its last meeting in early September to raise, for the second time this year, its intervention interest rates by 75 bps, with prospects for further hikes in at least 2 more meetings. The investors reacted immediately to the announcement of higher interest rates, with the Member States' borrowing costs rising. In particular, the yield on the German ten-year government bonds stood at 2.11% at the end of September, while the yield on the corresponding Greek bonds was 4.83% in the same period. At the same time, stock prices declined, while the corporate bond spread widened considerably, reducing thus the investors' financial wealth. Moreover, the rise in interest rates is expected to have a particularly negative impact on existing debt obligations, as well as on the cost of new borrowing for businesses and households, resulting in a slowdown in investment and consumption respectively. Unlike nominal interest rates, real interest rates are likely to continue their downward path due to higher expected inflation.

Regarding the monetary policies of quantitative easing, the ECB announced that it would reinvest the capital of maturing securities purchased through the APP (the value of the Eurosystem's APP bonds



portfolio totalled EUR 3.436 billion at the end of August 2022) and the PEPP (the value of the Eurosystem PEPP bonds portfolio amounted to EUR 1.715 billion at the end of August 2022) to ensure the necessary liquidity mainly in the bond market. Finally, the ECB will continue to monitor the financing conditions of private banks after the completion of the third series of the targeted longer-term refinancing operations (TLTRO III) in June 2022, in order to ensure the smooth transmission of the central monetary policy.

Although the rise in inflation is mainly driven by supply-side constraints that monetary policy cannot influence, most central banks around the world have made clear how they will continue interventions at the level of their key interest rates, aiming to curb excess demand in order to control high inflation in a timely manner before it consolidates. This restrictive monetary policy, combined with the stagnation of economic activity, makes the risk of recession notable in the medium term.

### **Expansionary fiscal policy, new support measures at the TIF**

In contrast to the ECB's restrictive monetary policy, fiscal policy in most EU and euro area countries continues to be expansionary, aimed at mitigating the effects of high inflation and normalising economic activity. However, after two years of interventions due to the pandemic, coupled with a milder recovery in the economy, there is limited scope for governments to react.

The Greek government announced at the Thessaloniki International Fair (TIF) a new set of permanent and transient measures to support household disposable income and maintain the growth potential of the Greek economy, at a time when the corresponding measures to address the pandemic have diminished considerably. In particular, the additional fiscal measures announced at the TIF amount to EUR 1.2 billion for 2022, EUR 3.2 billion for 2023, and EUR 3.6 billion for 2024. Focusing on 2022 and considering the measures announced earlier during the year, the total amount of measures amounts to EUR 13.2 billion in 2022 (or 7.3% of domestic GDP in 2021), of which EUR 10.6 billion is the cost of subsidising electricity and gas for households (EUR 4.1 billion) and businesses (EUR 6.5 billion). The remaining measures for 2022 concern in general, in addition to the electricity and gas subsidy mechanism and the more general measures to address the energy crisis, the creation of quality jobs, the abolition of the solidarity levy, the reform of the salaries of civil servants and NHS doctors, aid for pensioners and a grid of measures to address the increased housing costs.

### **Successful execution of the State Budget**

Government expenditure is therefore expected to remain high, with the net fiscal cost of energy support for households and businesses estimated at around 2% of GDP in 2022. As regards the Greek government's revenue, part of the tax revenue is expected to decrease due to the reduction of certain tax rates (e.g., reduction in social security contributions, corporate dividend and income tax, special tax regimes for attracting non-tax residents, etc.), as well as the slowdown in economic activity that will shrink income and consumption taxes (value added taxes are a key part of government revenue). By contrast, indirect tax revenues from energy products are expected to increase due to the high prices of these products, and the taxation of energy producers' profits, as proposed by the European Commission, thus mitigating the burden on the budget balance. Government revenues for 2023 are expected to be significantly boosted by the privatisation programme, with the completion of the tenders for Egnatia Odos and DEPA Infrastructure. With the successful implementation of the State Budget for January — August 2022, the revised primary balance targets are projected at a primary deficit of 1.7% of GDP (instead of 2.0%) for 2022, and a primary surplus of 0.7% (instead of 1.1%) for 2023 (more information on upcoming budgetary measures and on the implementation of the SB is presented in section 2.2.B).

### **Increased private sector debt, declining public debt as a percentage of GDP**

However, the Greek economy continues to be characterised by one more significant imbalance affecting public finances - private sector debt. According to the statement of the Special Secretariat for Private





Debt Management in July, private debt in Greece amounts to 125% of GDP, with the arrears reaching EUR 251 billion (with over EUR 150 billion to public bodies), remaining a key burden on the Greek economy. The impact of the increase in interest rates on these arrears is expected to be particularly significant and negative. Other factors that may affect the budget in the future are the activation of state guarantees issued under the support measures, as well as the pending decision of the Council of State on retroactive compensation for cuts in supplementary pensions and seasonal allowances. If the Greek economy does not enter a phase of stable and dynamic recovery in the coming years, these trends will have a significant impact on public finances and its long-term prospects.

As regards the public debt of the Greek economy, its absolute level increased in 2022 due to the government's borrowing through long-term bonds as well as the disbursement of the tranches of the loan leg of the recovery fund. Despite the expansion of the numerator in the debt-to-GDP ratio, the particularly strong recovery over the past year, which in nominal terms reached 10.6% of GDP in 2020, as well as high inflation, which contributes to the reduction of both private and public debt in real terms (especially to the extent that the largest share of government debt is at fixed, low interest rates) has resulted in the debt-to-GDP ratio falling from 206.3 % in 2020 to 193.3 % in 2021. According to provisional Eurostat data, Greek debt declined further to 189.3% in the first quarter of 2022, with a downward trend for the whole of 2022 and 2023. The Public Debt Management Agency projects debt reduction as a percentage of GDP to 169.1% in 2022 and 161.6% in 2023.

Meanwhile, the cost of new borrowing by the Greek government, like all eurozone governments, increased, with the average yield of the 10-year bond reaching 3.6% in August, while at the end of September it reached 5%, which is its highest level in five years. This rise in the rate of new borrowing, combined with forecasts for a further decline in the growth rate of the domestic economy, may jeopardise the stability of the Greek public debt over the medium term. Also, a negative factor for the sustainability of public debt in the long term is the fact that most of it, due to loan bailout programs, is in the hands of foreign investors and international organisations. It is worth noting, however, that following the adjustment programmes, much of the existing debt has a long repayment period and low, stable interest rates, as opposed to the high interest rates of new lending by the Greek government. Moreover, if the already unfavourable conditions in the capital markets deteriorate, it is possible to use part of the cash reserve that the Greek government has gradually accumulated since 2018 for the occasion of experiencing difficulties in accessing capital markets in the post-adjustment period.<sup>8</sup> Therefore, the cash reserve may gradually be used for the refinancing of public debt, particularly in the scenario of that Greece's credit rating is not upgraded by the agencies in 2023, which is necessary for ECB to purchase government bonds through the PSPP (Public Sector Purchase Programme).

## **The European Recovery and Resilience Facility and the implementation of "Greece 2.0"**

In its attempt to exit the pandemic crisis and cushion the impact of the war on Ukraine, the Greek government, like other European governments, acquired in 2021 a powerful six-year financing tool, the European Recovery and Resilience Facility (RRF). In particular, Greece will receive EUR 31.16 billion (EUR 18.43 billion in grants and EUR 12.73 billion in loans) by 2026, which will finance 107 investment proposals conditional on 68 reforms being implemented, with the aim of mobilising EUR 60 billion in total investment in the country over the next five years. To date, the value of projects submitted to the Fund's subsidy arm exceeds EUR 11.0 billion while on the loan side it stands at EUR 3.9 billion. The first tranche of EUR 3.56 billion was disbursed in April 2022, while the Ministry of Finance submitted at the end of September the application for the second tranche from the Recovery Fund, corresponding to EUR 3.56 billion. The Bank of Greece has estimated that if reforms are accelerated in key areas, e.g., labour market, primary health and education, GDP is expected to strengthen by more than 6% in the long term. However, it is worth noting that reforms have recently slowed down and may be further delayed in a prolonged election period scenario in 2023.

<sup>8</sup> Stability Programme 2022, Ministry of Finance, April 2022.





## Challenges in the banking sector

As regards the banking sector, while the ample liquidity from the ECB, the strong upward trend in private deposits over the past two years, and the activation of the loan arm of the RRF favoured credit growth, there are currently some factors that mitigate this momentum. In particular, the rise in the borrowing rate by the ECB, combined with a milder strengthening of private deposits and weak profitability, may limit banks' liabilities. A trend reversal in private deposits is likely for next year, as persistent inflation and the gradual weakening of fiscal support measures will shrink household disposable income and savings. Such a development will further strengthen the already significant credit dependence of Greek banks on the ECB in an environment of high interest rates.

In the bank assets, the NPL decline is expected to continue at a weakening pace due to the rise in interest rates and the lifting of borrowers' support measures, such as the gradual expiry of subsidisation of business loans through the Bridge II programme and the completion of the Hercules securitisation programme in October 2022. The key to the management of NPLs is the successful implementation of reforms in relation to the Bankruptcy Code and the out-of-court debt settlement mechanism. The supply of bank credit is also negatively affected by continued extensive lending to the General Government. As regards demand for loans, expectations of higher inflation and uncertainty are holding back new investment, but this is offset by projects already planned to be included in the recovery plan. Overall, in terms of new credit, lending to households is expected to continue to contract, while inflows from the European RRF and the relevant leverage of private investment are expected to significantly boost credit growth to businesses (analysis of developments in the financial system is presented in section 2.2.C).

## Short-term activity indicators

In terms of the latest supply trends, energy costs and disruptions in supply chains have slowed the positive trends in domestic production. In the first seven months of 2022, industrial production increased by 4.1% (compared to 9.5% in 2021), while in the euro area industrial production decreased marginally by 0.1% over the same period (against an increase of 13.0% in 2021). In the same period of 2022, the industrial producer price index increased by 39.9% against a significantly milder increase of 7.9% in the corresponding period of 2021 (a review of trends in key production sectors is included in section 3.2).



## Cautious expectations due to uncertainty

The prolonged geopolitical uncertainties stemming from the Russia-Ukraine war and tenuous US-China relations, together with continued inflationary pressures and a slowing global recovery, are worsening global economic sentiment and expectations.

According to the OECD Economic Sentiment Indicator, global business confidence weakened in August for the tenth month, while consumer confidence improved only marginally. In the euro area, the Economic Sentiment Indicator fell by 3.7%, to 93.7 points. According to the ECB's survey<sup>9</sup> of consumer expectations, they expect higher nominal expenditure growth over the next 12 months, stronger than the expected increase in income, as well as a rise in inflation, while they have revised downwards their growth expectations. As these trends are likely to continue in the coming quarter and early next year, as the war persists and sanctions against and from Russia escalate, all financial analysts worldwide seem to agree on a further downward path of economic sentiment indicators, with the IMF forecasting a "severe" winter for Europe in September that may lead to social unrest, which could be further reinforced by political developments. Already in Italy, recent high electoral rates of extreme political forces add to uncertainty, with the Italian spreads on the rise.

In Greece, despite a further boost of uncertainty due to geopolitical tensions bilaterally with Türkiye, the Economic Sentiment Indicator increased slightly in September, but stood at a mildly lower level than a year earlier (-4.1 points compared with September 2021). Business confidence in all sectors except industry improved, as did consumer confidence, but was significantly lower than a year earlier (-13.7 index points compared with September 2021). However, the marked decline in industrial capacity utilisation, below its long-term average, for the first time in 2 years (July 2020) is worth noting.

## Investment as a key recovery driver

The generally strained economic climate is holding back investment, with gross fixed capital formation showing a milder increase of 8.7% year on year in Q2 2022 (down from 13% in the previous quarter) and quite mixed trends in its components. Also, most investment from emergency liquidity support programmes in response to the pandemic (e.g., co-financed guarantee schemes) appears to have been used for working capital, while the investment gap in firms' fixed equipment remains significant.

The strong rise in inflation and the risk of creating a "spiral" of rising wages and prices, coupled with rising costs of new borrowing, are dampening firms' profits and slowing investment even further. It is therefore particularly necessary to make efficient use of the resources of the European recovery fund, as investment is expected to be a key factor in sustaining GDP growth, especially when the tourism sector, which was the main driver of growth this year, is already close to record 2019 levels. To date, 57 investment projects have been pre-approved, with a total budget of EUR 2.64 billion, of which EUR 1.23 billion are loans from the RRF, EUR 797 million are bank capital and EUR 615 million are investors' own funds. The resources of the recovery fund will be channelled to different sectors of the economy, such as services, trade, energy, construction, tourism, manufacturing, and transport, and are intended to strengthen firms' openness and competitiveness (EUR 4.8 billion through grants and EUR 3.2 billion through loans), as well as the promotion of mergers and acquisitions (EUR 0.7 billion through loans).

## Signs of fatigue in the labour market

In the labour market, according to the ELSTAT Labour Force Survey, the unemployment rate in Q2 2022 reached 12.4%, down from 15.8% in the same quarter of 2021, a drop which is the strongest in the euro area. Over the same period, the wage cost ratio declined marginally by 0.9% compared to the same quarter of 2021. The decline in unemployment was mainly driven by an increase in employment in the tourism, education, and manufacturing sectors, while the inactive population also declined (-2.9%).

<sup>9</sup> ECB survey [https://www.ecb.europa.eu/stats/ecb\\_surveys/consumer\\_exp\\_survey/html/index.en.html](https://www.ecb.europa.eu/stats/ecb_surveys/consumer_exp_survey/html/index.en.html)



In the coming quarters of the year, however, a weakening in job creation is expected, due to weaker production in sectors affected by high input costs as well as a possible weakening of demand after the end of the tourist season, mainly due to inflation and higher household borrowing costs. Already, according to data from the ERGANI system, a 20-year negative employment balance was recorded in August, with 32.966 jobs lost compared to the 9.875 jobs lost in the same month of 2021. Moreover, according to the latest data from IOBE's Business and Consumer Surveys, in the three-month period from April to June 2022, the short-term employment outlook deteriorated mildly quarter on quarter in all sectors except for Services which marginally strengthened. However, the planned appointments in the public sector, as well as the latter's greater contribution to investment activity (larger Public Investment Programme, RRF), may compensate for the jobs lost in other sectors. Considering the above effects on the labour market, the unemployment rate in 2022 is expected to lie in the region of 12.3%. For 2023, the unemployment rate is expected to stand in the region of 11.5% (analysis of the trends in the domestic labour market is presented in Section 3.4).

### **Deterioration of the Current Account**

Despite bleak forecasts about the continuation of the war and upward inflationary pressures, the developments in the export sector of the Greek economy were very positive in the second quarter of 2022. With the strong rise in tourist flows, the exports of services grew by 42% year-on-year, with most of the tourism sector turning to the supply of high-value services. The systematic increase in the openness of the domestic economy is also worth noting, with the ratio of the sum of imports-exports to GDP reaching a historical high of 82% in Q2 2022. However, the improvement in the Services account was not sufficient to offset the deterioration of the deficit in the Goods account. As a result, the current account balance recorded a deficit of EUR 9.7 billion in the first seven months of 2022, up from 2021 (EUR 6.8 billion), approaching 7% of GDP. The export momentum is expected to weaken in the coming months with the end of the tourist season, while a moderation in the momentum is also expected in imports, at least for the part that serves consumption. By contrast, the part of imports that concerns intermediate goods for domestic production is likely to slow down less, leading to a deterioration in the trade balance and a re-emergence of the high "twin deficits", which, as has been demonstrated in the past, are particularly detrimental to the Greek economy (the trends in the external balance, as well as a special analysis of the contributions of the current account components are described in Section 3.3).



### Box 3.1

#### Macroeconomic forecast drivers

##### Threats

- Continuation of the Russia-Ukraine war and a risk of a “hot” geopolitical episode
- High and persistent inflation
- A significant slowdown in global growth and a visible risk of a recession in the euro area in the medium term
- A restrictive monetary policy stance and a risk of a renewed build-up of arrears
- Lack of investment grade for Greece
- Challenges in the banking system
- Signs of labour market fatigue
- Delays in the implementation of the “Greece 2.0” plan
- Uncertainty: geopolitical intensity, energy prices and new electoral law

##### Positive prospects

- Systematic boost of openness
- Higher budget revenue and lower public debt
- No major disruptions to economic activity due to the health crisis
- Expansionary fiscal policy and support measures

### No COVID-19 restriction measures

Finally, the positive domestic economic developments include unhindered economic activity following the lifting of the pandemic containment measures. Generalised restrictive measures are not expected to be taken during the autumn-winter seasons, when people will continue to be vaccinated with the new updated Covid-19 vaccines that cover the full range of known variants of the disease so far.

### Medium-term forecasts

Based on the above analysis of international and domestic economic sentiment, key economic figures, and some key assumptions, we form short-term forecasts for the domestic GDP components.

Regarding consumption, the most important factor expected to dampen consumption spending is rising inflation, which is shrinking household disposable income. Despite the significant rebound in real GDP in the second quarter of 2022, by 7.7% year-on-year, the full impact of high inflation, and the ensuing contraction in real incomes, is expected to intensify in the coming quarters of the year. However, it is worth noting that high inflation may favour borrowers by reducing the real value of their debt, as well as their real interest rates if the effect of inflation exceeds the rise in nominal interest rates.

In addition to high inflation, a possible weakening in job creation, due to weaker output in sectors affected by high input costs and the end of the tourist season, would further reduce household incomes. However, the planned appointments in the public sector, as well as the latter’s greater contribution to the investment activity (larger Public Investment Programme, RRF will partly compensate for job losses in other industries.

### Box 3.2

#### Baseline scenario assumptions



- The pandemic does not cause a major disruption to economic activity.
- Geopolitical instability in eastern Europe and the Mediterranean persists, at similar intensity as in the third quarter of 2022.
- The euro area economy follows the ECB's baseline scenario for growth and inflation (3.1% and 8.1% in 2022, 0.9% and 5.5% in 2023), energy prices and interest rates.
- A short delay (1-2 quarters) in implementing the "Greece 2.0" plan.
- Slightly higher public expenditure than in the preliminary draft budget.
- In 2023, tourism revenues will not increase in real terms compare to 2022.

Negative effects on both current and future consumption spending are expected from the albeit partly depletion of savings accumulated during the pandemic, as well as the reduced provision of credit by the banking system because of the ECB's monetary policy tightening. Many households are also restraining spending due to heightened uncertainty and deteriorating economic sentiment.

The expansionary policies of the Greek government, and especially tax rate cuts and subsidies, are expected to moderate the consumption slowdown. However, it should be noted that, as these measures support domestic demand, they also sustain in part the strong inflation. Low real interest rates also discourage savings, the rate of which remains very low in Greece relative to the euro area, in favour of consumption.

On the public consumption side, the strengthening of public sector employment and the wide-ranging inflation support measures will contain the contraction in government consumption expenditure this year. The elections are likely to boost consumption expenditure in 2023.

For 2022, the annual change in private and government consumption is estimated at 8.1% and 2.2% respectively, with total consumption growing by 6.9%. A strong slowdown in consumption to 0.6% is projected in 2023, with private consumption expanding by only 0.8% and public consumption by 0.6%.

As for consumption, higher inflation and uncertainty are the main factors that are expected to drive investment. High production costs, due to an increase in the price of energy and other intermediate goods, depress companies' profits significantly, reducing the available investment resources. Production costs may be further expanded by a possible increase in nominal wages to protect workers' real incomes, increasing the chances that small and medium-sized enterprises will not be able to cope with current market conditions.

The ECB's tightening of monetary policy increases the cost of servicing business and mortgage loans at variable rates, while at the same time moderating new lending by the banking system, thereby slowing down investment. Greece not getting an investment grade by the rating agencies, at least in the first half of 2023, and the deterioration in the overall economic climate and uncertainty, will also have a particularly negative impact on the financing of investment.

Having said that, as discussed above, the Greek businesses now have a powerful financial instrument, the European recovery fund, whose resources will contribute to a broader strengthening of the openness and competitiveness of Greek businesses. In addition, domestic fiscal support measures (energy subsidies, lowering tax rates) for businesses will also boost investment.

Investment is expected to be the main growth driver in 2023, being the only GDP component likely to exceed its growth rate compared to the previous year. In particular, its annual change is forecast at 10.5% for 2023 compared to 6.6% this year.

**Table 3.2**

Comparison of forecasts for selected economic indicators for the years 2022 – 2023 (at constant market prices, annual % changes)



	MinFin		EC		IOBE		IMF		OECD	
	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023
GDP	5.3%*	2.1%*	4.0%*	2.4%*	6.0%	1.6%	5.2%	1.8%	2.8%	2.5%
Consumption	:	:	:	:	6.9%	0.6%	:	:	:	:
Private Consumption	2.4%	:	1.5%	1.7%	8.1%	0.8%	:	:	3.5%	1.4%
Public Consumption	-1.9%	:	-1.7%	-4.1%	2.2%	0.6%	:	:	-1.5%	-0.2%
Gross Fixed Capital Formation	9.8%	:	14.7%	8.5%	6.6%	10.5%	:	:	9.0%	12.4%
Exports	5.6%	:	11.6%	9.5%	12.5%	3.8%	:	:	16.5%	5.8%
Imports	16.1%	:	7.9%	5.3%	13.5%	4.8%	:	:	13.2%	5.1%
Harmonised Index of Consumer Prices (%)	8.8%*	3%*	8.9%*	3.5%*	9.7%	4.2%	9.2%	3.2%	8.8%	3.4%
Unemployment (% of labour force)	12.9%*	:	13.7%	13.1%	12.3%	11.5%	12.6%	12.2%	12.4%	12.6%
General Government Balance (% of GDP)	-1.7%*	0.7%*	-4.3%	-1.0%	:	:	:	:	-4.1%	-1.1%
Current Account Balance (% GDP)	:	:	-8.4%	-6.4%	:	:	-6.7%	-6.3%	-7.7%	-7.6%

Sources: Stability Programme 2022, Ministry of Finance, April 2022, \*Draft State Budget, Ministry of Finance, September 2022 - European Economic Forecast, spring 2022, European Commission, April 2022, \*summer 2022, July 2022 - The Greek Economy 03/22. IOBE, October 2022 - IMF World Economic Outlook, IMF, October 2022 – Economic Outlook 111, OECD, June 2022

As regards exports, the end of the tourist season, and later on the slowdown in the euro area's recovery and, in particular, in Greece's main trading partners, such as Italy, Germany, Türkiye, Cyprus and Bulgaria, is expected to halt their strong positive trend recorded in the second quarter of 2022. Also, the exports of goods, despite their small contributions to overall export growth, may be negatively affected by a possible decline in domestic production due to higher production costs. That said, the depreciation of the euro against the dollar is stimulating extra-EU exports.

Import and export growth are expected to weaken significantly owing to a more adverse macroeconomic climate. Import reductions are held back by the dependence of domestic production on energy and imported intermediate goods, as mentioned above.

Considering the growth assumptions for the euro area, the projected energy and intermediate goods prices, and the general climate of uncertainty, we estimate that the annual growth rate of exports will reach 12.5% in 2022 and 3.8% in 2023, while imports will grow by 13.5% in 2022 and 4.8% in 2023. The deterioration of the current account balance will be one of the most significant risks for the domestic economy in 2023.

As a result, we are revising the recovery forecast upwards to 6% for 2022 with a positive outlook, while we estimate a significantly slower growth of 1.6% in 2023, with a negative outlook, due to the above risks, with most notable the slowing global economy and the sustained inflation and uncertainty.







## 3.2 Trends in key sectors

- Industrial production rebounded by 4.1% in the first seven months of 2022. Growth slowed from 2021 (9.5%).
- Increase of production in construction by 23.9% in the first half of 2022, against 6.1% in the same period of 2021
- An 5.1% increase in the volume of retail trade in the first seven months of 2022 against an increase of 9.1% in 2021. A slight deterioration of expectations in the first nine months of 2022.
- Higher turnover in six out of the thirteen sub-sectors of services in the first half of 2022.

### Industry

In the seven months of 2022, the industrial production index continued to increase, albeit at an almost halved rate year-on-year (4.1%, instead of 9.5%). In July 2022, the month with the latest available data, industrial production in Greece increased by 7.0% year-on-year, close to July 2021 (8.1%).

