

# The Greek Economy

Quarterly Bulletin

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FOUNDATION FOR ECONOMIC & INDUSTRIAL RESEARCH

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## Foreword

IOBE publishes its fourth, bulletin on the Greek economy for 2021, as part of its series overviewing the Greek economy, at a time that is, like the previous ones, particularly critical for the Greek, but also for the global economy. The new, strong outbreak of the health crisis highlights its possible fluctuations and challenges until its completion. At the same time, inflationary pressures continue and widen, from the faster-than-expected recovery of the global economy and the arrhythmias in the supply of energy goods and commodities. The impact of the increases is more pronounced on industry and households. Domestically, the developments regarding the start-up and implementation of the Recovery Fund projects will be more important, in combination with the accompanying reforms. As every IOBE quarterly bulletin, this report includes four chapters and an appendix with key structural indicators, in the context of the