In the same period of 2022, the industrial producer price index increased by 39.9% against a significantly milder increase of 7.9% in the same period of 2021. Price increases were more pronounced for exported products (+46.0%, against an increase of 13.8%). Domestic industrial prices increased by 37.9% when the increase did not exceed 6.1% in the same period of 2021. The increase in prices is the main driver of industry turnover growth of 40.1% (against 20.1% in the seven months of 2021).

In the euro area, industrial production declined marginally by 0.1% in the first seven months of 2022 (against an increase of 13.0% in 2021) and in July 2022, industrial production fell by 2.2% (against an increase of 9.2% in July 2021).

In the key sectors of Greek industry, in the first seven months of 2022, production increased in manufacturing (+5.1% against 8.5%) and electricity supply (2.8% from 16.5%). However, in both sectors, the growth rate weakened significantly compared with the same period a year earlier. By contrast, a significant decline was recorded in mining – quarrying (-9.9% against an increase of 7.3% a year earlier) and water supply (-1.0% against +0.6%).

In the branches of mining-quarrying, production fell in other mining (-11.6% against +17.3% in the first seven months of 2021) and mining of metal ores (-7.5% instead of -11.4%). Production growth, albeit at a significantly lower rate than in the previous year, was recorded in coal and lignite mining (+13.4% against +93.3%).

In Manufacturing, output increased in 19 out of 24 branches. In more detail about the most important branches for the Greek economy, pharmaceutical production increased by 12.0%, following a similar increase of 12.3% in 2021. It was followed by basic metal production (+5.8% from 5.9%) and food production (+5.0% against an increase of 2.5% in the corresponding period of the previous year).

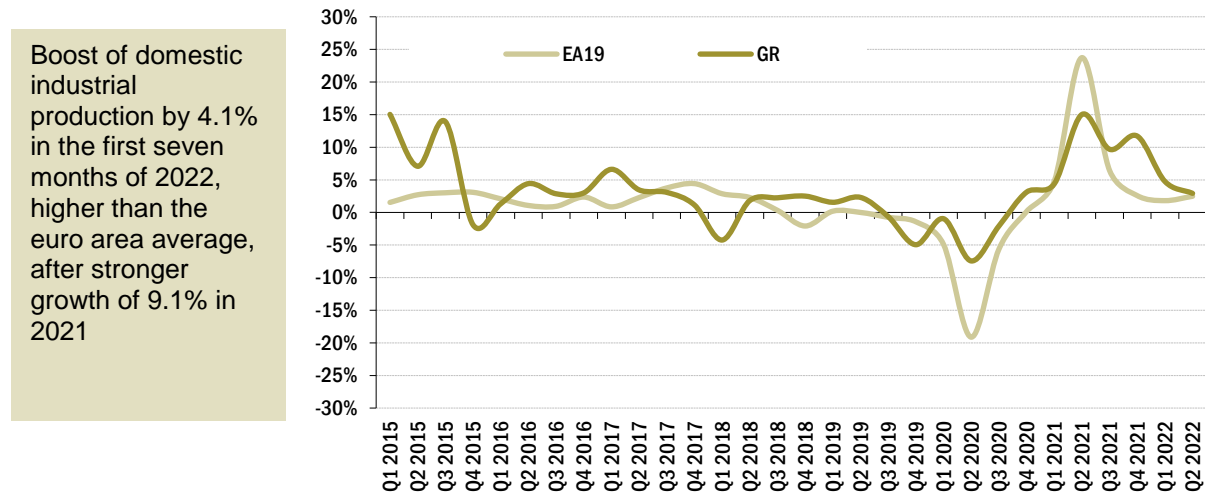
Among the other manufacturing sectors, output increased strongly in vehicles production (40.5% from 3.8%), furniture manufacturing (21.3% from 12.5%), and clothing (19.5% from 19.2%). By contrast, output declined in the production of textiles (-3.2% against an increase of 17.2% in the first seven months of 2021), chemicals production (-2.8% against +2.2%) and the production of tobacco products (-1.9% against 12.8%).

Output increased in all the main industrial product groups. The largest annual increase was recorded in durable consumer goods (20.9%, after an increase of 15.7% in the first seven months of 2021), followed by non-durable consumer goods (6.6% against 7.9%), capital goods (4.5% against 15.5%) and

intermediate goods (3.7% against 9.3%). Finally, energy production increased less strongly than in the first seven months of 2021 (1.3% from 9.4%).

**Figure 3.4**

Industrial Production Index in Greece and in the Euro area (year-on-year % change)



Sources: ELSTAT, Eurostat

## Construction

In the first half of 2022, the production index in the construction industry increased by 23.9%, against a milder increase of 6.1% in the first half of 2021. The increase was mainly due to a rise in activity in the second quarter, by over 30.7%.

In individual construction activities, in the first half of 2022 the construction of buildings increased by 22.2%, against a clearly weaker increase of 6.0% in the same period of 2021, while in Civil Engineering the indicator increased by 25.1% (against 6.2% in 2021).

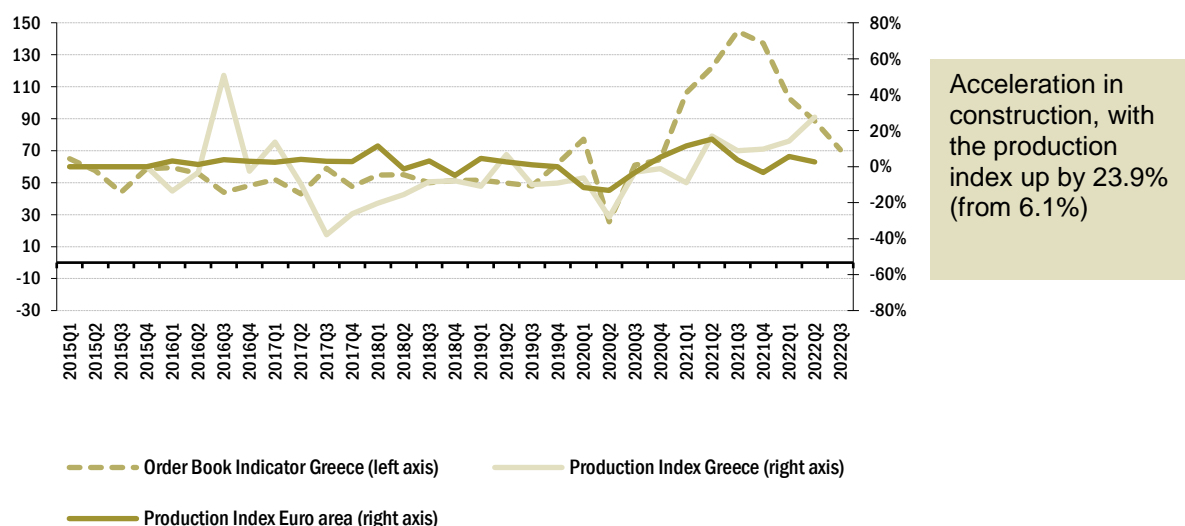
Over the same period in the euro area, the production index in construction rose by 4.1%, a rate that is less than half as high as in the first half of 2021 (9.8%).

Data on construction activity show an increase of 1.4% in terms of number of permits in the first half of 2022, against a strong increase of 37.1% in the first half of 2021. A decrease was recorded in terms of both surface (-11.4% against -60.8%) and volume (-1.5% after 52.9%).



Figure 3.5

## Production Index in Construction and Building Activity Index



Source: ELSTAT

## Retail Trade

The volume index in retail trade in the first seven months of 2022 increased by 5.1%, against a stronger increase of 9.1% in the same period of 2021. Activity volumes increased in 6 out of 8 sub-sectors. However, it should be noted that the growth rate of sales volumes is slowing down to three of the 6 sub-sectors.

In particular, the biggest increase was recorded in books-stationery (+16.6% from +13.4% in the first seven months of 2021), pharmaceuticals-cosmetics (13.4% against 24.7%) and furniture (9.7% against 27.9%). A 6.0 % increase was also recorded in the volume of sales of department stores (from 5.2 %). The mildest increase was observed for fuels-lubricants (3.7% against -2.7%) and clothing-footwear (3.4% against 20.6%). By contrast, a decrease in the relevant indicator was recorded in supermarkets (-1.9% against +2.8%) and food-drinks-tobacco (-1.1% instead of -15.3%).

The retail trade expectations in the first nine months of 2022 declined year-on-year, as reflected in the leading indicators of the IOBE Business Surveys. The index fell by 4.9 points, against an increase by 6.8 points in the first nine months of 2021.

Regarding the activity level, expectations deteriorated mainly in food – drinks – tobacco (-8.3 points after a decrease of 35.8 points in 2021) and vehicles - spare parts (-11.5 instead of an increase of 30.7 in 2021).

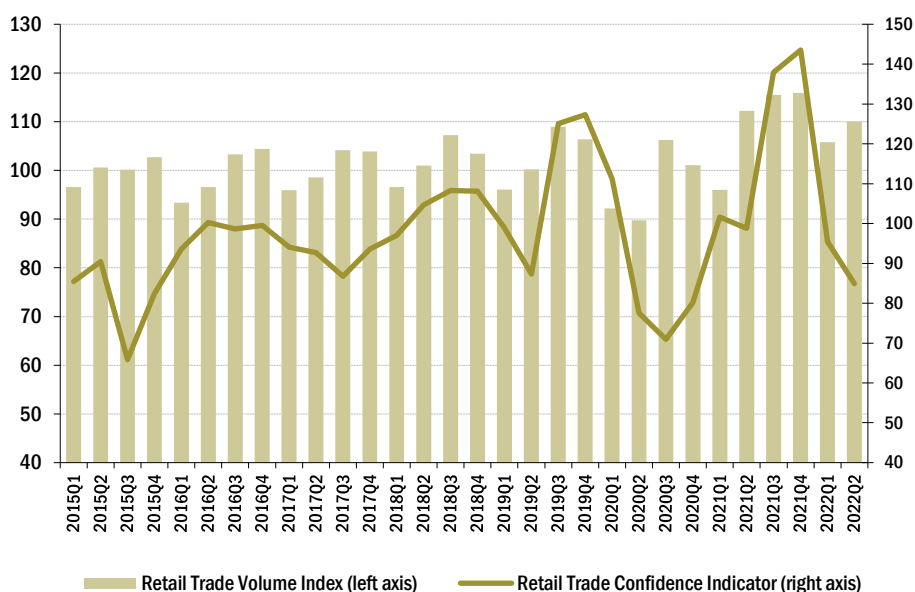
By contrast, expectations have strengthened in department stores (+6.6 against -37.3 in the previous year), textiles – clothing – footwear (+7.9 against 28.9 in 2021) and household appliances (+9.2 following an increase of 26.7 points).

Figure 3.6

Retail Trade Volume Index (2010=100) and Retail Trade Confidence Indicator (1996-2006=100)



5.1% increase in the volume of retail trade in the first seven months of 2022. Deterioration of expectations in the first nine months of the year.



Sources: ELSTAT, IOBE

**Table 3.3**

Volume Index in Retail Trade, annual changes

Category of Retail Trade Stores	Volume Index (2010=100)				
	H1 2020	H1 2021	H1 2022	Change 2021/2020	Change 2022/2021
Overall Index	95.4	104.2	109.5	9.1%	5.1%
Overall Index (excluding automotive fuels and lubricants)	98.5	108.8	112.5	10.4%	3.4%
Store Categories					
Supermarkets	109.6	112.7	110.6	2.8%	-1.9%
Department Stores	79.7	83.9	88.9	5.2%	6.0%
Automotive Fuels	82.2	79.9	82.9	-2.7%	3.7%
Food – Drink – Tobacco	73.3	84.5	83.6	15.3%	-1.1%
Pharmaceuticals – Cosmetics	108.6	135.5	153.6	24.7%	13.4%
Clothing – Footwear	86.9	104.8	108.4	20.6%	3.4%
Furniture – Electric Equipment – H. Appliances	107.6	131.2	144.0	21.9%	9.7%
Books – Stationary	112.1	127.1	148.1	13.4%	16.6%

Source: ELSTAT

Specifically in the case of vehicles - spare parts, the current sales balance deteriorated in the third quarter of 2020, as it stood at -17 points, compared with + 38 points in 2021, with a triple share of those who expected sales to decline, while those that expected sales growth have fallen to one-third of last year's levels. On the stock side, the balance remains negative with an additional increase of those who reported reduced stocks, as despite reduced sales estimates, supply problems for new vehicles have persisted. The balance of orders is negative, standing at -13 points, compared with +32 points in 2021, with a significant increase of those expecting a decline in orders later on. The balance for sales expectations is also negative, at -15 points, compared with + 22 points in 2021, with a large drop in the share of firms expecting sales to increase in the near term. On the employment side, the balance has turned significantly negative, after three quarters, with an increase in those expecting employment to decline. As regards prices, 60% of the firms were expecting an increase in the coming period.

**Table 3.4**



## Business Confidence Indicators in Retail Trade (1996-2006=100)

	Jan-Sep 2020	Jan-Sep 2021	Jan-Sep 2022	Change 2021/2020	Change 2022/2021
Food-Drinks-Tobacco	106.6	70.8	62.5	-35.8	-8.3
Textiles - Clothing – Footwear	61.7	90.6	98.5	28.9	7.9
Household Appliances	62.0	88.7	97.9	26.7	9.2
Vehicles-Spare Parts	80.4	111.1	99.6	30.7	-11.5
Department Stores	103.1	65.8	72.4	-37.3	6.6
<b>Total Retail Trade</b>	<b>86.6</b>	<b>93.4</b>	<b>88.5</b>	<b>6.8</b>	<b>-4.9</b>

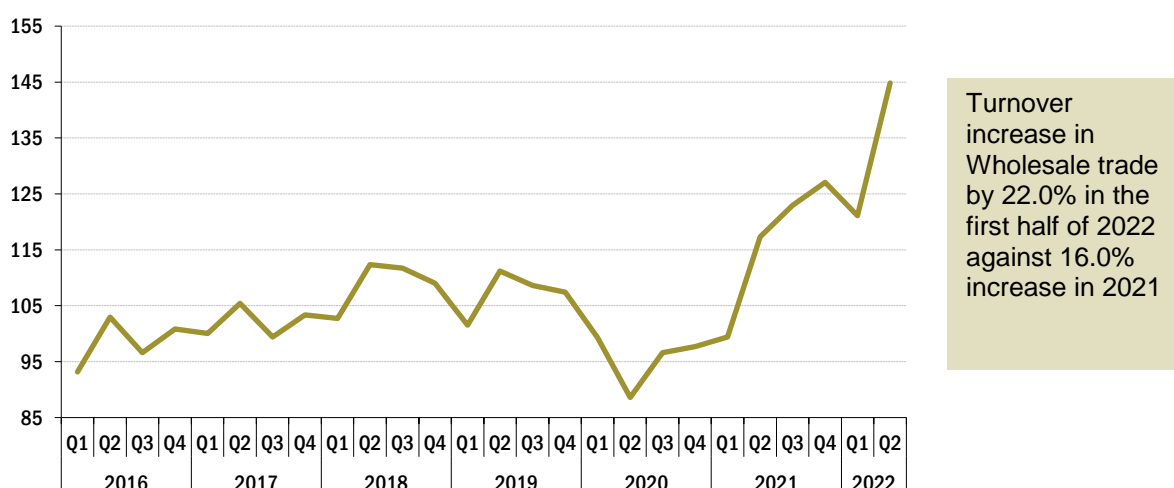
Source: IOBE

### Wholesale trade

In the first half of 2022, the turnover index in Wholesale trade increased by 22.0%, following a milder increase of 16.0% in the same period of 2021.

**Figure 3.7**

Turnover Index in Wholesale Trade



Source: ELSTAT

### Services

In the first half of 2022, turnover in services fell year-on-year in six out of 13 branches. However, in most sectors with turnover increase year on year, growth appears to be slowing down.

The largest increase was recorded in consultancy-accounting services (+21.3%, after a 12.8% increase in the first half of 2021) and cleaning activities (+14.5% from +8.4%). Next came computer programming (+6.3% from +12.0%), information services (+2.7% from +38.4%) and employment-related services (2.4% from +18.9%).

By contrast, turnover decreased in publishing activities (-13.4% against +24.7%), office administrative services (-12.9% against +32.6%) and other scientific and technical activities (-5.9% against 13.0%).

According to recent trends in the leading indicators from the IOBE Business Surveys, whose values refer to the January-September 2022 period, expectations improved in three of the four examined



branches of services. As a result, the sectoral indicator rose by 10.8 points, against a stronger increase of 19.8 points in the first nine months of 2021.

The relevant sectoral indicator strengthened mainly in hotels – restaurants (+27.5 points against +33.5 points in 2021), business services (+13.8 points against +27 points in the previous year) and IT services (+9.7 from +5.7 points in 2021). The representatives of financial intermediaries appeared less optimistic (-6.9 points against +10.2 points in 2021).

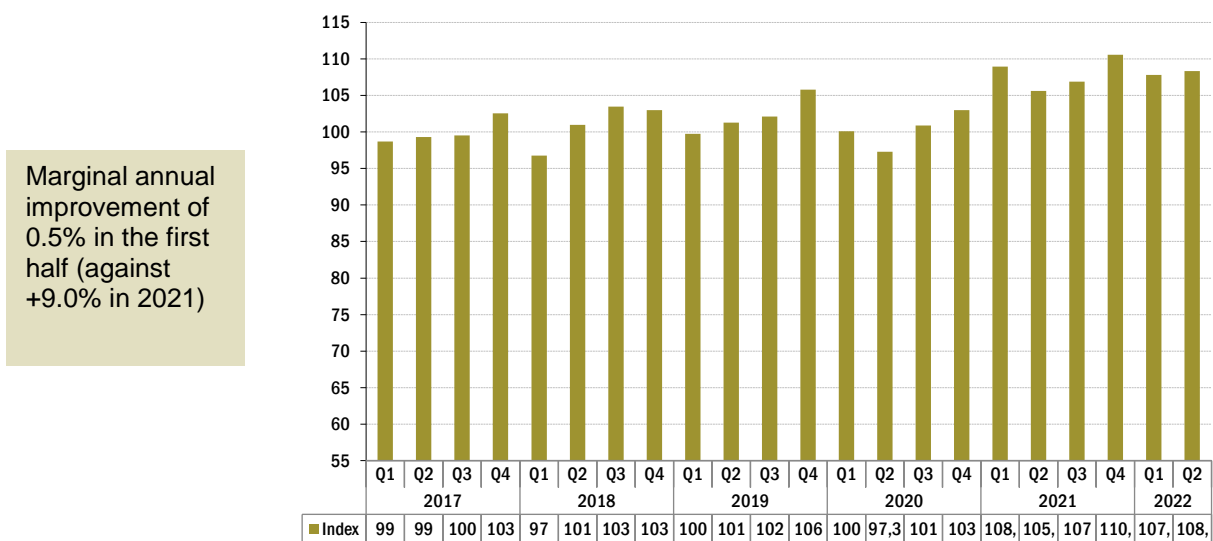
**Table 3.5**

Turnover Index in Services (2010=100)

	Jan-Sep 2020	Jan-Sep 2021	Jan-Sep 2022	Change 2021/2020	Change 2022/2021
Hotels – Restaurants – Travel Agencies	64.4	97.9	125.4	33.5	27.5
Financial Intermediation	108.3	118.5	111.6	10.2	-6.9
Other Business Services	73.2	100.2	114	27	13.8
Information Services	83.1	88.8	98.5	5.7	9.7
<b>Total Services</b>	<b>78.0</b>	<b>97.8</b>	<b>108.6</b>	<b>19.8</b>	<b>10.8</b>

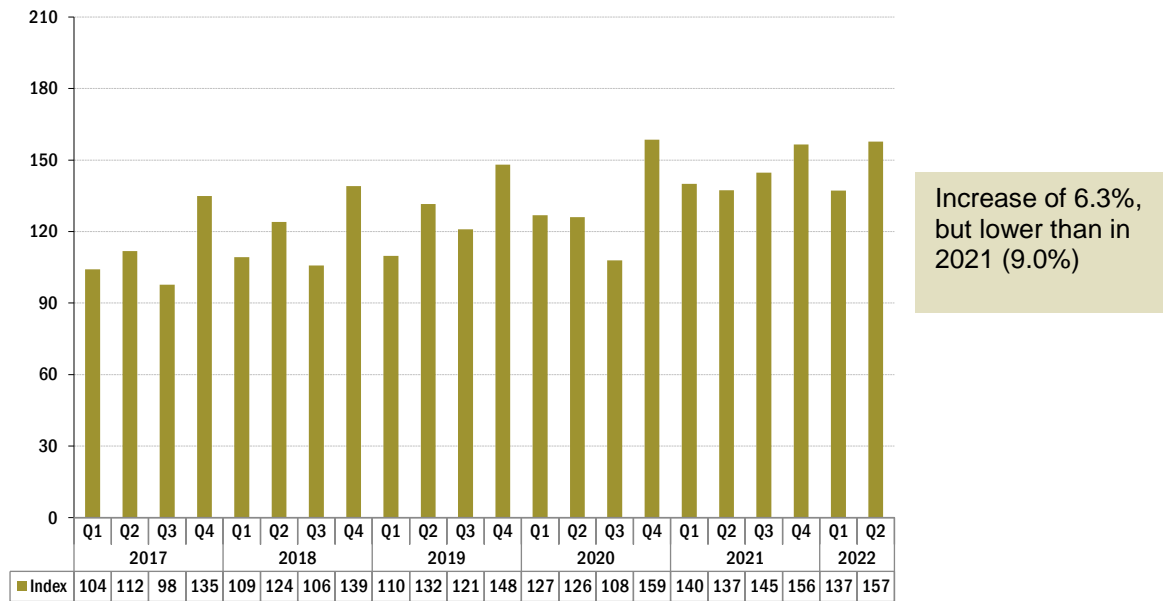
**Figure 3.8**

Turnover Index in Telecommunications (branch 61)



**Figure 3.9**

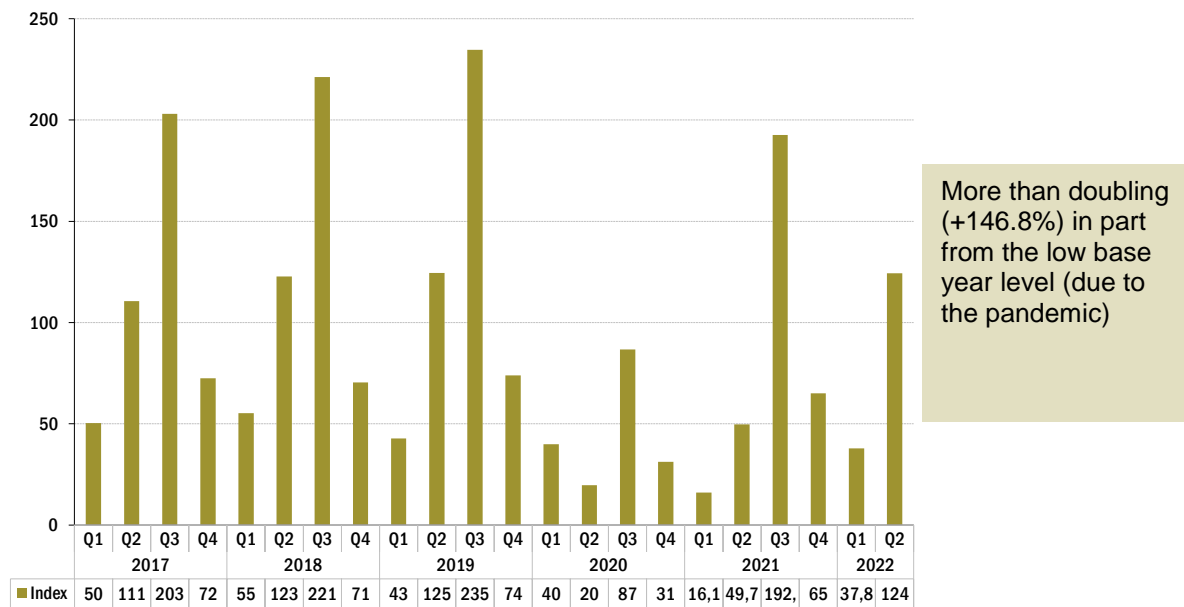
Turnover Index in Computer Programming, Consultancy and Related Activities (branch 62)



Source: ELSTAT

**Figure 3.10**

Turnover Index in Tourism (Accommodation and Food Services Activities, branches 55 & 56)



Source: ELSTAT







### 3.3 External balance

#### A. Analysis of exports and imports from national accounts

- Strong growth of exports of goods in nominal terms in the first seven months of 2022, by 39.8% and of imports at a rate of 49.0%. Lower but still strong growth in exports excluding petroleum products (+22.5%).
- An increase in all product categories, with the strongest growth in exports of raw materials and industrial products.
- The trade deficit widened relative to 2021 by 65.4% to EUR 20.7 billion
- A rise in demand from the euro area countries (+32.2% or +EUR 3.0 billion), M. East & N. Africa (+40.2% or EUR 1.2 billion) and a decline from Asian countries (-10.3% or EUR 168.8 million).

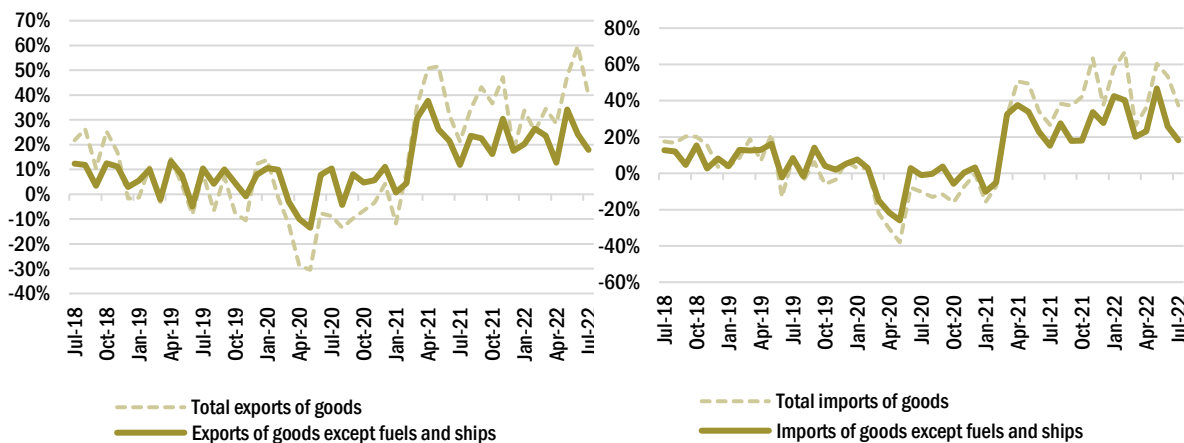
The exports of goods stood at EUR 31.0 billion in January-July 2022, compared with EUR 22.2 billion a year earlier, an increase of 39.8%. Excluding oil product exports, the remaining exports increased by 22.5%, to EUR 20.1 billion, from EUR 16.4 billion in the previous year. Imports increased more strongly over the same period, by 49.0%, to EUR 51.6 billion, compared with EUR 34.7 billion a year earlier. Excluding oil product imports, the remaining imports increased by 29.9%, to EUR 34.6 billion, from EUR 26.6 billion last year. As a result of the above trends in the main components of the external balance of goods, the trade deficit stood EUR 8.2 billion higher than in the corresponding period 2021 (+65.4%), at EUR 20.7 billion, from EUR 12.5 billion. As a result, the value of exports of goods of the Greek economy in the first seven months of 2022 corresponded to 60.0% of its imports, while one year earlier this ratio stood at 63.9%.

In detail, the exports of agricultural products increased by 16.8% in January-July 2022, to EUR 5.2 billion, from EUR 4.4 billion in 2021. The exports of fuels registered the largest increase, by 91.0%, to EUR 11.0 billion, from EUR 5.8 billion in the previous year. Exports in these two categories represent 52.3% of domestic exports of goods this year, up from 46.1% a year earlier. The increase in agricultural products was mainly driven by a 6.5% increase in demand for oils and fats of animal or plant origin, the value of which rose to EUR 495.8 million from EUR 465.6 million last year, as their share in total exports stood at 1.6% in 2022, up from 2.1% in 2021. In the category of food-live animals, which accounts for around 78.4% of the exports of agricultural products, exports increased by 19.1%, to EUR 4.1 billion from EUR 3.4 billion a year earlier. For drinks and tobacco products, which account for 12.1% of the exports of agricultural products, demand stood in the seven months of 2022 at EUR 625.9 million, 11.6% higher than in the same period of 2021.

The exports of industrial products were fairly strong in January-July 2022 (+24.3%), with their value at EUR 13.2 billion, up from EUR 10.7 billion in 2021. This development was driven mainly by an increase of 40.4% in the exports of industrial goods classified chiefly by their main material, from EUR 3.5 billion to EUR 4.9 billion. Stronger international demand, by 5.4%, was registered for chemicals and related products, with a value of EUR 3.6 billion. Export growth was also strong for machinery and transport equipment, by 26.1%, to EUR 2.7 billion, from EUR 2.2 billion, while the exports of various industrial items increased by +27.7%, to EUR 2.0 billion.

**Figure 3.11**

Total exports-imports of goods and exports-imports of goods except fuels and ships (current prices)



Source: ELSTAT, Processing: IOBE

Exports excluding petroleum products and ships stood in January-July 2022 at EUR 20.1 billion, 22.5% higher than in 2021. Imports excluding petroleum products – ships stood at EUR 34.6 billion, 29.9% higher than in the same period of 2021.

Finally, the exports of raw materials increased by 10.0%, to EUR 1.1 billion, from EUR 1.0 billion a year earlier, and the exports of articles and transactions not classified in categories increased by 42.0%, from EUR 291.0 million in 2021 to EUR 413.1 million in 2022.

**Table 3.6**

Exports per one-digit category at current prices, January – July (million €)\*

Product	Value		% Change		% Share	
	2022	2021	22/21	2022	2021	
<b>AGRICULTURAL PRODUCTS</b>	5,191.9	4,443.7	16.8%	16.8%	20.0%	
Food and Live Animals	4,070.2	3,417.3	19.1%	13.1%	15.4%	
Beverages and Tobacco	625.9	560.8	11.6%	2.0%	2.5%	
Animal and vegetable oils and fats	495.8	465.6	6.5%	1.6%	2.1%	
<b>RAW MATERIALS</b>	1,104.5	1,004.2	10.0%	3.6%	4.5%	
Non-edible Raw Materials excluding Fuels	1,104.5	1,004.2	10.0%	3.6%	4.5%	
<b>FUELS</b>	11,018.3	5,767.4	91.0%	35.6%	26.0%	
Mineral fuels, lubricants, etc	11,018.3	5,767.4	91.0%	35.6%	26.0%	
<b>INDUSTRIAL PRODUCTS</b>	13,249.3	10,659.4	24.3%	42.8%	48.1%	
Chemicals and Related Products	3,636.9	3,448.9	5.4%	11.7%	15.6%	
Manufactured goods classified chiefly by raw material	4,864.3	3,464.1	40.4%	15.7%	15.6%	
Machinery and transport equipment	2,734.5	2,169.4	26.1%	8.8%	9.8%	
Miscellaneous manufactured articles	2,013.6	1,577.0	27.7%	6.5%	7.1%	
Other and transactions not classified by category	413.1	291.0	42.0%	1.3%	1.3%	
<b>TOTAL EXPORTS</b>	30,977.2	22,165.6	39.8%	100.0%	100.0%	

\* Provisional data

Source: Eurostat

As regards trends in exports by geographical area, they expanded strongly in the first seven months of 2022 to euro area countries, by 32.2%, approaching EUR 12.2 billion, up from EUR 9.2 billion in the same period of 2021. The EU as a whole saw an increase of 37.6% or EUR 4.6 billion, with exports to this region reaching EUR 16.8 billion, up from EUR 12.2 billion a year earlier. Among the euro area countries that absorb the largest share of Greek exports, there was a significant expansion to Germany of 22.5%, from EUR 1.7 billion to EUR 2.1 billion, and a decrease to France, by 18.8%, from EUR 1.2 billion to EUR 987.5 million. Indeed, exports of goods to the leading destination, Italy, rose by 44.3% to EUR 3.2 billion in 2022, from EUR 2.2 billion in 2021.

**Table 3.7**



## Exports by destination, January-July 2022 (million €)\*

ECONOMIC UNIONS – GEOGRAPHIC REGION	EXPORTS		% CHANGE
	2022	2021	22/21
EU (27)	16,817.4	12,223.5	37.6%
Euro Area	12,175.2	9,206.6	32.2%
G7	5,999.3	4,771.9	25.7%
North America	1,572.6	1,088.5	44.5%
BRICS	564.1	708.8	-20.4%
Middle East & North Africa	4,030.4	2,875.3	40.2%
Oceania	164.4	146.0	12.6%
Central-Latin America	239.4	161.0	48.7%
Asia	1,473.3	1,642.1	-10.3%

\* Provisional data

Source: Eurostat

Among the remaining European Union countries, where total exports increased by 53.6% or EUR 1.6 billion, to EUR 4.6 billion, Bulgaria continued to be the main export destination, with product outflows rising by 92.4% or EUR 943.1 million. Shipments increased to two other countries which absorb a significant share of Greek exports, Romania (+30.4% or EUR 237,8 million to EUR 1.0 billion) and Poland +37.7% or EUR 160.5 million, to EUR 585.9 million.

The rest of Europe also saw a strong pick-up in demand for Greek exports, by 64.4%, from EUR 3.6 billion in the first seven months of 2021 to EUR 5.9 billion a year later. This was manifested primarily by Türkiye, where exports expanded by 33.3%, from EUR 969.3 million to EUR 1.3 billion, and secondarily by the United Kingdom, with an increase of 93.0% from EUR 664.0 million last year to EUR 1.3 billion a year later.

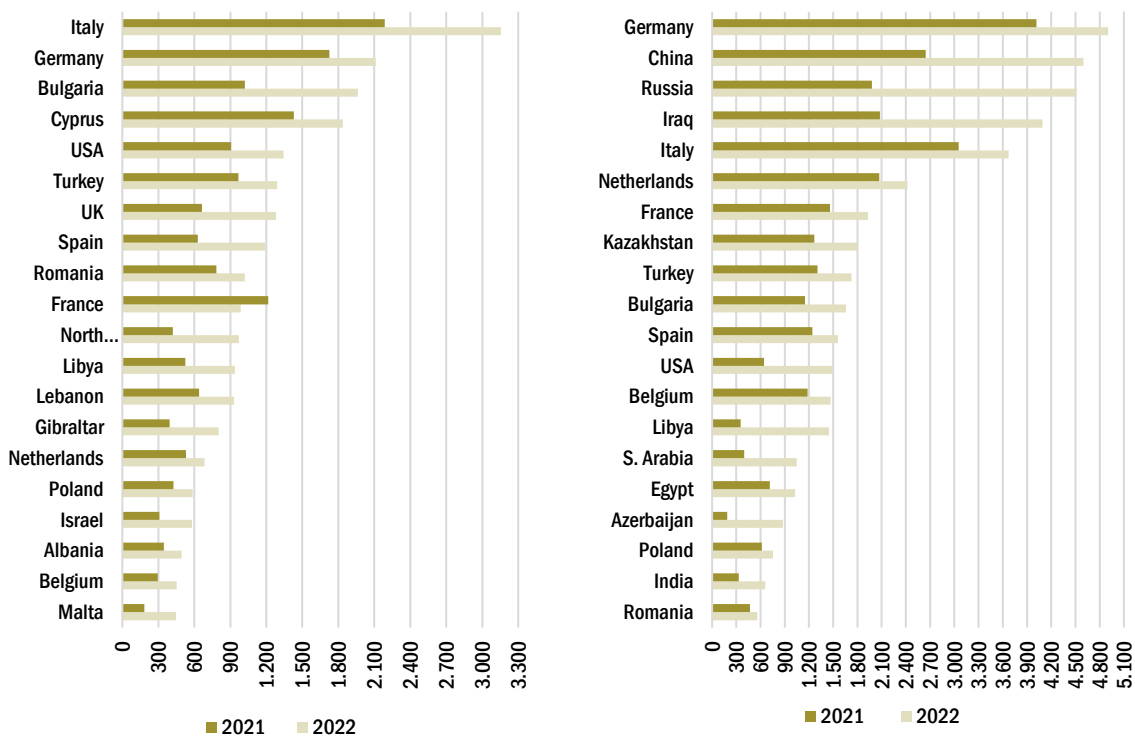
Exports to North America increased strongly, by 44.5%, from EUR 1.1 billion in 2021 to EUR 1.6 million in 2022, mainly due to an increase in exports to the US by 48.1%, from EUR 907.1 million in 2021 to EUR 1.3 billion this year, and to Canada, by 43.9% or EUR 45.7 million. Exports to Mexico also increased (+3.3% or EUR 2.5 million).

Exports to the markets of Central-Latin America countries increased by 48.7% in January-July 2022, reaching a value of EUR 239.4 million from EUR 161.0 million in the same period in 2021. The increase in exports to the countries of the region is mainly due to the rise in Panama's demand for Greek products by 58.1%, which brought their value to EUR 122,8 million from EUR 77.6 million a year earlier. Exports to Brazil declined (-17.6% or -EUR 6.2 million).

Exports to the Middle East and North African countries also increased strongly, by 40.2%, to EUR 4.0 billion from EUR 2.9 billion, mainly due to an increase in exports to Libya (+78.8%), where exports in January-July 2022 stood at EUR 938 million, against EUR 524.7 million a year earlier, and to Lebanon (+45.4%), where they increased by EUR 291.0 million in 2022 compared with 2021. In two major export destinations in the Middle East, exports to the United Arab Emirates increased by 26.2%, to EUR 205.2 million, while to Saudi Arabia exports increased by 44.0%, to EUR 365.7 million.

### Figure 3.12

Countries with the largest share in the exports and imports of Greek goods, January – July 2022  
(million €, current prices)



Source: Eurostat. Data processing: IOBE

The largest increase in exports of goods in the seven months of 2022 to Italy in absolute terms (+ EUR 968,7 million). Sharper fall in China (-EUR 237.5 million). Italy's share in exports remains the largest. A larger increase of imports in 2022 in absolute terms from Russia (+ EUR 2.5 billion), a larger decrease than Ireland (-EUR 596.4 million).

By contrast, demand for Greek goods weakened in the Asian countries, where exports declined in the first seven months of 2022 by 10.3%, to EUR 1.5 billion, from EUR 1.6 billion in 2021. This development is mainly due to a 26.9% drop in exports to South Korea, from EUR 495.4 million in 2021 to EUR 362.0 million this year. Similarly, there was a sharp drop in demand from China (-52.4%, to EUR 216.6 million from EUR 453.1 million in 2021).

The exports of Greek products to Oceania increased by 12.6%, with their value in the first seven months of 2022 standing at EUR 164.4 million, up from EUR 146.0 million a year earlier. The increase was driven by a similar trend to Australia, where exports increased by 12.2%, to EUR 143.5 million, from EUR 128.0 million in the previous year. Similarly, there was an increase in New Zealand (+15.3% or EUR 2.8 million).

To sum up, Greece's exports of goods increased strongly, by 39.8% in January-July 2022, driven by an increase in all categories of goods and most notably petroleum products (+91.0 %) and industrial products (+24.3 %). The top five countries with the highest demand for Greek products are Italy, Germany, Bulgaria, Cyprus, and the United States amid considerable uncertainty about the course of the global economy. The effects of the war in Ukraine, the energy crisis and high inflation are a combination that reinforces the uncertainty and concerns about possible disruptions in the global supply chain and markets. Rising inflation in the European markets, high energy prices and the depreciation of the euro vis-à-vis the dollar pose a combination of new challenges for the Greek entrepreneurship and export activity.

## B. Balance of payments



- Σημαντική αύξηση του ελλείμματος στο Ισοζύγιο Τρεχουσών Συναλλαγών στο πρώτο επτάμηνο του 2022, στα €9,7 δισεκ., έναντι €6,8 δισεκ. το 2021.
- Επιδείνωση στα ισοζύγια Αγαθών και Πρωτογενών Εισοδημάτων, η οποία αντισταθμίστηκε εν μέρει από τη βελτίωση στα ισοζύγια Υπηρεσιών -λόγω τουρισμού και μεταφορών- και Δευτερογενών Εισοδημάτων.

## Current Account

### January – July 2022

In the first seven months of 2022, the Current Account (CA) had a deficit of EUR 9.7 billion (around 6.9% of GDP), up from EUR 6.8 billion in 2021. The deficit was exacerbated by a large increase in the deficit in the goods account and a relatively small deterioration in primary incomes, offset in part by an improvement in services and secondary income accounts. The contribution of the main components of the CA to its recent development is summarised in Text Box 3.3.

In detail, the deficit of the goods account stood at EUR 21.0 billion in January-July, up by EUR 7.9 billion compared to 2021, as the increase in imports was twice as high as the increase in exports. Exports increased to EUR 30.3 billion (EUR 8.6 billion)<sup>10</sup>, with the exports of fuel and other goods both expanding by EUR 4.3 billion. The imports of goods increased to EUR 51.3 billion (EUR 16.5 billion), while the imports of fuel and the imports excluding fuel and ships increased by EUR 8.2 billion and EUR 8.3 billion respectively. Fuel covers 50% of the hike in exports and imports, compared with 37% in 2021 for exports and 27% for imports. The deficit of the balance of goods excluding fuel and ships stood at EUR 14.7 billion in 2022, higher by EUR 4.0 billion.

The services account expanded significantly in the first seven months of 2022, and due to tourism, it is now very close (94%) to the level of 2019. In particular, the surplus reached EUR 10.1 billion, up by EUR 5.4 billion from 2021. Total receipts from Services stood at EUR 25.7 billion, up 58% compared to 2021, while payments were at EUR 15.5 billion, with an increase of 34%. Receipts from travel services approached EUR 8.8 billion, up 154% from last year, reaching 97% of 2019 levels, while transport services were at EUR 13.3 billion, with an increase of 39%, reaching their highest level on record. Finally, receipts from other services reached EUR 3.5 billion, an increase of 8%. Payments for travel services increased by 151% to EUR 1.1 billion, transport payments increased 41%, to EUR 10.8 billion, while payments for Other Services reached EUR 3.6 billion, an increase of 4%.

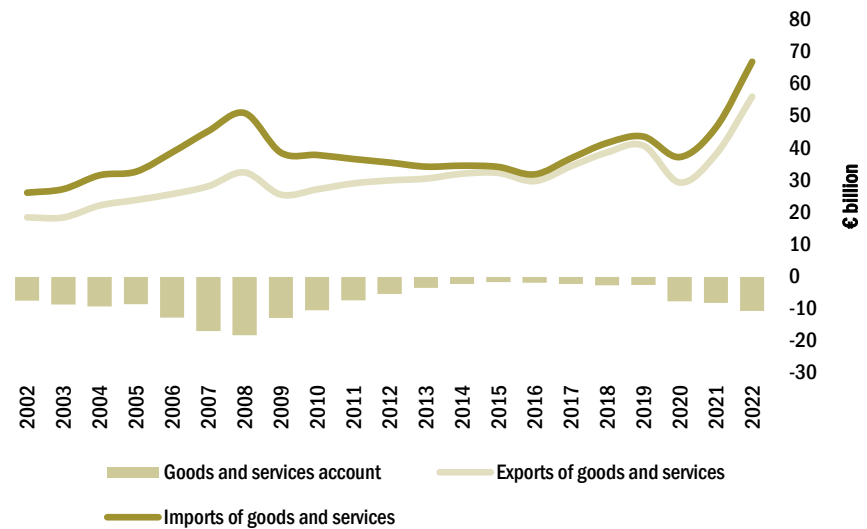
**Figure 3.13**

Imports-Exports of Goods and Services (January – July) 2002-2022

<sup>10</sup> The figures in brackets reflect the absolute change in relation to the corresponding period of the previous year, unless otherwise stated.



Widening deficit of the goods and services account in the first seven months of 2022 to EUR 10.9 billion, from EUR 8.4 billion in 2021



Source: Bank of Greece - Data processing IOBE

The surplus in the primary income account fell to EUR 708 million in 2022, compared with EUR 1.3 billion last year. Receipts fell by EUR 445 million to EUR 4.3 billion, while payments increased to EUR 3.6 billion.

The secondary income account recorded a surplus of EUR 413 million, higher compared with 2021 (at EUR 297 million), with receipts rising to EUR 3.3 billion, due to the transfer of yields from bond holdings (ANFA/SMP) to the Greek State in July, while payments increased to EUR 2.9 billion.

## Capital Account

The capital account surplus<sup>11</sup> increased to EUR 2.0 billion in the first seven months, compared to EUR 666 million in 2021, with an increase in receipts to EUR 2.4 billion, and a fall in payments to EUR 460 million.

Finally, the current trade and capital account, reflecting the relationship of an economy with the rest of the world as a lender or borrower, had a deficit of EUR 7.8 billion, compared with EUR 6.1 billion in 2021.

<sup>11</sup> The capital account shows capital transfers, i.e., unilateral receipts and payments between residents and non-residents linked to fixed capital formation. Capital transfers mainly comprise part of the transfers (receipts) from the Community budget of the European Union to the General Government (withdrawals from the Structural Funds – except for the European Social Fund – and from the Cohesion Fund under the CSFs).

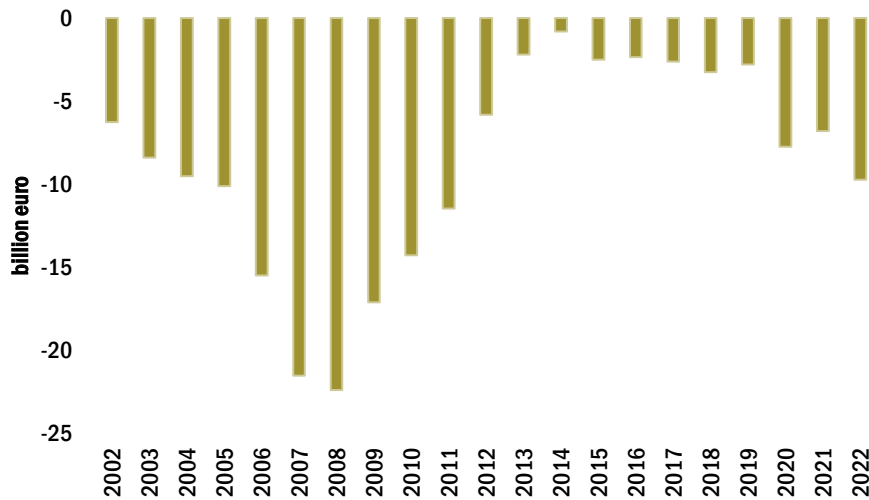


## Financial Account

The financial account was in a deficit of EUR 6.4 billion in the first seven months of 2022, compared with EUR 4.9 billion in 2021.

**Figure 3.14**

Current Account (January – July) 2002-2022

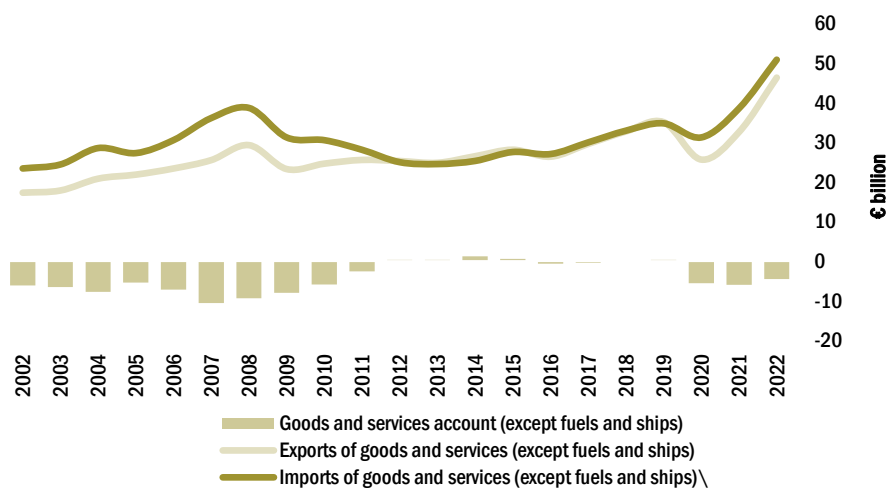


At EUR 9.7 billion, the current account deficit in January — July 2022, from EUR 6.8 billion in the previous year.

Source: Bank of Greece - Data processing IOBE

**Figure 3.15**

Imports-Exports of Goods excluding fuel and ships (January – July) 2002-2022



The deficit of the goods and services account excluding fuels narrowed to EUR 4.5 billion, from EUR 5.9 billion in 2021

Source: Bank of Greece, Data processing IOBE





Table 3.8 Balance of payments (million €)

		January – July				July	
		2020	2021	2020	2021	2020	2021
<b>I</b>	<b>CURRENT ACCOUNT (I.A + I.B + I.C + I.D)</b>	<b>-7,753.4</b>	<b>-6,813.3</b>	<b>-9,741.6</b>	<b>-782.4</b>	<b>570.3</b>	<b>1,104.2</b>
	<b>GOODS AND SERVICES ACCOUNT (I.A + I.B)</b>	<b>-7,936.7</b>	<b>-8,387.9</b>	<b>-10,862.6</b>	<b>-703.7</b>	<b>250.8</b>	<b>838.4</b>
<b>I.A</b>	<b>GOODS ACCOUNT (I.A.1 - I.A.2)</b>	<b>-11,002.7</b>	<b>-13,103.8</b>	<b>-20,997.4</b>	<b>-1,595.7</b>	<b>-2,234.2</b>	<b>-3,099.2</b>
	Oil balance	-2,277.3	-2,383.4	-6,254.2	-251.6	-672.6	-1,161.0
	Trade balance excluding oil	-8,725.4	-10,720.4	-14,743.1	-1,344.2	-1,561.6	-1,938.3
	Ships balance	-64.8	-31.3	-80.0	1.6	-1.1	-21.6
	Trade balance excluding ships	-10,938.0	-13,072.5	-20,917.4	-1,597.3	-2,233.1	-3,077.6
	Trade balance excluding oil and ships	-8,660.6	-10,689.1	-14,663.2	-1,345.8	-1,560.5	-1,916.6
<b>I.A.1</b>	<b>Exports of Goods</b>	<b>16,693.1</b>	<b>21,630.5</b>	<b>30,268.9</b>	<b>2,651.9</b>	<b>3,467.0</b>	<b>4,876.6</b>
	Oil	3,468.2	5,270.7	9,554.8	552.9	803.7	1,631.0
	Ships (sales)	48.6	63.7	72.6	19.8	9.9	11.6
	Goods excluding oil and ships	13,176.3	16,296.1	20,641.6	2,079.2	2,653.5	3,234.1
<b>I.A.2</b>	<b>Imports of Goods</b>	<b>27,695.8</b>	<b>34,734.3</b>	<b>51,266.3</b>	<b>4,247.6</b>	<b>5,701.3</b>	<b>7,975.9</b>
	Oil	5,745.6	7,654.0	15,809.0	804.5	1,476.3	2,791.9
	Ships (buying)	113.3	95.0	152.5	18.2	11.0	33.2
	Goods excluding oil and ships	21,836.9	26,985.2	35,304.8	3,424.9	4,214.0	5,150.7
<b>I.B</b>	<b>SERVICES ACCOUNT (I.B.1-I.B.2)</b>	<b>3,066.1</b>	<b>4,715.9</b>	<b>10,134.7</b>	<b>892.1</b>	<b>2,485.0</b>	<b>3,937.7</b>
<b>I.B.1</b>	<b>Receipts</b>	<b>12,454.3</b>	<b>16,291.1</b>	<b>25,675.8</b>	<b>2,227.2</b>	<b>4,632.6</b>	<b>6,356.7</b>
	Travel	1,411.7	3,481.9	8,849.4	677.9	2,288.0	3,723.1
	Transportation	8,555.8	9,568.7	13,340.4	1,192.9	1,691.1	2,011.7
	Other services	2,486.9	3,240.5	3,486.0	356.4	653.6	621.9
<b>I.B.2</b>	<b>Payments</b>	<b>9,388.3</b>	<b>11,575.3</b>	<b>15,541.1</b>	<b>1,335.1</b>	<b>2,147.6</b>	<b>2,419.0</b>
	Travel	545.1	454.5	1,139.3	67.7	129.1	204.9
	Transportation	6,067.7	7,666.8	10,802.8	873.0	1,471.1	1,619.4
	Other services	2,775.4	3,454.0	3,599.0	394.4	547.4	594.7
<b>I.C</b>	<b>PRIMARY INCOME ACCOUNT (I.C.1-I.C.2)</b>	<b>-141.0</b>	<b>1,277.4</b>	<b>708.1</b>	<b>-531.0</b>	<b>-349.8</b>	<b>-302.4</b>
<b>I.C.1</b>	<b>Receipts</b>	<b>4,110.4</b>	<b>4,785.2</b>	<b>4,339.9</b>	<b>391.8</b>	<b>509.7</b>	<b>437.3</b>
	From work (wages, compensation)	122.6	113.6	132.0	18.3	16.5	19.5
	From investments (interest, dividends, profit)	1,677.2	2,049.1	1,886.2	237.8	351.9	289.2
	Other primary income	2,310.6	2,622.5	2,321.7	135.8	141.3	128.5
<b>I.C.2</b>	<b>Payments</b>	<b>4,251.3</b>	<b>3,507.9</b>	<b>3,631.8</b>	<b>922.8</b>	<b>859.5</b>	<b>739.7</b>
	From work (wages, compensation)	827.3	727.2	872.1	117.3	108.0	129.9
	From investments (interest, dividends, profit)	3,131.3	2,447.4	2,288.0	786.3	731.7	576.1
	Other primary income	292.7	333.2	471.7	19.2	19.9	33.7
<b>I.D</b>	<b>SECONDARY INCOME ACCOUNT (I.D.1-I.D.2)</b>	<b>324.3</b>	<b>297.2</b>	<b>413.0</b>	<b>452.3</b>	<b>669.3</b>	<b>568.2</b>
<b>I.D.1</b>	<b>Receipts</b>	<b>2,465.2</b>	<b>2,486.2</b>	<b>3,297.9</b>	<b>892.0</b>	<b>915.5</b>	<b>914.8</b>
	General government	1,518.2	1,621.9	2,258.9	793.3	794.8	790.5
	Other sectors	947.0	864.3	1,039.0	98.7	120.7	124.3
<b>I.D.2</b>	<b>Payments</b>	<b>2,140.9</b>	<b>2,188.9</b>	<b>2,884.9</b>	<b>439.7</b>	<b>246.2</b>	<b>346.6</b>
	General government	1,166.5	1,372.0	1,988.3	108.8	112.6	190.9
	Other sectors	974.4	817.0	896.6	330.9	133.6	155.7
<b>II</b>	<b>CAPITAL ACCOUNT (II.1-II.2)</b>	<b>569.8</b>	<b>665.9</b>	<b>1,962.6</b>	<b>-23.9</b>	<b>-48.4</b>	<b>475.7</b>
<b>II.1</b>	<b>Receipts</b>	<b>770.2</b>	<b>1,309.0</b>	<b>2,422.1</b>	<b>5.9</b>	<b>28.8</b>	<b>490.8</b>
	General government	655.6	1,045.3	1,897.0	0.6	19.9	382.0
	Other sectors	114.6	263.6	525.1	5.4	8.9	108.8
<b>II.2</b>	<b>Payments</b>	<b>200.4</b>	<b>643.0</b>	<b>459.5</b>	<b>29.8</b>	<b>77.2</b>	<b>15.1</b>
	General government	2.7	2.6	4.2	0.4	0.4	0.6
	Other sectors	197.8	640.4	455.3	29.4	76.8	14.5
	<b>BALANCE OF CURRENT AND CAPITAL ACCOUNT (I+II)</b>	<b>-7,183.6</b>	<b>-6,147.4</b>	<b>-7,779.0</b>	<b>-806.2</b>	<b>521.9</b>	<b>1,579.9</b>
<b>III</b>	<b>FINANCIAL ACCOUNT (III.A+III.B+III.C+III.D)</b>	<b>-7,260.9</b>	<b>-4,920.7</b>	<b>-6,440.1</b>	<b>-504.1</b>	<b>568.3</b>	<b>1,451.4</b>
<b>III.A</b>	<b>DIRECT INVESTMENT*</b>	<b>-1,580.7</b>	<b>-2,468.8</b>	<b>-2,986.9</b>	<b>-321.7</b>	<b>-476.1</b>	<b>1,029.9</b>
	Assets	352.1	647.6	1,090.7	45.9	-61.1	772.2
	Liabilities	1,932.8	3,116.3	4,077.6	367.6	415.0	-257.7
<b>III.B</b>	<b>PORTFOLIO INVESTMENT*</b>	<b>37,335.3</b>	<b>11,905.1</b>	<b>8,207.8</b>	<b>8,870.9</b>	<b>2,024.7</b>	<b>1,640.9</b>
	Assets	28,231.3	14,801.4	10,472.9	8,064.9	1,654.7	397.9
	Liabilities	-9,104.1	2,896.3	2,265.2	-806.0	-370.1	-1,243.0
<b>III.C</b>	<b>OTHER INVESTMENT*</b>	<b>-43,687.9</b>	<b>-13,968.3</b>	<b>-9,188.9</b>	<b>-9,207.3</b>	<b>-1,040.3</b>	<b>-1,170.2</b>
	Assets	1,202.3	2,450.2	-1,393.8	-1,149.5	680.8	-48.3
	Liabilities	44,890.2	16,418.5	7,795.1	8,057.8	1,721.1	1,121.9
	(Loans of general government)	-210.0	-1,423.1	-1,615.6	46.8	-152.3	-153.8
<b>III.D</b>	<b>CHANGE IN RESERVE ASSETS**</b>	<b>672.3</b>	<b>-388.8</b>	<b>-2,472.1</b>	<b>154.0</b>	<b>60.0</b>	<b>-49.3</b>
<b>IV</b>	<b>BALANCE ITEMS (I +II +IV +V = 0)</b>	<b>-77.3</b>	<b>1,226.6</b>	<b>1,338.9</b>	<b>302.1</b>	<b>46.4</b>	<b>-128.5</b>
	<b>RESERVE ASSETS (STOCK)***</b>				<b>9,385</b>	<b>9,393</b>	<b>10,962</b>

Source: Bank of Greece

\* (+) Increase (-) decrease - According to the new balance of payments methodology training BPM6, increases in demand are presented with a positive sign while the decrease in receivables is displayed with a negative sign. Similarly, the increase in liabilities is captured with a positive sign, while the reduction of liabilities with a negative sign.

\*\* (+) Increase (-) decrease - According to the new balance of payments methodology training BPM6, the increase in foreign reserves is now presented with a positive sign, while the reduction of foreign exchange reserves with a negative sign.

\*\*\* Reserve assets, as defined by the European Central Bank, include only monetary gold, the "reserve position" in the IMF, "Special Drawing Rights" and the claims of the Bank of Greece in foreign currency from residents of countries outside the euro area. Conversely, they do not include claims in euro from residents of countries outside the euro area, claims in foreign currency and in euros from residents of euro area countries and the participation of the Bank of Greece in the capital and the reserve assets of the ECB.



In the sub-accounts, the residents' net assets from direct investment abroad increased by EUR 1.1 billion, while net liabilities to non-residents (non-residents' investments in the country) increased by EUR 4.1 billion. In the portfolio investment category, the residents' receivables from abroad increased by EUR 10.5 billion, while the liabilities to non-residents increased by EUR 2.3 billion. In the other investment category, the foreign receivables of residents fell by EUR 1.4 billion, and liabilities to non-residents increased by EUR 7.8 billion. Finally, the country's foreign reserves stood at EUR 11 billion at the end of July 2022.

### Box 3.3

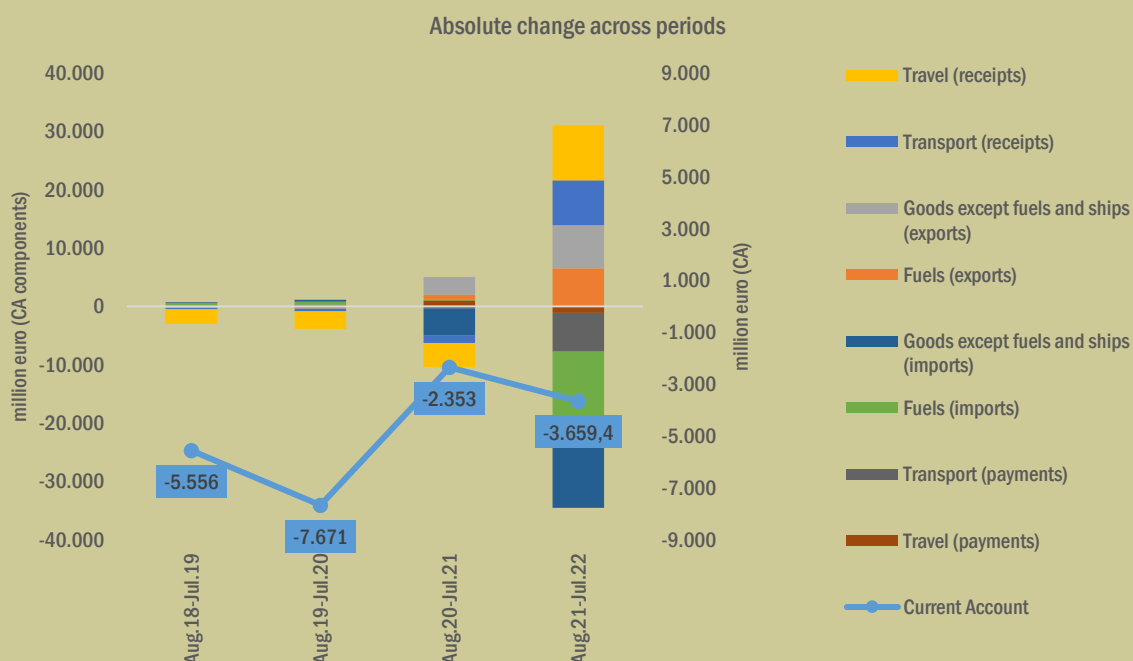
The contribution of selected components to the change in CA after the outbreak of the energy crisis

The energy crisis that began in mid-2021 and escalated in early 2022, with Russia's full-scale invasion in Ukraine and the subsequent sanctions on energy, has had a significant impact on international trade, while it has now transpired in higher prices of imports and exports. Trade between countries is taking place in a new environment of higher prices, both due to the energy crisis and the problems in supply chains, inherited from the pandemic, with product shortages and distribution delays.

The current account in Greece recorded a deficit of EUR 13.7 billion in the 12 months of August 2021-July 2022 (approximately 6.9% of GDP), higher by EUR 3.7 billion compared to the previous 12-month period (August 2020-July 2021). The expansion of the current account over the past 12 months is examined by analysing its main components, i.e., exports of goods and services and their subcategories. This analysis shows the change in exports and imports of fuels and other goods, as well as receipts and payments for travel and transport services.

Figure 3.16.

Absolute change in current account components by period



Source: Bank of Greece. Exports and receipts are shown with a positive sign, while imports and payments with a negative sign. A deterioration in exports takes a negative sign, while a decrease in imports has a positive sign. The goods category does not include fuels and ships.

In addition to the significant recovery of tourism in the period considered and the gradual recovery of the economy with the ease of the pandemic, changes after August 2021 also incorporate the effect of higher prices. Initially, the higher prices transpire in fuels and then in other goods, through the transmission of increased energy costs via the chains of production and distribution of products.



Transport receipts increased in the last 12 months by EUR 7.7 billion, contributing to the improvement of the current account, while correspondingly a positive impact came from the exports of goods (other than fuel) with a boost of EUR 7.4 billion over the same period. However, the most significant boost came from travel receipts, as they increased by EUR 9.5 billion compared to a decline in the corresponding previous period, responsible for 30% of the growth in the exports of goods and services over the past 12 months. The exports of fuels, which have a particular role in the economy and in the trade balance, increased by EUR 6.5 billion. The exports of goods and fuels taken together increased by 41.3% over the same period, while based on price developments in these categories (export of goods deflator, 2021Q3-2022Q2), most of the increase comes from prices, which increased by 31%. Total tourism and transport receipts increased by 81%, while their prices increased by around 20% over the same period.

But like exports, and almost for the same reason, imports expanded, as the recovery of the Greek economy also inflated imports to some extent. The imports of goods increased by EUR 13.8 billion, as in addition to the stronger flows of goods prices also went up. In fuels, the value of imports more than doubled, with an increase of EUR 13 billion over the same period. As a result, the imports of goods and fuels increased by EUR 26.8 billion or 49% compared to the previous period. However, based on the import of goods deflator (for 2021Q3-2022Q2) import prices increased by 24%, thus half of the increase in value is due to rising prices. Travel and transport payments increased by EUR 7.8 billion or 64%, while the effect of prices is also significant, with an increase of 20%.

In conclusion, exports and imports increased significantly over the past 12 months, reflecting an increase in the openness of the economy (sum of exports and imports), to a historically high level, exceeding 100% of GDP in nominal terms. A relatively large part of this growth stems from higher prices, as in all the categories under consideration the price growth exceeds 20%.



### 3.4 Labour market

- Reduction of the unemployment rate in Q2 2022 to 12.4% from 15.8% in Q2 2021, recording its strongest annual decline, at least since 1999.
- Marginal increase in the seasonally unadjusted unemployment rate in August 2022 (11.6%) compared to July 2022 (11.5%).
- Greatest increase in employment in Tourism (+84,400 employed persons), Education (+30,400), and Manufacturing (+27,900).
- Strongest decline in employment in Public Administration (-20,900 people).
- Year-on-year decrease in the seasonally adjusted wage cost ratio in the second quarter of 2022 by 0.9%.

According to ELSTAT's Labour Force Survey, the unemployment rate in the second quarter of this year fell to 12.4% from 15.8% in the second quarter of the previous year, i.e., by 3.4 percentage points, and represents the strongest drop in the unemployment rate since at least 1999. There was also a strong decrease in the number of unemployed, by 19.2% or by 140,900 people, from 732,500 to 591,600, i.e., to the levels of the first quarter of 2010. In the same period, employment increased by 6.4%, bringing the number of people employed to 4,167,200 from 3,915,300 (+251,900), while the inactive population decreased by 2.9% or 126,200 (to 4,293,100 from 4,419,300). In the first half of 2022, the unemployment rate (13.1%) decreased by 3.4 percentage points compared to the first half of 2021 (16.5%). At the same time, the seasonally unadjusted unemployment rate in August 2022 decreased by 1.8 percentage points compared to August 2021 and stood at 11.6% from 13.4%, posting the lowest decrease for this year. Meanwhile, it increased marginally, by 0.1 percentage points, compared to the July 2022 unemployment rate (11.5%).

As regards the evolution of unemployment in the euro area in the second quarter of 2022, in all Member States the unemployment rate fell, with the strongest reduction of unemployment recorded in Greece (-3.4 percentage points), followed by Spain and Ireland (-2.8 percentage points in both countries). In Spain — which together with Greece has the highest unemployment rate in the eurozone — unemployment stood at 12.5% in the second quarter of this year, from 15.3% a year earlier, while in Ireland it fell from 7.3% to 4.5%. The lowest unemployment rates were found in Malta and Germany. In the former, it fell to 2.9%, from 3.4%, i.e., a decrease of 0.5 percentage points, which was the weakest in the Eurozone in the second quarter of this year. In the latter, the unemployment rate fell from 3.7% to 3.0% (-0.7 percentage points). In the other major eurozone economies, France and Italy, the unemployment rate fell by 0.5 percentage points and 1.6 percentage points respectively - in France from 7.6% to 7.1% and in Italy from 9.6% in Q2 of 2021 to 8.0% in Q2 of 2022. Finally, in the euro area as a whole, unemployment decreased for the fourth consecutive quarter and in the second quarter this year it fell to 6.6% from 7.9% a year earlier (-1.3 percentage points).

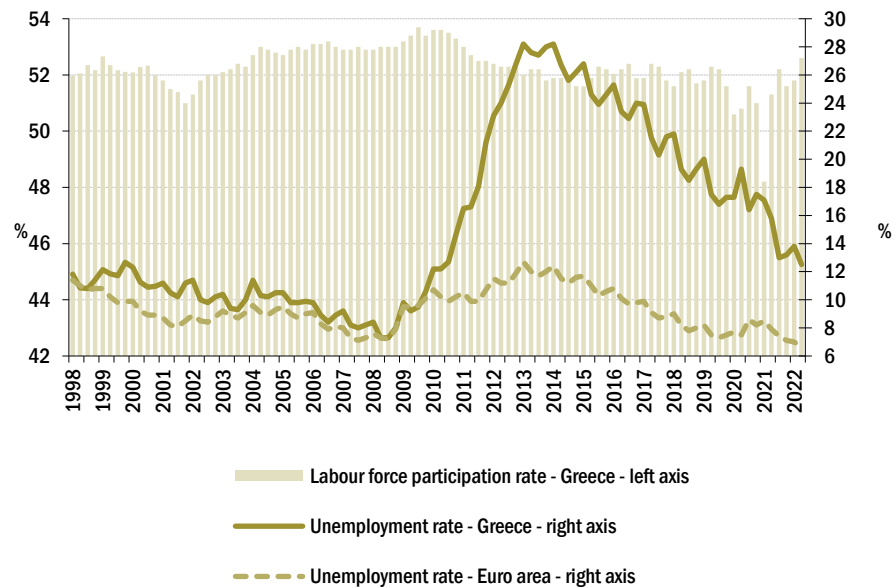
Regarding the development of the gender-based unemployment rate in Greece, the decrease in unemployment was similar. Among men — with lower unemployment rates over time than among women — it fell by 3.2 percentage points to 9.2% in the second quarter of 2022, from 12.4% in the second quarter of 2021. Among women, it fell to 16.6% from 19.9%, down 3.3 percentage points, while the difference compared to the male unemployment rate narrowed marginally to 7.4 percentage points, from 7.5 in the previous quarter. In the euro area as a whole, the unemployment rate for men fell to 6.2% from 7.5% (-1.3 percentage points), while the unemployment rate for women was 0.8 percentage points higher than that of men, as it fell in the second quarter of 2022 to 7.0% from 8.4% in the second quarter of 2021 (-1.4 percentage points).

**Figure 3.17**

Labour force participation and unemployment rates



Unemployment rate decreased in Greece in Q2 2022 to 12.4%, from 15.8% second quarter of 2021.



Sources: ELSTAT – Labour Force Survey, Eurostat

Regarding the age-based unemployment rate, as has been repeatedly reported, it falls as age increases. In Q2 of this year, in all age categories except that of people aged 15-19, it decreased. The strongest decrease occurred among people aged 20-24 and 25-29 years. In the first category, the unemployment rate fell by 7.6 percentage points, i.e., to 29.0% from 36.6% (-7.6 percentage points) while in the second, it declined by 7.2 percentage points, i.e., from 26.7% to 19.5%. The highest unemployment rate occurred among those aged 15-19, where it stood at 54.3% in the second quarter of 2022, from 51.8% in the second quarter of 2021 (+2.5 percentage points). Finally, the lowest unemployment rate is found in the age category that experienced the mildest decrease (by 0.8 percentage points), i.e., those over 65 years old, where unemployment fell to 8.4% in the second quarter this year, from 9.2% a year earlier.

As regards the duration of unemployment, the share of the long-term unemployed in total unemployment in the second quarter of 2022 increased for the second consecutive quarter, reaching 62.6% from 61.0% a year earlier (-1.6 percentage points). In contrast, the number of long-term unemployed fell by 18.3% or 82,700, from 453,100 to 370,400, reaching its Q1 of 2011 level.

Unemployment is lower among people with higher education. In the second quarter of 2022, in all categories of education, the unemployment rate decreased compared to the same quarter of 2021. The highest unemployment rate and its strongest decrease were recorded among people who attended a few years of primary education or did not go to school at all, as this fell from 46.7% to 36.9% (-9.8 percentage points). People with secondary education diplomas recorded the second largest drop in the unemployment rate, as it fell to 14.4% from 18.3% (-3.9 percentage points). By contrast, the lowest unemployment rate and its weakest reduction were found among those with a doctoral or postgraduate degree, where it fell to 4.7% from 6.4% (-1.7 percentage points). Next came the unemployment rate among those with a university degree, falling to 9.2% from 12.2% (-3.0 percentage points), followed by those with a post-secondary vocational degree, where unemployment fell to 12.4% in the second quarter of 2022, from 16.0% a year earlier (-3.6 percentage points).

In terms of the regional dimension of unemployment, the unemployment rate fell in all regions of the country. The highest unemployment rate in the second quarter of 2022 was recorded in Western Macedonia, where it stood at 19.7% from 21.6% a year earlier (-1.9 percentage points). The unemployment rate in Thessaly fell to 17.2% from 17.5%, decreasing by 0.3 percentage points. By contrast, the lowest unemployment rate was registered in the South Aegean and Crete. In Crete, unemployment fell by 6.9 percentage points (the second strongest decrease in the unemployment rate) to 9.3% from 16.2%. The South Aegean region experienced an even stronger drop in the unemployment rate of 19.1 percentage points, falling to 7.5% in the second quarter of 2022 from 26.6% in the second



quarter of 2021. The weakest decrease in the unemployment rate took place in the Peloponnese, by 0.4 percentage points, falling to 12.8% from 13.2%, while in Attica unemployment fell to 9.9% from 12.8% (-2.9 percentage points).

With regard to employment developments in terms of professional status, two categories saw an increase in employment and one a decline. The strongest increase in the second quarter of 2022 was recorded in the largest category of employed persons, employees, where employment rose by 257,100 or 9.7%, reaching 2,913,600 from 2,656,500 in the second quarter of 2021. Among the contributing family workers, the number of employed rose to 116,200, from 119,600 (+13,900 or +16,600), while the number of self-employed persons fell by 1.9% or 21,700 to 1,117,400, from 1,139,100.

As regards the evolution of employment based on occupations, it increased in all occupations in the second quarter of 2022 compared with a year earlier, except for craft and related trades workers (-6.6%, from 311,600 to 291,100) and for persons who cannot be classified (-0.2%, from 66,200 to 66,100). In absolute terms, the strongest employment growth in Q2 2022 was recorded among scientific, artistic, and related professionals, by 80,200 employees (+9.7%), reaching 910,000 from 829,800 in Q2-2021. The number of service and sales workers also increased significantly, by 72,400 to 927,900 from 855,500 (+8.5%). Finally, among technicians/associate professionals, employment increased by 9.0%, or 32,100, to 888,900, from 356,800.

In terms of employment status, both full and part-time employment increased, but in absolute terms the increase was stronger in the former category. In more detail, full-time employment in the second quarter of this year rose by 220,900 or 6.1% to 3,816,800, from 3,595,900 in the same quarter of the previous year. Part-time employment rose by 31,100 or 9.7% to 350,400, from 319,300.

In all main sectors, employment strengthened in the second quarter of 2022 compared to the same quarter last year. In particular, in the primary sector employment rose by 13,000 persons or 2.9%, to 457,400 from 444,400 people. In the secondary sector, employment rose by 56,600 persons, or by 9.7%, to 638,000 from 581,400 people, while employment rose by 178,500 people (or 6.2%) to 3,068,000 employed, from 2,889,500 people in the tertiary sector in absolute terms among the main sectors of the economy.

At the branch level, 16 saw an increase in employment and in the remaining five it declined. In absolute terms, the strongest increase was recorded in accommodation and food services, where employment rose by 84,400 persons or 26.6% (to 401,300 in Q2 2022 from 316,960 in Q2 2021), followed at a distance by employment in education, which increased by 30,400 or 9.5% (from 320,500 to 350,900). Employment growth in manufacturing was lower, reaching 27,900 people or 7.4% (from 379,400 to 407,300). The weakest employment growth was recorded in the activities of extraterritorial organisations and entities (+1,300, to 3,700 from 2,400 people), mining-quarrying (+2,400, from 9,900 to 12,300), and real estate management (+4,000, from 7,400 to 11,400). By contrast, the strongest decline in employment in the second quarter of 2022 was seen in the public administration sector, where employment contracted by 20,900 persons or by 5.4% (from 388,800 to 367,900 people). This is followed electricity-gas-steam-air conditioning and transport-storage. In the former sector, employment contracted by 5,200 or 13.9% (to 32,100 from 37,300), while in the latter it fell by 5,100, or 2.4% (from 211,700 to 206,600).

In conclusion, employment data at the sectoral level show that the rise in employment in the second quarter of 2022 compared with one year earlier was mainly driven by an upturn in the following sectors:

- Accommodation and food service activities (+84,400 employed) in connection with the rise in international arrivals at major airports in the country in the second quarter of 2022 by 4.4 times or 5.08 million persons (from 1.48 million to 6.56 million) and the increase in the tourism turnover index by 2.5 times (from 49.7 to 124.6 points);
- Education (+30,400 persons employed);
- Manufacturing (+27,900 persons employed) in line with the rise in the seasonally adjusted industrial index over Q2 2021 - Q2 2022 by 2.3% (from 115.0 to 117.6 points);

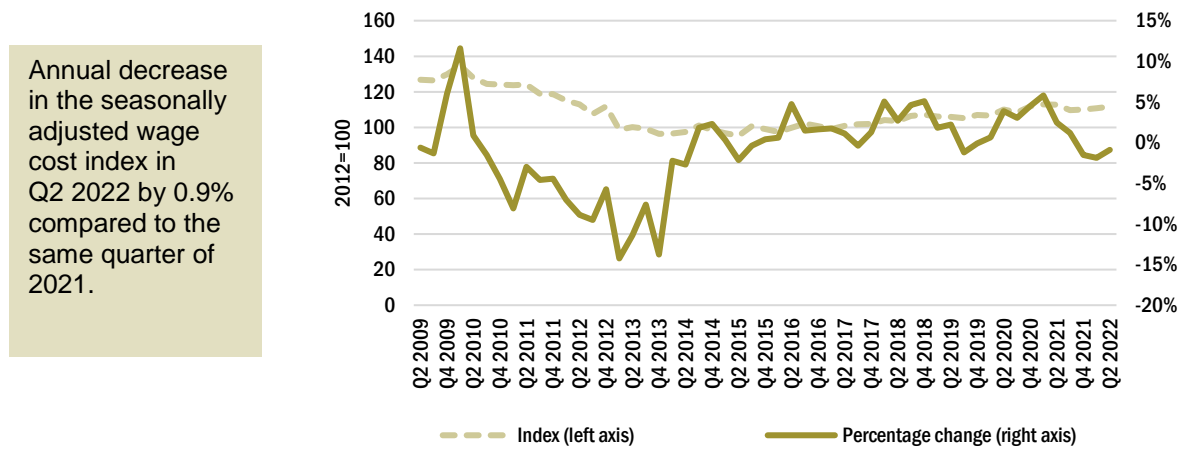




despite the drop in employment in the public administration sector by 20,900 people.

**Figure 3.18**

Seasonally adjusted wage cost index and its percentage change



Sources: ELSTAT

The seasonally adjusted wage cost index in the Greek economy as a whole declined for the third consecutive quarter, and in the second quarter of this year it fell by 0.9%, compared to the second quarter of 2021, to 111.7 from 112.7 points.

**Table 3.9**

Population aged 15 years and over by employment status (in thousands)

Reference period	Total	% of Population	Employed	Percentage (%) of the labour force	Unemployed	Percentage (%) of the labour force
2015	9,246.6	52.0	3,610.7	75.1	1,197.0	24.9
2016	9,212.8	52.1	3,673.6	76.5	1,130.9	23.5
2017	9,176.9	52.1	3,752.7	78.6	1,027.1	21.5
2018	9,140.2	51.9	3,828.0	80.7	915.0	19.3
2019	9,103.5	52.0	3,911.0	82.7	818.9	17.3
Q1 2020	9,083.8	50.6	3,852.6	83.8	745.1	16.2
Q2 2020	9,080.5	50.8	3,844.0	83.3	768.3	16.7
Q3 2020	9,077.3	51.6	3,926.8	83.8	756.4	16.2
Q4 2020	9,074.2	51.0	3,878.5	83.8	750.1	16.2
2020	9,079.0	51.0	3,878.5	83.7	755.0	16.3
Q1 2021	9,070.8	48.2	3,625.1	82.9	745.4	17.1
Q2 2021	9,067.1	51.3	3,915.3	84.2	732.5	15.8
Q3 2021	9,063.5	52.2	4,118.3	87.0	615.4	13.0
Q4 2021	9,060.0	51.6	4,053.3	86.8	617.4	13.2
2021	9,065.4	50.8	3,928.0	85.2	677.7	14.7
Q1 2022	9,055.8	51.8	4,044.0	86.2	647.2	13.8
Q2 2022	9,051.9	52.6	4,167.2	87.6	591.6	12.4

Source: ELSTAT, Labour Force Survey

### Medium-term outlook

The developments in the international socio-economic environment in the first nine months of 2022 were mainly driven by the war in Ukraine with the ensuing negative effects on energy costs and inflation. At the same time, despite the spread of the coronavirus, both the number of intubations and the number of deaths fell significantly, while vaccination with updated vaccines for its new variants has started.

In the baseline scenario, the above factors are not projected to vary significantly over the rest of 2022. As a consequence, the war in Ukraine is expected to continue and is likely to persist in 2023. Energy costs are expected to remain very high, maintaining strong inflationary pressures. However, to ease energy costs, the government has recently announced additional measures to support households and businesses amounting to EUR 5.5 billion. Internationally, the major central banks are expected to raise interest rates to curb inflation. Already in early September, the ECB announced an increase in the key interest rate from 0.5% to 1.25%, with a further increase expected in the next period. Higher interest rates will lead to higher borrowing costs for firms and households, discouraging the take-up of investment risk and burdening the servicing of existing borrowing at variable rates.

Regarding the coronavirus, despite the high daily level of the number of cases (in four digits), its new variants are milder and vaccination – especially for vulnerable groups – has started with updated vaccines. As a result, the health conditions are not expected to deteriorate sharply, and therefore no lockdown is foreseen, but – if necessary – soft protective measures are likely to come back again.

Taking this into account for the rest of 2022, the trend in domestic employment will be largely determined by the evolution of tourism, exports of goods, and household consumption, driven by strong inflation and investment.

Regarding Tourism, the increase in international traffic in the first seven months of the year was very strong compared with the same period last year, as inbound tourist flows rose by 8.7 million or 2.9 times, from 4.6 million in the first seven months of 2021 to 13.3 million one year later. Over the same period,





travel receipts (at current prices) increased by 2.5 times or by EUR 5.37 billion, to EUR 8.85 billion from EUR 3.48 billion. The strong positive momentum in the tourism sector resulting from these conditions is expected to have a corresponding positive impact on employment in this sector throughout most of the third quarter. Thereafter, however, the gradual end of the tourist season and high energy costs are expected to have a negative impact on employment in the sector, especially in the last quarter of the year.

The exports of goods will also pick up in 2022, but milder than in previous years, as the euro area's recovery, the main export destination, will continue at a slower pace, i.e., by 2.6% according to the latest European Commission forecast (Summer 2022), compared to its previous growth forecasts of 2.7% (Spring 2022) and 4.0% (Winter 2022), respectively. This will continue to support employment in export-oriented manufacturing sectors, as well as in transport and storage. However, the increase in employment in these sectors is expected to gradually fade because of the expiry of the diesel subsidy in early October, which will weigh on transport costs, offset to some extent by subsidising the consumption of electricity and gas to non-household consumers. It should be noted that, based on seven-month data, exports (at current prices) increased by 39.9% (or + EUR 8.64 billion to EUR 30.27 billion from EUR 21.63 billion).

Investment is expected to have a positive effect on the employment of the respective sectors of industry and tourism, while a positive impact is also expected from the start of investments in significant and mature privatisation deals (e.g., Hellinikon). The use of resources from the recovery fund also contributes positively to investment growth. With data for September 2022, projects of EUR 10.73 billion have been included in the recovery fund this year, totalling EUR 13.49 billion since the start of the plan. However, as mentioned above, the recent increase in the key interest rate by the ECB and the expected new increase in the rate in the coming few weeks will lead to higher borrowing costs for businesses and households, discouraging the uptake of investment risk, while dampening employment. Higher prices of building materials, because of higher inflation, will have negative effects on investment, mainly through the construction sector.

Rising borrowing costs for households and firms because of a rise in the key ECB interest rate and higher inflation are having a negative impact on purchasing power. Negative effects on this will also arise from heating costs in the last quarter of the year. However, far-reaching interventions in response to the energy crisis, combined with the use of part of the accumulated savings during the pandemic, will to some extent support consumer demand and thus employment in the sectors concerned (retail trade, tourism, food services, recreation - entertainment).

Regarding the course of employment in the following year, 2023 is a year of parliamentary elections. However, the current electoral law envisages the application of a simple proportional system and therefore there is a high likelihood of second elections later in the year, with corresponding effects on the functioning of the economy and thus on employment.

In addition, employment will be significantly affected by the course of tourism. It is expected to be lower than in 2022, mainly because of the slowdown in the countries of origin of most tourists visiting Greece, because of high energy costs and the associated inflationary pressures, which are nevertheless expected to be milder (inflation of 4.6% in 2023 in the EU, down from 8.3% in 2022, according to the European Commission's forecast).

Consumption is expected to be negatively affected by high inflation, which is nevertheless projected to stand at a lower level than in 2022 (at 4.2% in 2023 from 9.7% in 2022, as discussed in Section 3.5). At the same time, the disposable income of households and firms will also be dampened by the higher cost of borrowing (existing and new) because of the expected further hike in ECB interest rates. However, these negative effects will to some extent be offset by support measures of households and firms in response to the energy crisis.

The positive impact of investment on employment is expected to be milder. On the one hand, the resources of the recovery fund and the maturing of large infrastructure projects (Hellinikon, metro, rail



infrastructure, motorways, digital infrastructure) will have a positive impact, but on the other inflation (lower than in 2022) and the increase in interest rates by the ECB act as a drag on the uptake of investment risks.

As regards the contribution of the public sector to employment, the evidence so far suggests that it will come from hiring regular (17.942 permanent hirings) and temporary staff (22.344 fixed-term private-law positions) in the public sector. In relation to public benefit work, beyond the programme to promote employment through public benefit programmes in services of the Ministry of Environment and Energy and the Ministry for Migration and Asylum (first contact and identification services) which concerns only 2,260 positions, expected to start in late 2022, there is no information available on programmes to be launched in 2023.

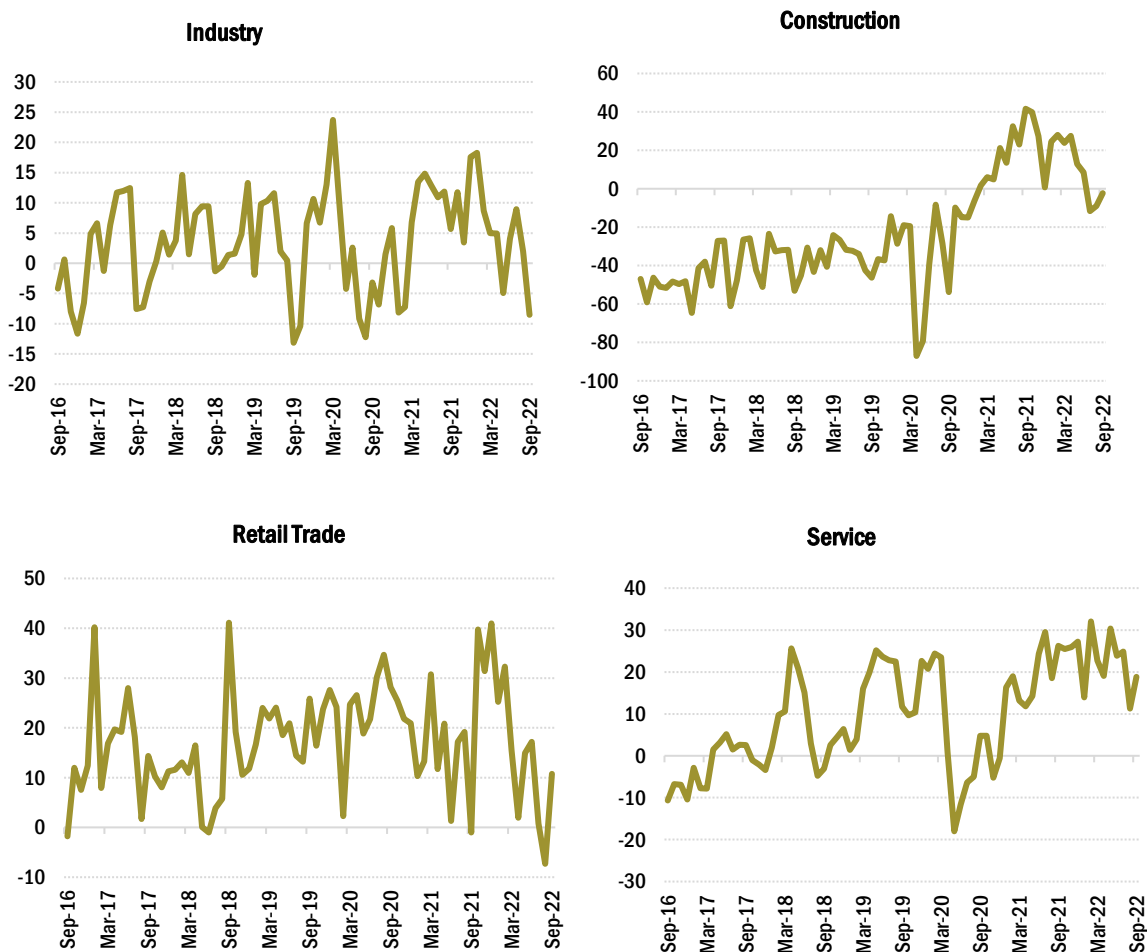
Considering the above effects on the labour market, the unemployment rate in 2022 is expected to lie in the region of 12.3%. As regards 2023, the unemployment rate is expected to stand in the region of 11.5%.

According to the latest IOBE business and consumer surveys, in July-September 2022 compared with the second quarter of this year, the short-term employment expectations deteriorated significantly in all sectors except industry, where they remained unchanged. Compared with the same period of 2021, there was a mild decline in services, industry, and retail trade, while there was a sharp deterioration in the construction sector. In more detail:

In Industry, the average balance for the third quarter of the year was unchanged from the previous quarter at +1 point. Compared with last year's corresponding performance, the average quarterly indicator is around 8 points lower. In the three-month period under review, the percentage of industrial firms expecting employment to fall in the near term declined slightly to 12%, from 14% in the previous quarter, while the proportion of those expecting an increase in the number of jobs decreased to 13% (from 16%). However, the vast majority of enterprises in the sector (75%) were expecting employment to remain unchanged.

**Figure 3.19**

Employment expectations (difference between positive and negative responses)



Source: IOBE

In the third quarter of 2022, compared with the previous quarter, there is a significant deterioration in the short-term employment expectations in all sectors except industry where they remained unchanged.

In Construction, the sector's employment expectations balance declined sharply, from +16 points to -8 points, to a significantly lower level than in the same period of 2021 (+32 points). In the three-month period under review, 38% (from 17%) of the firms were expecting fewer jobs, while the proportion of respondents expecting an increase in employment declined slightly to 30% (from 33%). At the branch level, there was a significant decline in the relevant index for private construction (-35 from +18 points) in contrast to the index for public works (+24 from +14 points) where the balance strengthened.

The expectations indicator for retail trade weakened significantly in the third quarter of this year compared with the previous quarter, to +1 point (from +11), significantly lower than in the previous year (+12). About 9% of the firms in the sector were expecting jobs to decline, from just 3% in the previous quarter, while 11% (down from 14%) were predicting an increase in employment, with those expecting no change reaching 80% (from 84%) of the total. In the individual branches examined, there is a significant improvement in the balance in food-drinks and household equipment, the increase in department stores is marginal, whereas there is a significant decline in textiles-clothing-footwear and vehicles-spare parts.



In services, the expectations for the quarter under review point to a mild weakening quarter on quarter, and a slight boost year on year. The balance fell by 6 points to +18 points in the third quarter of 2022, while it fell by 7 points year-on-year. Of the enterprises in the sector, 4% (down from 5% in the previous quarter) were expecting employment to fall, while 23% were expecting growth (down from 29%). At the sectoral level, the trend is strongly negative in hotels and restaurants and mildly negative in land transport, while expectations are strongly rising in various business activities and the IT sector and growing more moderately in financial intermediaries.





### 3.5 Consumer and Producer Prices

- An increase in the CIP in the first nine months of 2022 to 10.1% against an inflation rate of 0.2% one year earlier. Higher prices mainly from the strong impact of energy prices.
- A rate of change in HICP with constant taxes and excluding energy at 5.1% in the first eight months of 2022, from a decline of 0.7% one year earlier.
- For 2022, the Consumer Price Index is expected to strengthen in the region of 9.7%, mainly on account of a strong increase in energy prices and consumer demand.
- For 2023, the Consumer Price Index is projected to increase at a rate in the region of 4.2%.  
Key assumptions:
  - Brent oil prices will fall by around 7%.
  - Consumer demand is expected to pick up moderately.
  - Supply will suffer from second-round effects from higher energy prices.

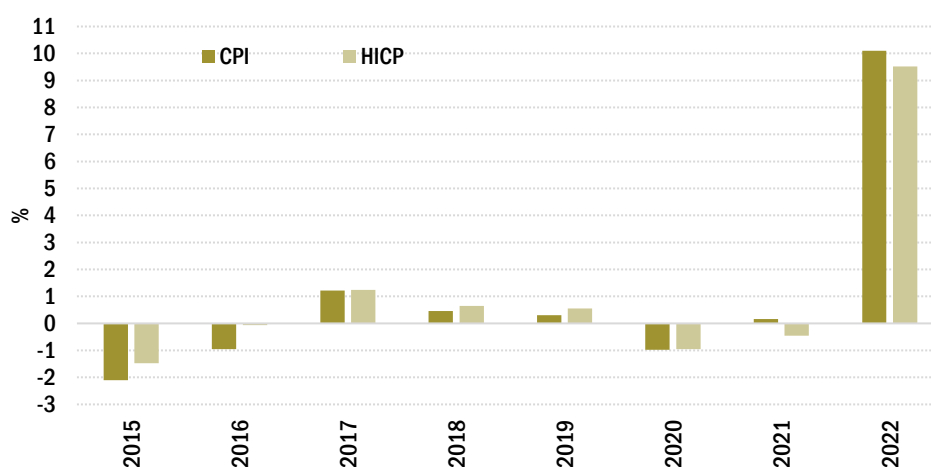
#### Recent developments

The period from January to September 2022 saw a particularly strong rise in prices compared with a year earlier, with the average rate of change in the Consumer Price Index (CPI) standing at 10.1%, from a marginal increase of 0.2% a year earlier. The Harmonised Index of Consumer Prices (HICP) rose sharply, by 9.5%, in the first nine months of this year, from a decline of 0.5% last year.

Turning to the contribution of HICP components to its trend between January and August 2022, where data were available, the strong increase in the harmonised index, by 9.2%, (from a marginal decline of 0.1% a year earlier) was mainly, but not exclusively, due to the upward direct impact of energy goods, as the percentage change in the index with constant tax rates and excluding energy goods stood at 5.1%, and thus domestic demand also had a positive effect on price changes. Indirect taxes had practically no impact on prices in the first eight months of 2022 (-0.1 percentage points of the HICP), up from -0.6 percentage points a year earlier.

**Figure 3.20**

Annual change in the domestic CPI and the HICP in Greece (January- September)



CIP increase of 10.1% on average year on year in the first nine months of 2022, up from 0.2% in the corresponding period of 2021.

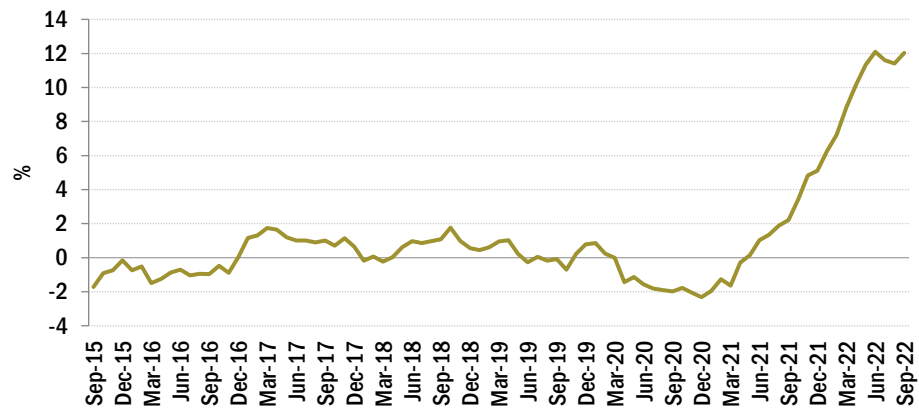
Source: ELSTAT, processing IOBE

**Figure 3.21**

CPI in Greece (annual percentage change per month)



Particularly strong increase in the domestic CPI in September (12%), compared with a milder increase of 2.2% in September 2021



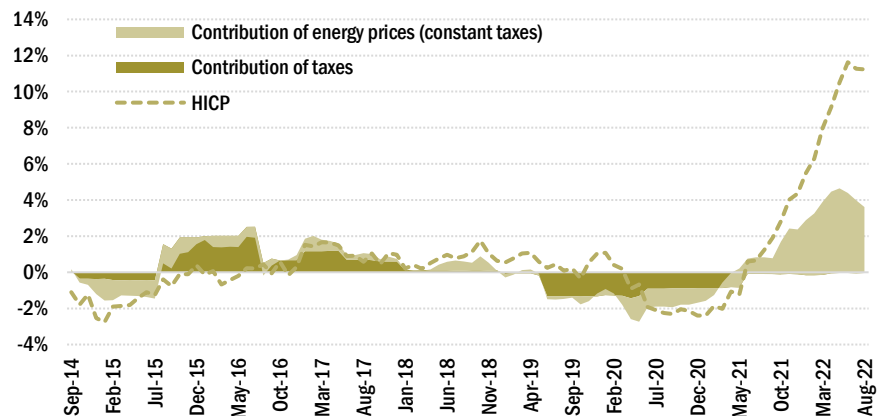
Source: ELSTAT, processing IOBE

Regarding the developments in energy prices and their impact on the HICP, the average international oil prices recorded a strong year-on-year increase in January-August 2022. In particular, the average price of Brent crude oil stood in the first eight months of 2022 at USD 106.9 per barrel, up from USD 67 per barrel in the previous year, rising by 59.6%.<sup>12</sup> The decline in the average exchange rate of the euro vis-à-vis the dollar over the same period, by 10.7%, to 1.07 compared with 1.19, further reinforced the rise in the euro price of oil, with its average value standing at EUR 99.8/barrel, 78.8% higher than in the corresponding period of last year. The rise in oil prices, a key component of energy costs, reflects the average upward impact of energy prices on the domestic rate of change of 4.0 percentage points in January-August 2022, compared with a milder positive impact of 0.5% in the corresponding period of 2021.

Figure 3.22

Annual rate of HICP change in Greece and impact of energy product prices and tax changes

Almost half of the increase in the HICP in January-August 2022 was due to energy prices, while the impact of taxes is negligible.



Source: Eurostat, processing IOBE

The strong rise in the HICP in Greece between January and August this year, by 9.2%, brings the country to the middle of the ranking of the euro area countries, but above their weighted average. The average change in the HICP in the euro area stood at 7.6% over the same period, down from 1.7% a year earlier. Resilient domestic demand and indirect supply effects from the energy crisis appear to have been the main drivers of price increases in the euro area, as the price index with constant taxes and excluding energy goods rose by 4.2% in the first eight months of this year, compared to the same period

<sup>12</sup> Average period prices based on Europe Brent Spot Price. Source: EIA, US Energy Information Administration [https://www.eia.gov/dnav/pet/pet\\_pri\\_spt\\_s1\\_d.htm](https://www.eia.gov/dnav/pet/pet_pri_spt_s1_d.htm)



of 2021, when it increased by 1.0%. Text Box 3.4 shows the evolution of the non-energy inflation rate in the first eight months of 2022 in Greece, compared to euro area member countries.

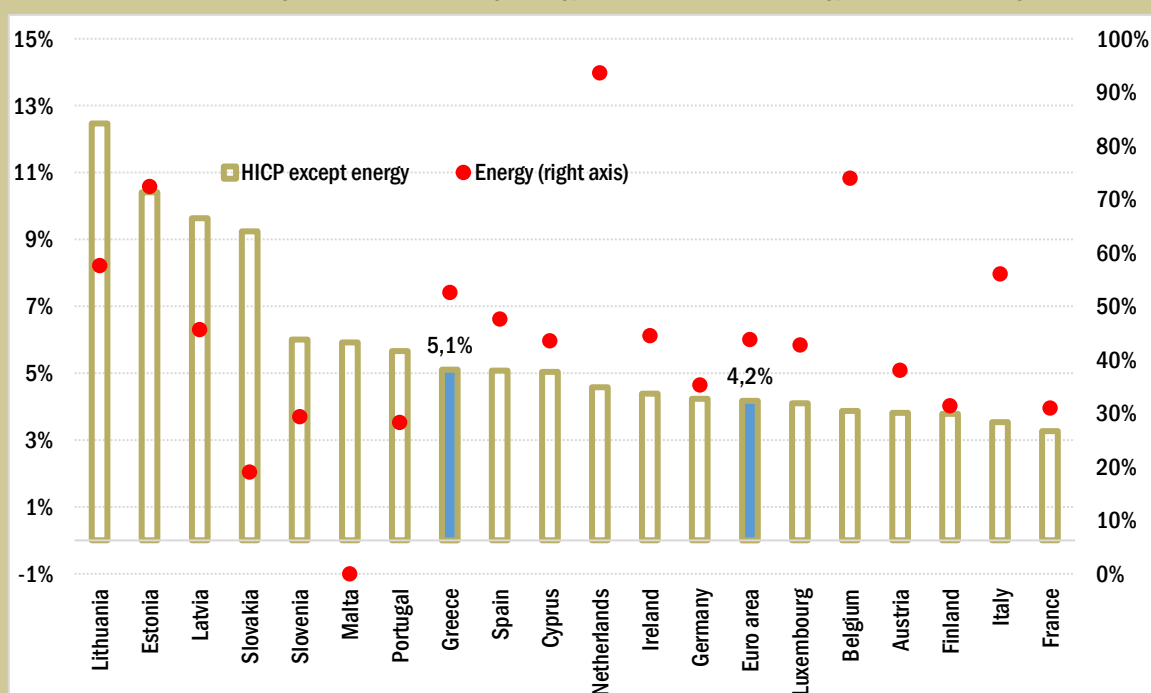
### Box 3.4

#### Inflationary pressures per euro area country in the first 8 months of 2022

In the January-August 2022 period, prices rose from a year earlier, with the average rate of change in the domestic Harmonised Index of Consumer Prices (HICP) excluding taxes and energy reaching 5.1%, which ranks the country above the euro area average (4.2%, Figure 3.23). In detail among the euro area countries, the rate was lower in Spain and Cyprus at 5.1% and 5.0%, respectively, followed by the Netherlands, with 4.6%. The rate of change in the HICP excluding taxes and energy for Ireland and Germany stood at 4.4% and 4.2%, respectively. The change in the HICP excluding taxes and energy is milder than the euro area average for Luxembourg (4.1%) and Belgium (3.9%), followed by Austria and Finland (3.8%, both). Italy and France were ranked last in terms of the increase in the relevant indicator, with 3.5% and 3.3%, respectively.

Figure 3.23

Annual rate of change of HICP excluding energy and taxes and of energy prices excluding taxes



Source: Eurostat, processing IOBE

Therefore, the evidence suggests that price growth is not only coming from higher energy prices but also from factors related to the characteristics of each individual market, such as high demand and



weak competitiveness. The fact that the HICP excluding taxes and energy increased stronger in Greece than the euro area average reflects a deterioration in the competitiveness of Greek goods and services within the monetary union. With stable demand, high core inflation to some extent highlights distortions in the functioning of competition in domestic product and services markets, compared to the euro area.

As regards changes in energy goods domestically, the relevant indicator excluding taxes rose year on year by 52.6% in January - August 2022, while in the euro area, it rose by 43.8% over the same period. This development places Greece sixth in the ranking of euro area countries in terms of rising energy prices, reflecting the relatively high burden of global energy market price increases on the Greek economy, with Italy (56%) and Lithuania (57.6%) placed higher. The highest increase in energy prices over the examined period was recorded in the Netherlands (93.6%), followed by Belgium and Estonia, with 73.9% and 72.4%, respectively. The strong rise in energy commodity prices, due to the energy crisis brought about by the Russian war in Ukraine, is having a strong upward effect on prices in the economy as a whole, both directly and indirectly. In particular, the rate of change of the HICP in the euro area countries is shown in a graph in the Annex to the current report.

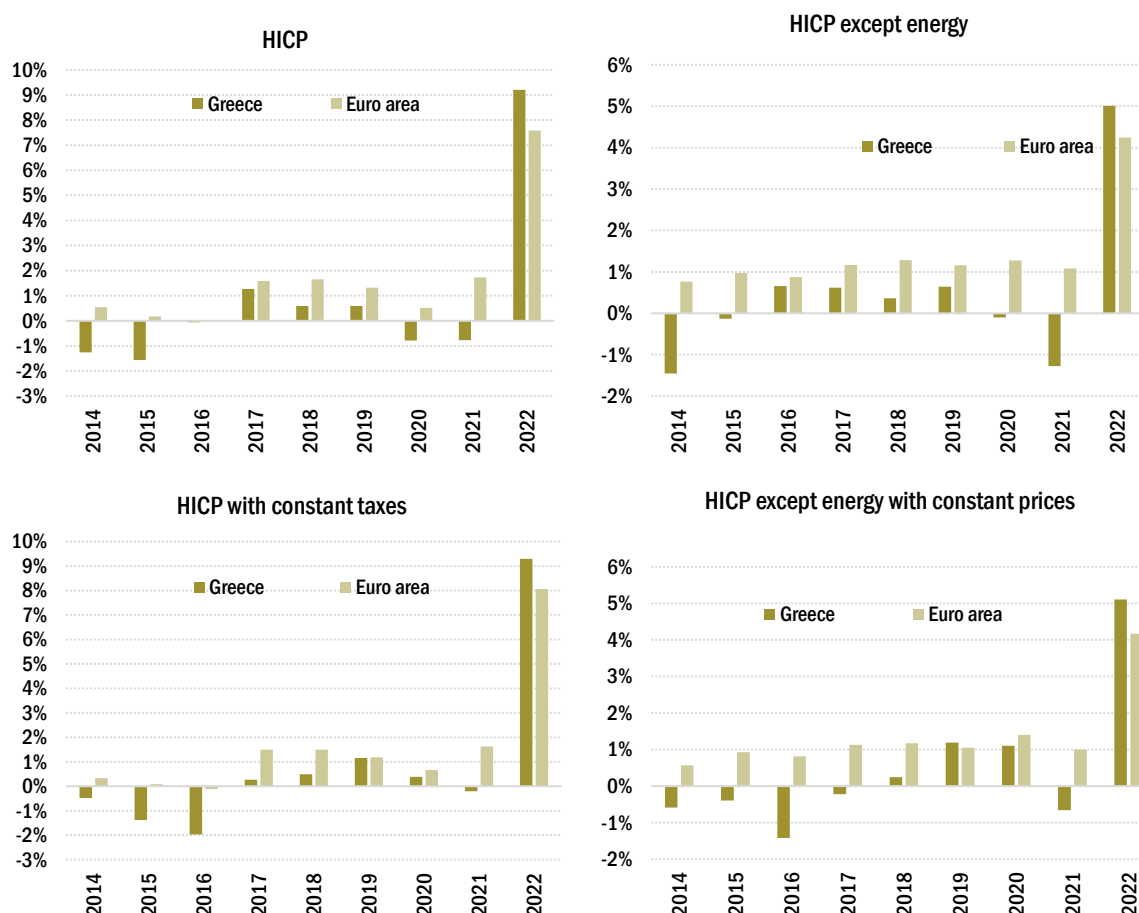
Turning to the trends in the categories of goods and services included in the domestic Consumer Price Index, the strongest increase in January-August 2022 was recorded in Housing and transportation, owing mainly to the strong pick-up in energy prices. The change in housing prices rose to 30.2%, compared with a milder increase of 1.6% a year earlier, while transport prices rose by 16.8%, up from 1.9% in the same period last year. Milder change was recorded in food, with an increase of 10.3% from +0.3% a year earlier, followed by durable goods with 5.5%, from a decline of 1.3% in the previous year. Price increases were also recorded in clothing and hotels, by 4.6% and 4.3%, respectively, against a decline of 3.8% and 0.6% a year earlier. The price increase for other goods was weak over the period under review (1.2%), from a decline of 1.8% a year earlier, while prices increased less in recreation (1.0%) and education (0.9%), against a weakening of 0.7% and stability, respectively, over the same period of 2021. In alcoholic beverages and health care, prices were slightly higher in January-August 2022 compared with a year earlier (+0.6% and +0.5%, respectively), against a decline (-0.2% and -1.0%) one year earlier. By contrast, prices fell by 2.6% in communications, reflecting, to some extent, a decline in the mobile telephone subscription levy, after a decline of 1.9% a year earlier.

Regarding the price trends on the production side in the first eight months of 2022, the Producer Price Index (PPI), for the domestic and external markets as a whole, increased strongly compared to the same period of 2021 (+39.8%). In detail, PPI excluding energy increased by 8.7% in January-August 2022, compared to a softer boost one year earlier (2.4%). Turning to trends in industrial prices, refined petroleum products and electricity-gas rose by 94.3% and 64.3%, compared with hikes of 35.8% and 3.4% respectively a year earlier. A strong rise in producer prices was also recorded in crude oil-gas, by 35.4%, after an increase of 53.8% in the first eight months of 2021. Next came basic metals, with a lower yet still exceptionally high level of positive price change, with 22.8%, compared with a milder increase of 8.7% a year earlier, and wood products, at 17.7%, after a milder increase of 3.0% a year earlier. A significant increase in producer prices was recorded in metal products (14.3%), compared with a weaker rise in the previous year (4.8%). Producer prices increased in January - August 2022 in plastic products as well, by 14.3%, compared with an increase of 2.8% a year earlier. At a lower level was the price increase in paper products and metals, by 12% both, after increases of 5.2% and 0.2%, respectively, a year earlier. By contrast, the price trend in coal-lignite producer prices and pharmaceutical products was negative, with a decline by 18.3% and 0.7%, respectively, following an increase of 42.7% and a decrease of 1.1%, respectively, a year earlier.



Figure 3.24

Annual HICP change in Greece and the Euro area (January- August)



Source: Eurostat, processing IOBE

Particularly strong price increase domestically in the first eight months of 2022, mainly driven by the boosting impact of energy goods (4.0 percentage points)

Regarding the developments in the Import Price Index (IPI) for the period for which data are available, a strong annual increase of 33.0 % was recorded in January - July 2022, compared with 16.2% a year earlier. The same indicator rose at a slightly lower rate in the euro area than in Greece, by +28.7%, compared to an increase of 7.0% in the corresponding period of 2021. The strong increase in import prices domestically puts Greece in second place after Estonia (35.1%) in terms of their increase among ten euro area countries for which data were available at that time. The Netherlands followed with a slightly lower rate of 32.9%. It should be noted that all euro area countries for which data are available recorded a strong increase in import prices in the first seven months of 2022 compared to a year ago, a trend which mostly reflects the positive impact of the strong rise in energy prices.

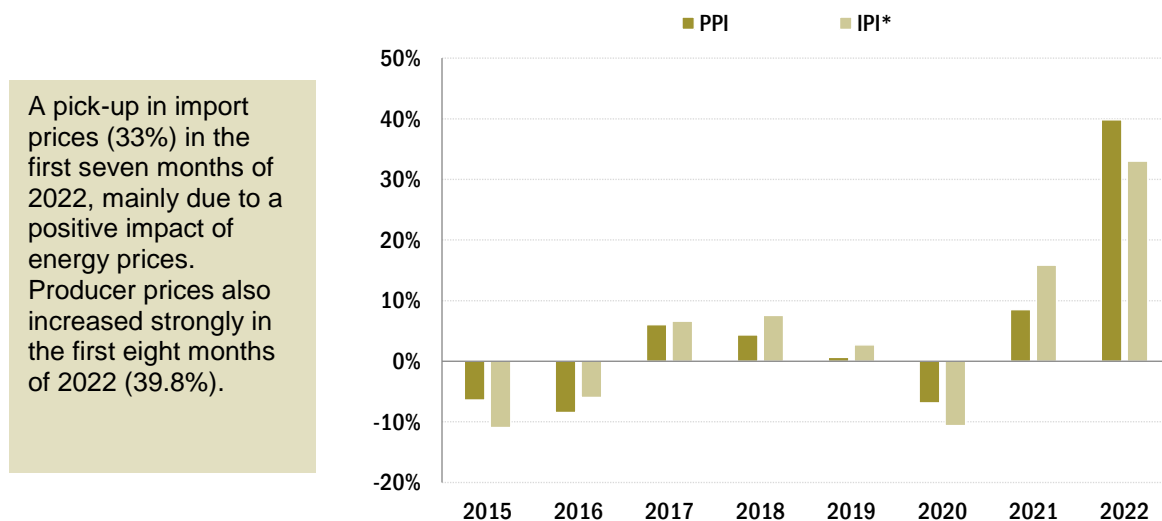
In individual import categories, the highest increase in the first seven months of 2022 was recorded in electricity supply prices, by 98.8%, owing to the positive impact of energy prices, compared with a 14.4% boost in the same period of 2021. Slightly less intense was the increase in refined petroleum products, at 87.7%, and crude oil, at 68.4%, compared with a milder but still strong increase in the first seven months of 2021 (41.9% and 57.4% respectively). Prices also followed strong positive trends in basic metals, by 28.7%, and minerals, by 15.7%, from a milder increase of 13.2% and 5.2% a year earlier. By



contrast, prices fell in January - July 2022 in drinks manufacturing, by 1.2%, and leather goods by 1.8%, after an increase of 1.1% and price stability respectively a year earlier.

**Figure 3.25**

Annual change of PPI and IPI in Greece (January - August)



Source: ELSTAT, processing IOBE

\* The import prices refer to the period January – July.

### Medium-term outlook

Looking at trends in the main components of the domestic Consumer Price Index between January and August this year, the particularly strong increase was mainly due to the positive impact of energy prices. The strong rise in energy prices stems first from Russia's war in Ukraine, countries that play an important role in the production of energy products (oil, gas) and raw materials, and second from the widespread sanctions gradually imposed by the United States, the European Union, and the United Kingdom on Russia.

In light of the above developments, in the third quarter of 2022, the price of Brent oil soared by more than \$10.7 per barrel, an increase of 37% compared with a year earlier. The EUR/USD exchange rate averaged 1.0 in the third quarter of 2022, 14.6% lower than in the same period of the previous year. Subsequently, the average oil price in euro reached EUR 100/barrel in July-September, a particularly large increase compared with a year earlier, by 60.4%.

#### *Demand effects*

With regard to expected trends in consumer demand and its effects on prices, the new design of the unified property tax (ENFIA) is expected to result in small boost of income, as it now includes more brackets and coefficients in order to avoid heavy burdens on households.<sup>13</sup> Disposable income will also be propped up by income support measures for vulnerable social groups (low-pension beneficiaries, disabled, minimum income recipients, etc.) and the announced new minimum wage increase expected from the new year.

Turning to health developments, containment measures in response to the pandemic have been lifted in Greece since the beginning of May, supporting consumer demand and subsequently contributing to higher prices.

<sup>13</sup> Law 4916/2022



In addition, the new domestic energy cost support measures announced in September, following previous interventions, sustain a significant part of the demand for energy products, preventing a significant fall in their prices.

Consumer demand is therefore expected to remain at high levels for the remainder of the year, while it is expected to soften in 2023, sustaining to some extent high prices.

#### *Tax effects*

As regards the expected effects of indirect tax interventions, the reduction in the VAT on fertilisers and animal feed from 13% to 6% and the refund of the special levy on farmers' motor oil are expected to dampen the strong rise in food prices for the remainder of 2022.

#### *Energy effects*

Regarding recent developments in energy goods, the international price of Brent crude oil stood on average in September at \$89.7 per barrel, up by 20.5% compared with a year earlier, driven by uncertainty about the evolution of the war and new sanctions on Russia's energy exports. The EUR/USD exchange rate stood at 0.99 in September 2022, 15.9% lower than in the corresponding month of 2021. Subsequently, the average oil price in euro stood at EUR 90.66/barrel, an increase of 43.2% compared with a year earlier.

To curb domestic energy price increases, a new package of measures was announced in September, following previous packages. It should be noted that the measures to address high energy costs mitigate to some extent the effects of energy prices on inflation, as the energy prices accounted for in the CPI incorporate subsidies.

Regarding oil supply, at its last meeting in October, OPEC+ (including Russia) decided to reduce daily oil production by up to 2 million barrels in response to the decline in oil prices and uncertainty about a global recession. This is the first decision to cut production for almost a year, following the drastic cuts during the Covid-19 pandemic. That said, the US is putting pressure on OPEC+ countries not to cut daily oil production. To sum up, the main drivers of the increase in supply for 2022 are expected to be the United States, Canada, China, Brazil, while production restrictions, in addition to OPEC+, are expected from Libya due to its political instability and internal disruptions.

Regarding the price of natural gas, the European Commission is considering imposing a cap on gas import prices of all origins in response to the energy crisis. It should be noted that the European Commission recognises that the TTF is no longer a representative price index for imported gas and should be replaced by a new European index that better captures gas supply and demand levels.

Finally, EU Member States have reached a preliminary agreement on a new package of sanctions including a price cap on Russian oil, following the announcement of an annexation of Ukrainian territories.

#### *World demand*

Turning to the factors affecting oil demand, the prospects for a recovery in global demand this year and next appear to be deteriorating in line with macroeconomic forecasts by international organisations. In particular, global GDP growth is expected to slow in 2022, to around 3%, below the pace projected last June (3.8%).<sup>14</sup> Growth is expected to be weaker than initially projected in almost all economies, as they are affected by the surge in commodity and energy prices. These developments add to inflationary pressures and dampen real incomes and spending, further slowing down the recovery. The global recovery, albeit milder than initially expected, and the fact that electricity providers, especially in Europe, may switch to oil-based generation sources are pushing up oil demand. Rising demand, together with production restrictions and sanctions in Russia, are restraining the decline in oil prices in the current period.

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<sup>14</sup> OECD Economic Outlook, Interim Report September 2022: Paying the Price of War



Against this background of developments, it is estimated that the oil price in 2022 will average USD 104.2/barrel from USD 70.8/bbl in 2021 (+47.1%).<sup>15</sup> The EUR/USD exchange rate this year is expected to average 1.05, down by 11.3% from 2021.<sup>16</sup> Thereafter, the average oil price in euro will be EUR 99.2/barrel in 2022, with an increase of 65.9% compared to last year. For 2023, international oil prices are projected to decline by about 7%,<sup>17</sup> mainly due to the slowdown in global growth.

In view of the above trends and developments in the main factors affecting consumer prices, the overall Consumer Price Index is expected to increase strongly in 2022, at a rate in the region of 9.7%, mainly because of the strong increase in energy prices and consumer demand. For 2023, assuming a decline in Brent oil prices in the region of around 7%, and consumer demand rising moderately in the region of 1.0-1.5%, the Consumer Price Index is projected to strengthen by about 4.2%.

The monthly business and consumer surveys of IOBE provide results that serve as leading indicators for the price developments on the supply side for the coming period.

The quarter-on-quarter trends in the price change expectations are negative in the third quarter of 2022, with the balance declining modestly in retail trade and services and more markedly in industry and private construction. Year on year, the expectations for price developments recorded a strong positive change in all sectors except industry, where price expectations remained unchanged. In more detail:

In Industry, the price expectations were markedly lower in the third quarter of the year than in the previous quarter. In particular, the index declined by 22 points in the quarter under review, to stand at +27 points, while remaining at the same level as in the same quarter of 2021. Of the firms in the sector, 7% were expecting prices to fall in the short term, while 34% (down from 54%) were expecting an increase, with the remaining 59% expecting price stability.

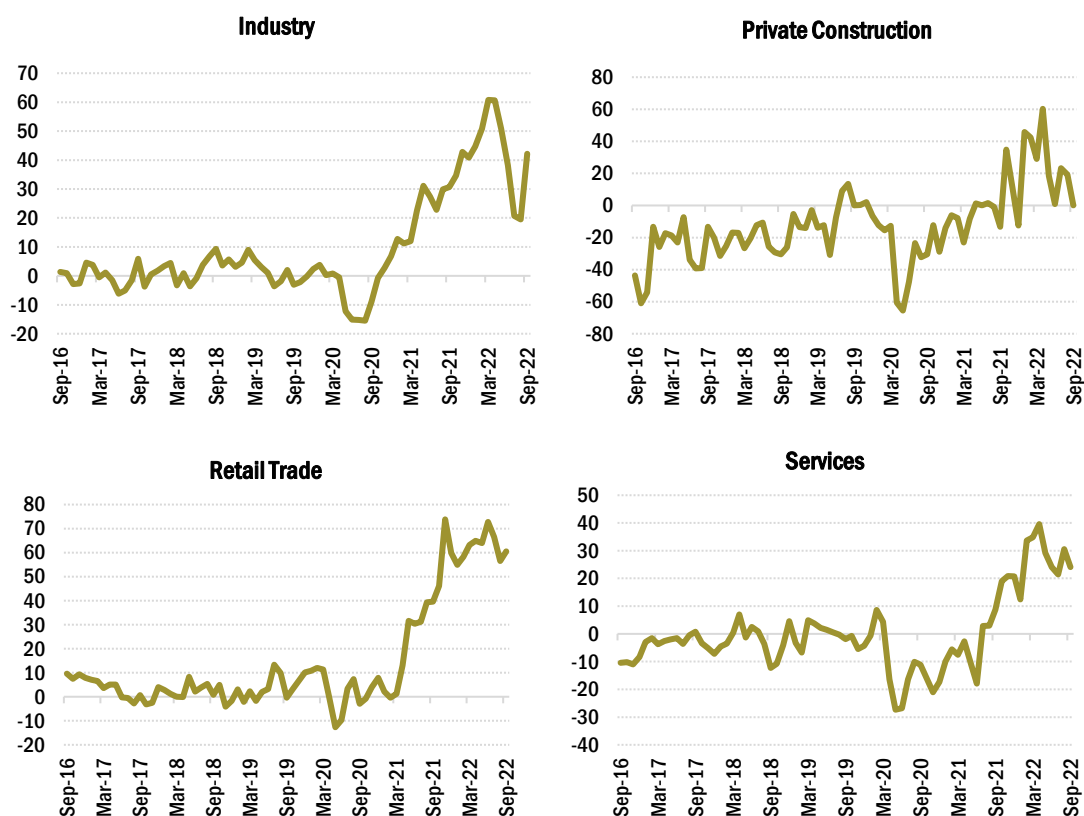
### Figure 3.26

Price expectations over the coming quarter (difference between positive and negative answers)

<sup>15</sup> Energy International Agency, Short-Term Energy Outlook, September 2022

<sup>16</sup> Macroeconomic projections, ECB, September 2022

<sup>17</sup> Energy International Agency, Short-Term Energy Outlook, September 2022



Source: IOBE

The quarter-on-quarter trends in the price change expectations are negative in the third quarter of 2022, with the balance declining modestly in retail trade and services and weakening more markedly in industry and private construction.

In retail trade, the balance of +67 points in the price expectations of enterprises in the sector in the previous quarter weakened by 6 points, while at the same time, it was 24 points higher than in the corresponding period of 2021. Of the firms in the sector, only 3% were expecting prices to fall in the short term, while the rate of those expecting them to rise fell to 64%, with the remaining 34% (from 29%) expecting price stability. Across retail trade sub-sectors, the quarter-on-quarter trends in price expectations in the third quarter of 2022 were negative in all individual sectors under review, except for food-drinks, where expectations strengthened sharply.

The average price change expectations indicator for services declined slightly in the three-month period under review, compared with the previous quarter, standing at +25 (from +31) points, while at the same time, it stood at a markedly higher level year on year (+20 pp in Q3 2021). In the current quarter, once more 4% of the firms in the sector were expecting prices to fall and 30% (from 35%) were anticipating prices to increase. The indicator declined markedly in most individual sub-sectors under review, except for financial intermediaries and various business activities, where price expectations strengthened considerably.

Finally, in the private construction sector, the strongly positive balance of +26 points in the previous quarter declined markedly to +14 points, having also risen sharply compared with the corresponding level in 2021 (+18 percentage points). In addition, 4% (from 8%) of the firms in the sector were anticipating a decline in prices in the sector, while the proportion of those expecting an increase stood at 18% (from 34%), with 78% (from 58%) anticipating price stability.





## 4 THE DEMOGRAPHIC ISSUE: CHALLENGES AND POLICY PROPOSALS<sup>18</sup>

- This chapter records the demographic trends and projections for Greece in the medium and long term.
- It outlines the various implications and challenges of ageing in key sectors of the Greek economy.
- It makes policy proposals with a view to adapting to new realities, addressing the challenges that are emerging, and ultimately addressing the problem.
- It highlights the urgency and severity of the demographic issue for Greece.

### Introduction

The demographic issue refers to the changing of the age composition of a country's population because of its ageing. The age composition of a country's population depends on the natural balance of deaths and births, as well as on the difference between migration outflows and inflows. Low birth rates and increasing average life expectancy have a significant impact on the evolution of the natural balance.

The decline in fertility rates in economically developed countries is mainly due to socio-economic factors. Social and economic changes that have taken place over the last 50 years have had an impact on individual family decisions, leading to a decline in the proportion of women who become mothers, especially in young ages, and the shift of the average age of parenting for men and women alike. Meanwhile, the increase in life expectancy mainly reflects advances in medical science and improved quality of life, mainly due to scientific and technological developments.

The challenges that societies face as their population ages concern several areas of economic and social life. The main challenge in economic terms is that the share of the working-age population is declining while the proportion of the economically inactive population increases and the dependency of the latter on the former is growing. As a result of the shrinking of younger age groups (due to falling birth rates), fiscal revenues from taxes and levies are expected to decrease. At the same time, social expenditure (such as healthcare, long-term care, and pension benefits) will grow as the number of older people relative to the rest of the population increases and the demand for these services expands.

The social challenges arising from the ageing of a country's population are also very significant. The sweeping changes in the structure of families and households from declining birth rates and fertility mean that in the future there will be many more elderly people who will live completely on their own, requiring substantial assistance and support. Also, the prevalence of chronic diseases has a direct

<sup>18</sup> The chapter is based on a recent IOBE study supported by Eurobank. The full text (in Greek) as well as a presentation of the study can be found at: [http://iobe.gr/research\\_dtl.asp?RID=267](http://iobe.gr/research_dtl.asp?RID=267)



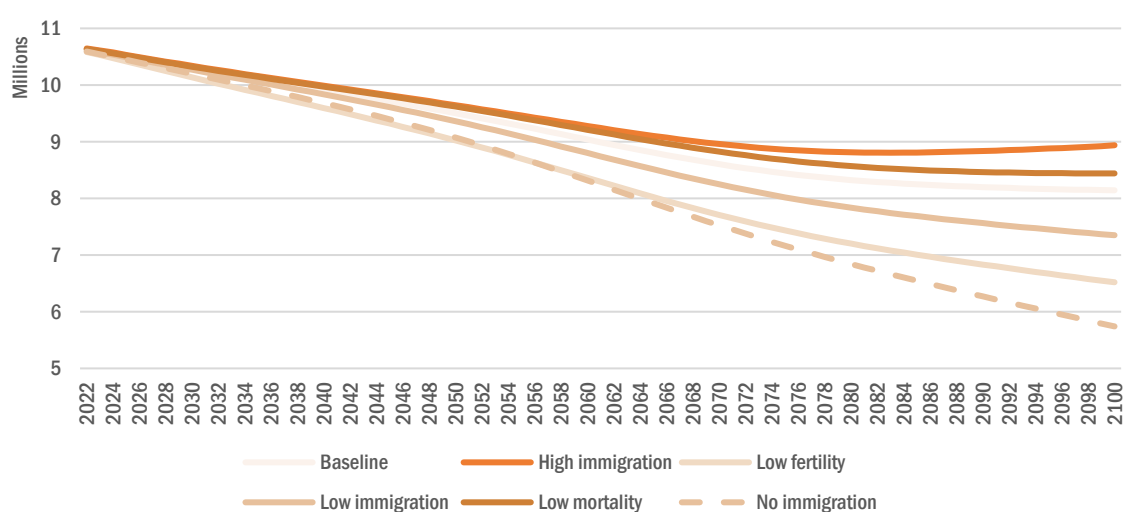
impact on quality of life not only for older people but also for their friends and family and, in general, their carers. Society should be prepared on multiple levels (such as mentality and infrastructure) to meet the emerging needs and challenges of an ageing population.

## Demographic changes and projections

The country's population fell by 441,000 people (-4.0%) between 2011 and 2021. This development was driven by a significant increase in migration outflows during the economic crisis, yet births in Greece have been declining since 1980. In particular, the fertility rate has fallen to less than 1.5 (a level not sufficient for population replacement) since the late 1980s, from 2.1-2.5 points in the 1960s and 1970s.

Figure 4.1

Eurostat population projection scenarios, 2022 – 2100



Source: Eurostat – EUROPOP 2019 Data

The decline and ageing of the country's population is projected to continue over the coming decades. In the demographic projections baseline, Greece's population is projected to decline to 8.1 million by 2100 – a decline of 2.5 million people or 24% from 2021.

The projected demographic developments in Greece are much faster than in the euro area as a whole, where the population is expected to decline by just 4.2% by 2100. Based on the magnitude of the expected population decline by 2100, Greece ranks third worst in the euro area, after Latvia and Lithuania.

By 2050, the population projections do not differ significantly between the scenarios of the analysis (Figure 4.1), as changes in the main parameters of the demographic balance reflect on population aggregates with a significant lag over decades. By contrast, after 2050 the population varies very widely across the projection scenarios. In the most optimistic scenario (high migration), the population would fall between 2022 and 2100 by 16% to 8.9 million, while the population is expected to contract by 45% in case of zero migration flows (to 5.7 million in 2100). The different projected levels of fertility and mortality also result in different population trends but to a lesser extent, giving direction to all segments of population policymaking, with a particular focus on migration policies.

A change in the structure of the population is also an important development from the perspective of social policy effects. Population trends vary across regions and the trends of excessive concentration in the country's large urban centres are expected to persist. In terms of age structure, the old-age dependency ratio<sup>19</sup> is projected to exceed 0.60 points after 2050, up from 0.35 points in 2020 and 0.29

<sup>19</sup> Defined here as the ratio of the number of people aged 65 and over and the number of people aged 15-64



points in 2010. The number of single-person households made up of older people without a family support network is also projected to increase gradually.

The analysis of demographic trends and projections highlights the need to implement demographic policies to enhance fertility and improve the migration balance, with a view to mitigating population ageing. However, as the positive effects of these measures are not expected to be quickly reflected in demographic indicators, the expected demographic changes will inevitably pose very serious challenges for several social policy areas. Therefore, immediate policy action is needed, both to mitigate demographic change in the long term and to adapt key policy areas in the medium term.

### Pension system

In the pension system, the expected further deterioration in the demographic old-age dependency ratio of the Greek population poses significant challenges for pension sustainability and adequacy. On the one hand, public pension expenditure will continue to absorb significant financial resources, at a double-digit percentage of GDP up to 2070. On the other, the gross replacement rate for old-age pensions is expected to decrease further, down to around 55% in 2060 (figure 4.2).<sup>20</sup>

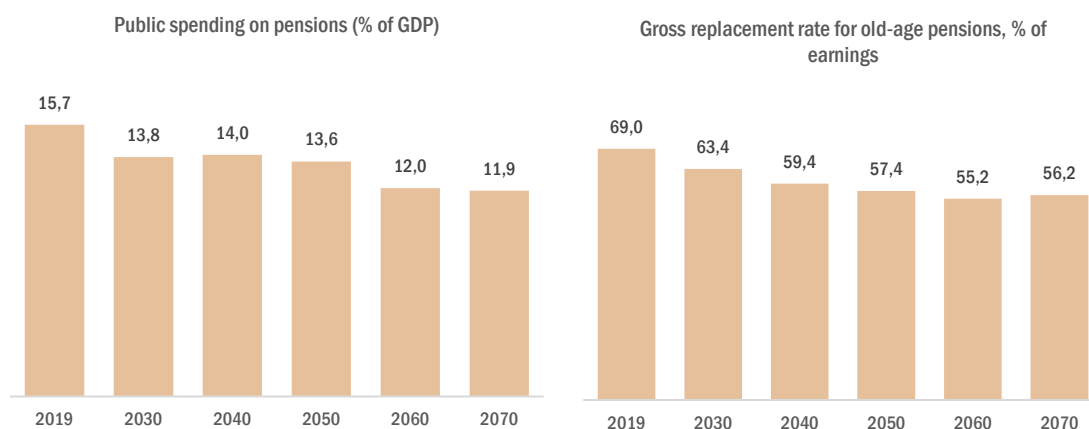
With a view to better adapting the pension system to demographic developments, interventions are needed to strengthen the funded pillar of the system, improve its pay-as-you-go parameters, lengthen statutory working lives, enhance transnational portability, and institutionally strengthen recent pension reforms.

### Labour market and demographic developments

In the labour market, the expected demographic developments lead to a smaller labour force, with higher average age and lower productivity. While an increase in age is usually accompanied by increased work experience, which can have a positive impact on productivity, it may also have a negative impact on productivity, as people with shrinking working horizon may not try to improve their skills, have a lower propensity to innovate, and are more often absent from work due to health problems. In the Greek labour market, the share of workers is higher in occupations where productivity decreases rather than increases with age (Figure 4.3).

**Figure 4.2**

Expected evolution of sustainability and adequacy of pensions, 2019 - 2070



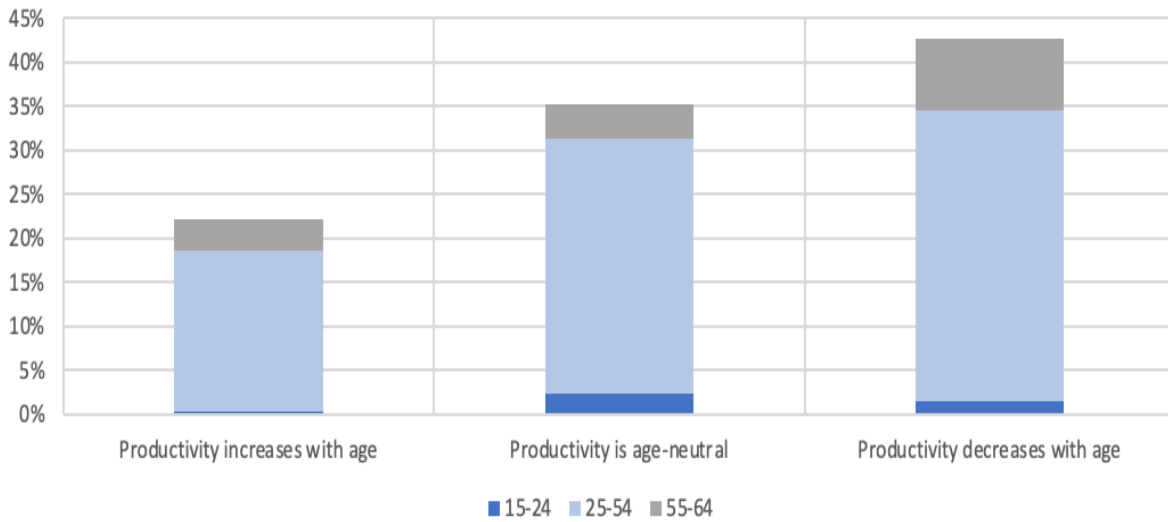
Source: European Commission, historic data and baseline scenario projections, Ageing Working Group Report 2021.

<sup>20</sup> European Commission. (2021). The 2021 Ageing Report, Economic and Budgetary Projections for the EU Member States (2019-2070).

Chronic weaknesses in the domestic labour market, such as the relatively low employment rate, especially for women in all age groups and men under 29 and over 60, make room for partially countering the negative effects of the demographic developments. However, appropriate policies are needed to increase labour supply and productivity.

**Figure 4.3**

Breakdown of employees by occupational group and age



Source: ELSTAT, Labour Force Survey, Q2 2019 and research team estimates.

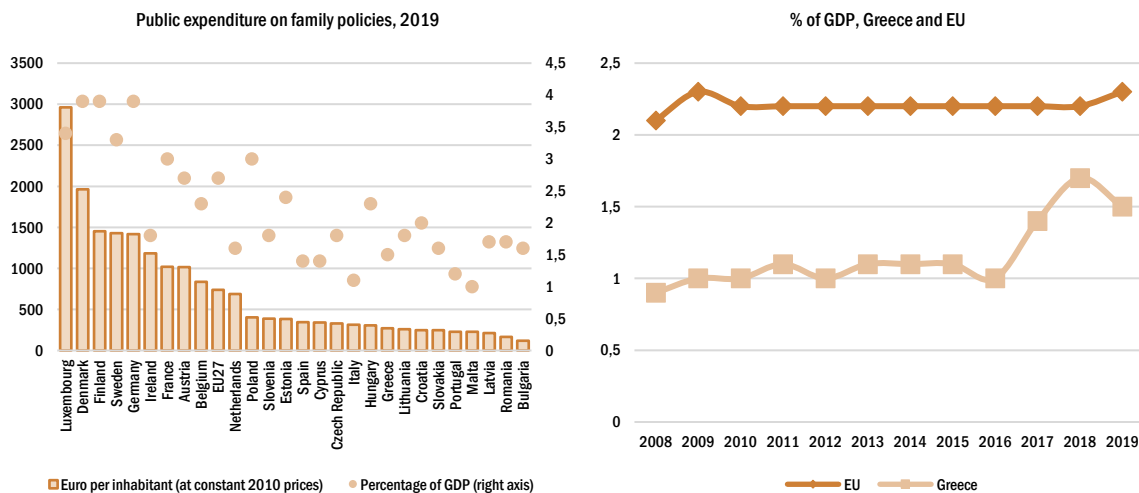


### Family policy and gender equality

Policies on family and gender equality have a very significant impact on women’s labour market participation. Spending on family policies in Greece is well below the EU average, both as a percentage of GDP and in per capita terms (Figure 4.4).

Figure 4.4.

#### Public spending on family policies



Source: Eurostat, ESSPROS.

While several one-off family allowances are at a relatively high level, Greece is below the EU average for periodic family and child cash benefits, as well as in per capita expenditure on benefits in kind. On the issue of gender equality Greece is also significantly lagging – it ranks last in the EU based on EIGE’s 2021 Gender Equality Index. The context of parental leave is broadly comparable with European standards, but there are significant differences between the public and private sectors. Therefore, there is considerable scope for improving female labour market participation in Greece by adopting appropriate policy measures.

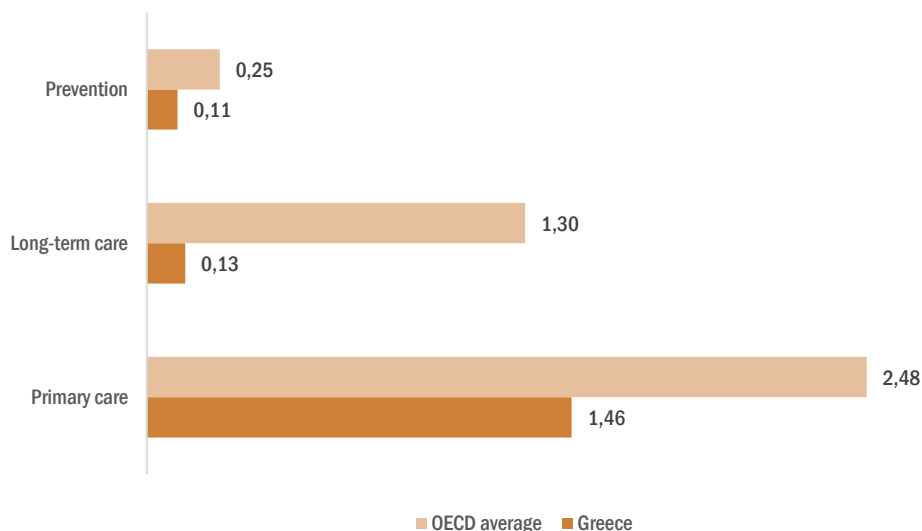
### Health and health care

Health and healthcare are two sectors where population ageing has a direct and significant impact. Population ageing is partly due to rising life expectancy. This, although desirable, is accompanied by a variety of difficulties and challenges for people’s quality of life, which also increase as the elderly’s physical and intellectual health levels deteriorate. Moreover, population ageing is also correlated with significant epidemiological changes, notably with regard to prevailing diseases and main causes of death. The healthcare sector must respond to these major challenges that increase the demand for health and long-term care services, as the needs of older people increase quantitatively and qualitatively, traditional family structures are changing radically, and the available funding resources for the health system are shrinking as the working age population falls.

These developments pose serious challenges for the domestic health system, which suffers from chronic weaknesses. In Greece, the level of private direct expenditure on health (out-of-pocket payments), as well as pharmaceutical and hospital spending, is particularly high, while the payments for long-term care, prevention, and primary health care are very low compared to other OECD countries (Figure 4.5). Demographic developments therefore further exacerbate the need to adopt policies to improve the adequacy and preparedness of the health system for demographic and epidemiological changes, to shield it from future funding pressures, and to promote a higher standard of health and living for all.

Figure 4.5.

Total health expenditure categories as % of GDP, 2019



Source: OECD (System of Health Accounts).

## Education

The demographic developments over the past decade are now also reflected in the aggregate figures of the domestic education system. Already, the number of first-class primary school students has fallen, by 16.5% in 2014-2019. By the end of the demographic projections in 2100, the number of students in the first two levels of education is expected to fall by 32.1% (413,000 fewer students). Without policy interventions, this development may further exacerbate the inefficiency of the use of educational resources in Greece. Greece has the lowest number of pupils per teacher in OECD Member States in most education levels, while the indicator is below the OECD average even in the most densely populated administrative regions of the country, without this reflecting in good learning outcomes in international measurements such as the OECD PISA programme. However, the expected significant decline in the student population creates opportunities to restructure educational expenditure in order to improve the quality of education work, especially for children coming from vulnerable social groups.

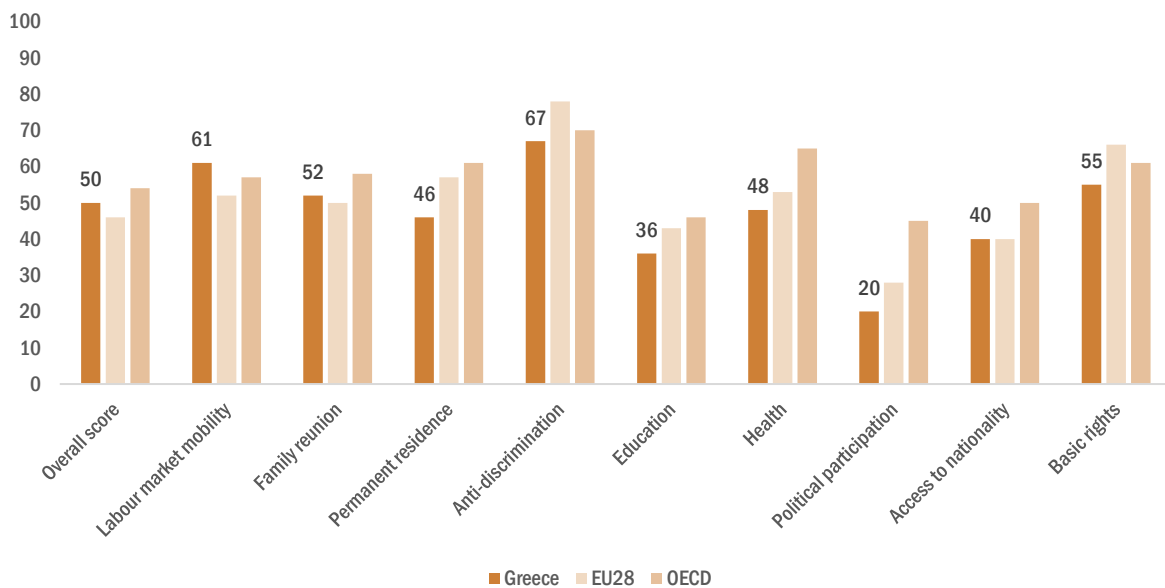
## Migrant policy

In Greece, the integration of migrants into the economic and social life of the country remains a major challenge. Greece lags behind the EU and OECD averages in the Migrant Integration Policy Index (MIPEX, 2020) in several areas, such as education, political participation, permanent residence, access to nationality, basic rights, and discrimination (Figure 4.6).

The acceptance of migrants by Greeks in public opinion surveys is also relatively low. In the effort to attract highly qualified workers, students, and researchers from third countries, Greece performs very poorly compared to most EU Member States, based on the number of new permits issued before the start of the pandemic in 2019. Greek migration outflows abroad remain relatively high, while the first results of recently introduced repatriation measures are encouraging. A coherent immigration policy framework is needed to better integrate immigrants into Greece's economic and social life, attract more highly qualified non-nationals and ensure the right conditions to limit migration outflows and boost the repatriation of Greeks residing abroad.

**Figure 4.6**

Immigrant integration indicators (country scores of up to 100) by policy area, 2019



Source: Migrant Integration Policy Index (MIPEX).

## Economic impact

The demographic issue has a major impact on the country's economic development. The decline in the working-age population has a negative impact on labour supply and growth potential, the increasing dependency ratio poses challenges to fiscal sustainability, and population ageing weighs on labour productivity. Inaction to demographic trends, in the absence of policies that give priority both to better adjustment of the economy and to alleviating the demographic problem, is expected to bear very high long-term costs in terms of GDP, employment, budgetary resources and wellbeing.

In a baseline scenario, where the demographic trends in Greece converge only slightly with the rest of Europe, but population ageing and declining trend persist, macroeconomic simulations estimate real GDP in 2100 to be EUR 58 billion (or 31%) lower than in 2019, employment down by 2.1 million people (or 48%), fiscal revenues down by EUR 14 billion (or 19%) and GDP per capita down by about EUR 1.740 (or 10%), in constant 2019 prices. Fertility and migration flows are highlighted as key parameters for the normalisation of the demographic trends, as it is estimated that policy measures to boost fertility and interventions in immigration policy can significantly limit the GDP losses. In particular, a comparison between the economic effects in the sensitivity scenarios shows that higher fertility can limit losses in GDP by 10 percentage points (p.p.) by 2100 compared to a low fertility scenario, while the corresponding positive impact of higher emigration is estimated at 7 p.p. of GDP at the end of the period.

## Policy recommendations

The demographics raise a multidimensional problem requiring the coordination of services from many social sectors and institution-building so that the policies adopted are not overturned through the electoral cycle. For the same reason, the involvement of the wider society also plays a very important role in the formulation and implementation of relevant policies.

The establishment of an inter-party parliamentary committee for demographics in 2017 was an important first step towards recognising the importance of the demographic problem and identifying policies to resolve it with broad political consensus. However, the implementation of these policies requires greater continuity and additional institutions, with a view to facilitating coordination, targeting, implementation, evaluation, and further improvement of relevant policies.

To this end, a National Coordinator for Mitigation and Adaptation to Demographic Developments could be established. The purpose of this role would be to coordinate the preparation of a National Action Plan for the implementation of policies to mitigate and adapt to demographic developments. The National

Action Plan will record existing and planned policy measures, with relevant quantitative and qualitative targets, milestones, funding sources, and timelines. For effective and regular consultation and communication of the National Action Plan with wider society, it is proposed to set up a National Committee on Demography, involving representatives of public bodies, local governments, social partners, civil society organisations, and academics. With a view to facilitating the collection of administrative data and information for the planning and implementation of relevant measures by the competent ministries, an Interministerial Committee on Demography could be set up. Finally, an independent Monitoring Centre for Demographic Policy Implementation could be established to analyse and evaluate the implementation of the National Action Plan.

Through the functioning of the above institutions, policy interventions can have the necessary coherence and consistency over time. Some interventions which can be included in a national action plan are summarised in Table 4.1. The functioning of the above institutions will set out the detailed parameters of the proposed measures, their prioritisation, the objectives to be achieved, their budgetary cost, the expected benefit, and the timing of their implementation.

**Table 4.1**  
Summary of proposed policy interventions

Intervention area	Indicative measures
<b>Family policies and gender equality</b>	Harmonisation of rules and rights for parental leave between the private and public sectors and the self-employed
	Introduction of a non-transferable paternal leave with high income-replacement rate
	Relieve employers of the cost of covering part of the remuneration paid during the period of use of parental leave
	Redesign and strengthen preschool education and care services
	Training initiatives and incentives in the private sector to facilitate the balance between work and family life and support of businesses for young parents
	Redesign the social benefit system
	Implementation of affirmative action and quota policies in universities and public institutions
	Targeted actions in the education and health sectors
<b>Integration of immigrants into the social and economic life of the country</b>	Accelerate legalisation procedures
	Simplify permanent residence permit procedures
	Speed up family reunification procedures
	Shorten and simplify the process of naturalisation of new migrants
	Improve access to public services (such as health and education), especially for migrant children
	Other actions to protect against discrimination in work, education, public services, and public space
<b>Attract highly skilled non-nationals</b>	Upgrade the blue card scheme in Greece
	Examine the possibilities of introducing a scoring programme for applicants and abolishing the job offer requirement
	Reduce further the bureaucratic burden and create the right conditions to facilitate both the establishment and sustainable operation of businesses by foreign entrepreneurs
	Offer more tertiary education curricula (at all levels: undergraduate, Master, PhD) in English
	Recognise qualifications by private institutions combined with an assessment of the quality of their studies provided by an independent Greek educational authority
	Simplify the bureaucratic procedures for foreign students
	Further simplify the procedures for recognition of diplomas and reduce the processing time for the application
<b>Curb migration outflows and boost the repatriation of Greeks residing abroad</b>	Strengthen actions to improve job prospects in Greece
	Examine the effectiveness and the possible reinforcement of financial incentives to repatriate Greeks
	Inform Greeks living abroad of specialisations with a shortage of skilled staff in Greece
<b>Employment and productivity growth</b>	Subsidise labour cost of employed persons on leave
	Incentives for research and innovation in businesses and incentives for in-house training programmes
	Incentives to invest in the modernisation of businesses located outside major urban centres, especially if these businesses are export-oriented
	Financial incentives for older people in training and life-long learning
<b>Boost the labour supply of women, young people, and older people</b>	Incentives for enterprise groups to set up, operate and manage high-quality childcare units
	Subsidise child-raising costs for working parents
	Improve the quality of childcare by public and private providers (Kipseli programme)
	Expand the use of teleworking, leading to a reduction in the cost of travelling to and from work
	Introduce further incentives for those close to the minimum retirement age to stay at work
<b>Strengthen the fully funded pillar of the pension system</b>	Help change the social standards for the role of women
	Implement the recent reform of the new supplementary fully funded social insurance scheme based on political consensus and sound international practices
	Strengthen occupational pensions insurance
	Re-establish and strengthen tax incentives for households in relation to private pension products
	Introduce targeted fiscal incentives to direct and invest part of pension savings domestically in line and within the European regulatory framework
	Promote financial literacy
<b>Improve the public pay-as-you-go social security pillar</b>	Reduce the cap on insured income that is subjected to compulsory contributions
	Reduce the compulsory contribution rate for the portion of gross earnings of each worker up to the level of the minimum wage
	Monitor and timely revise retirement ages in conjunction with minimum years of insurance
	Possibility of receiving a national pension with less than 15 years of insurance, reduced proportionally
<b>Other interventions in the pension system</b>	Establish a national, cross-party expert committee to monitor trends in relation to the pension system
	Promote transnational agreements for the recognition of pension rights
	Harmonise the funding structure of pension schemes within the EU
	Reduce the bureaucratic burden of implementing portability through digital data sharing between social security authorities
	Facilitate the deployment of multi-employer professional funds with an international presence
	Provide a high degree of flexibility for parallel employment opportunities for pensioners
	Promote active employment policies to boost the employment of older workers

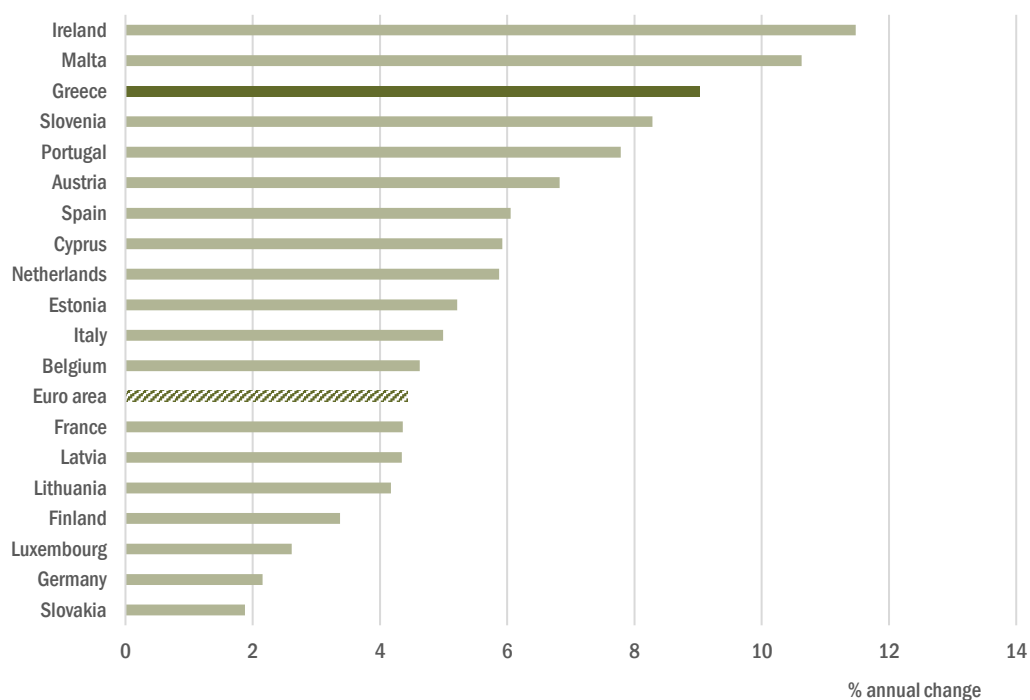


Intervention area	Indicative measures
	Establish programmes to integrate people with disabilities into the labour market
<b>Improve the health system</b>	Redistribute funding and redesign the health system
	Shift to patient-centred care
	Enhance the elderly care training of medical and nursing staff
	Promote supporting environments and services for the elderly
<b>Adaptation of the education system</b>	Set a minimum threshold for students per class, with specified exemptions for specific social or geographical conditions
	Set a minimum threshold for students and classes per school, especially in urban and semi-urban areas
	Decentralise the management of the education system
	Promote the autonomy and flexibility of schools in adapting part of the school programme to local conditions
	Reallocate public expenditure
	Redesign the functioning of pedagogical departments of universities
	Adjust the number of entrants to higher education institutions (HEIs), in line with demographic change
	Reorient HEI programmes to improve the quality of education, reduce skill mismatches in the labour market and attract foreign students

# APPENDIX

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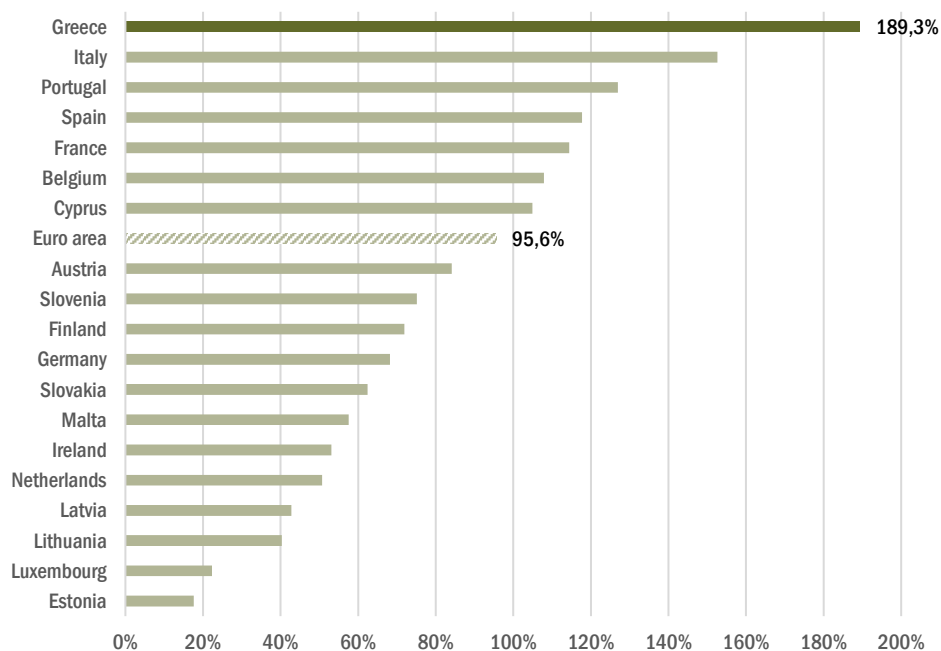
**Figure 1**  
Real GDP growth rate, Q2 2022 (\*)



(\*) Annualised GDP data (4-quarter moving average, up to Q2 2022)

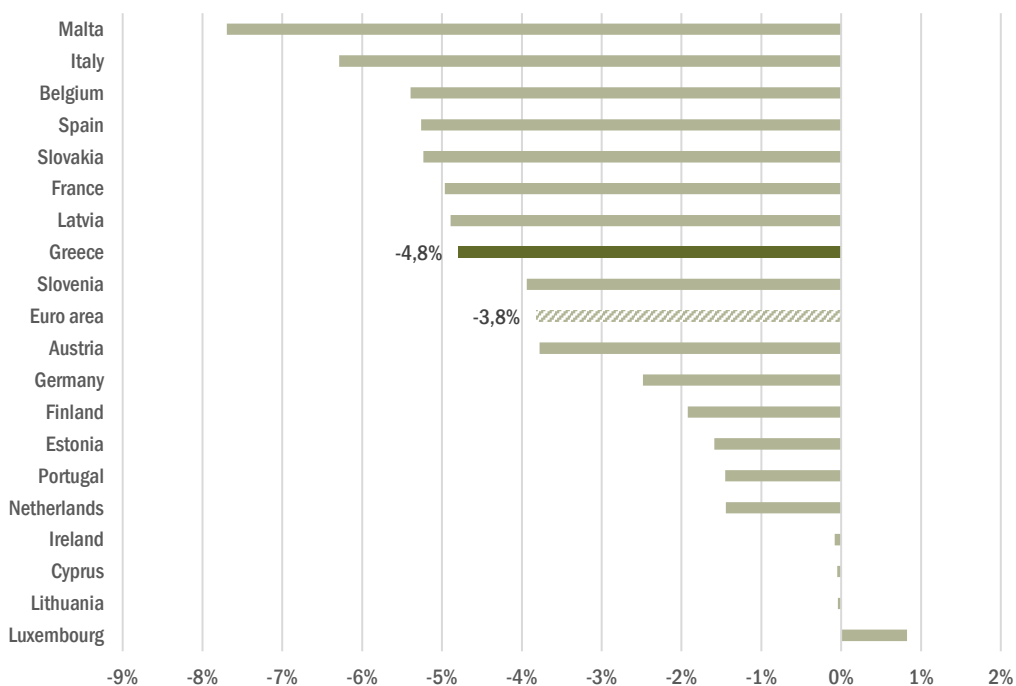
Source: Eurostat

**Figure 2**  
General Government Debt as % of GDP, Q1 2022



Source: Eurostat

**Figure 3**  
General government balance as % of GDP, Q1 2022 (\*)

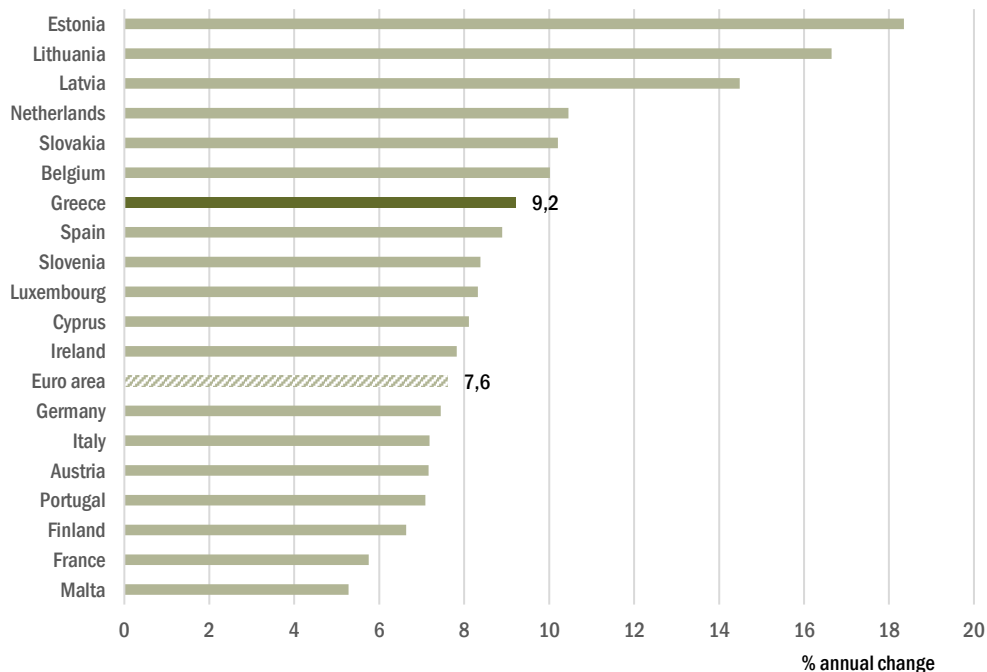


(\*) Annualised data (4-quarter moving average, up to Q1 2022)

Source: Eurostat

**Figure 4**

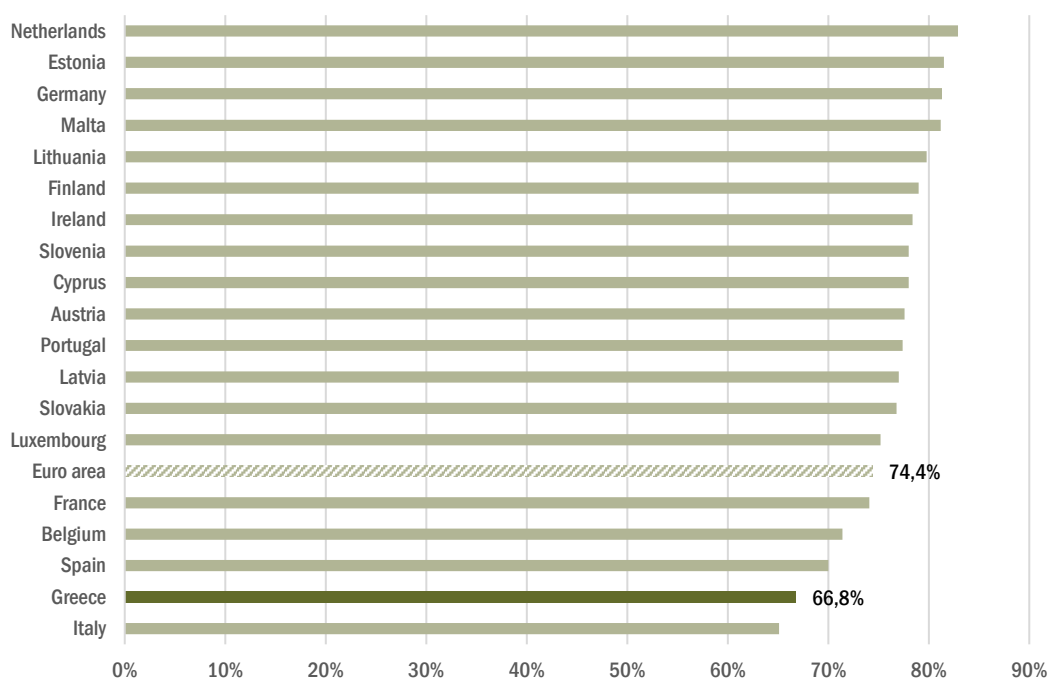
Harmonised Index of Consumer Prices, January – August 2022



Source: Eurostat

**Figure 5**

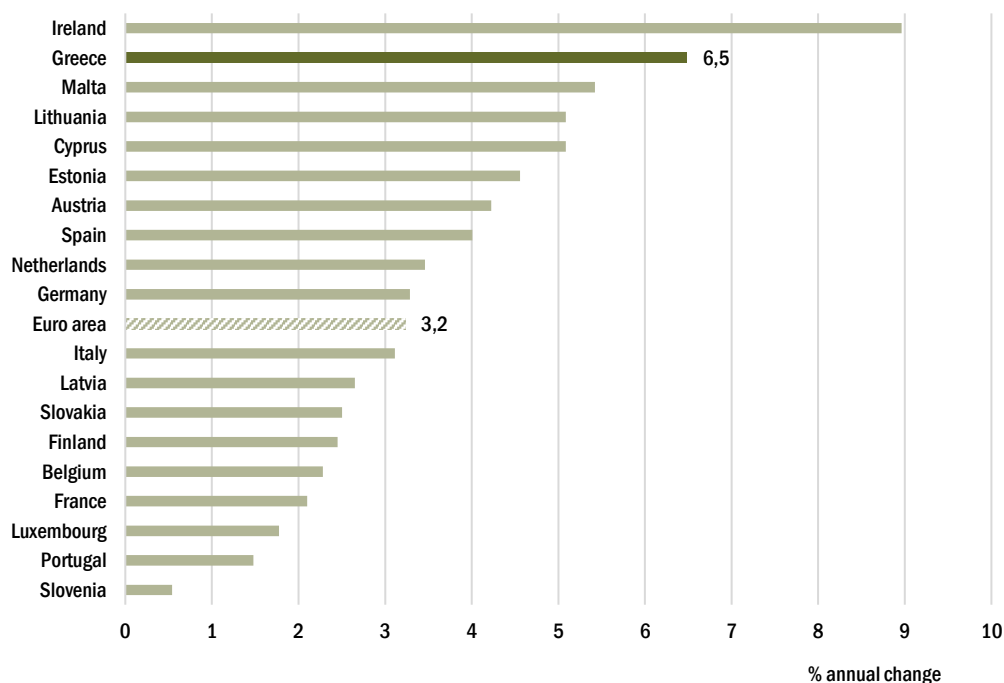
Employment, Q1 2022 (\*)



(\*) % of employed people aged between 20 and 64 in relation to their total population.

Source: Eurostat

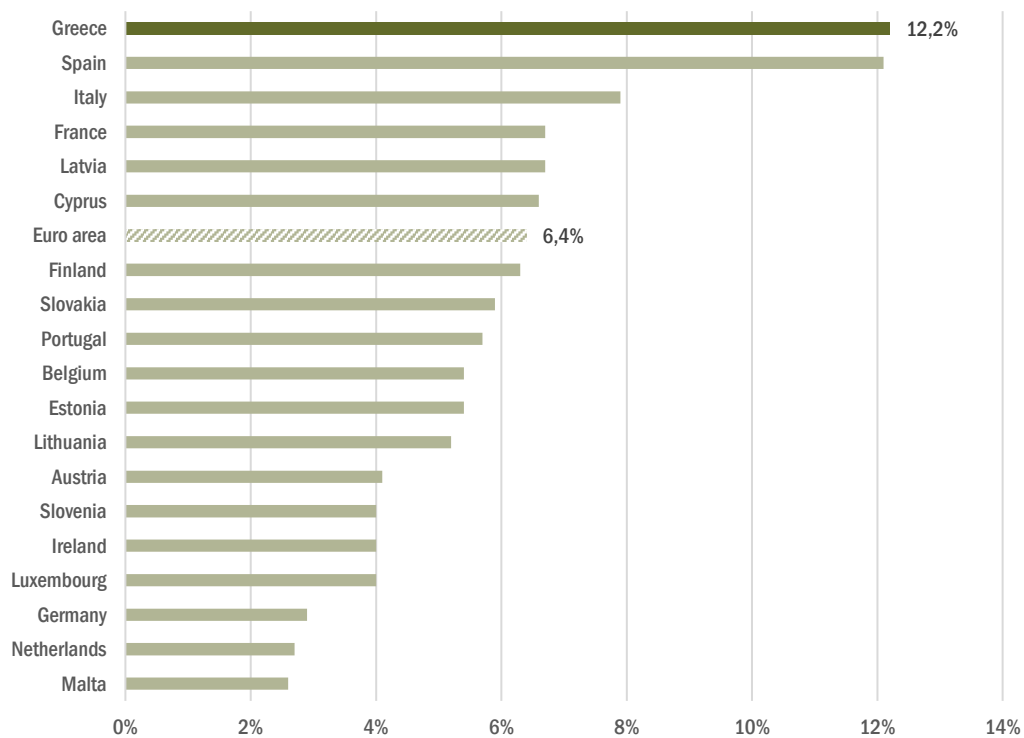
**Figure 6**  
Change in Employment, Q1 2022 (\*)



(\*) employed people aged between 20 and 64.

Source: Eurostat

**Figure 7**  
Unemployment, Q2 2022 (\*)



(\*) % of unemployed aged 20-64 in the total active population of the corresponding age, seasonally adjusted data  
 Source: Labour Force Survey, Eurostat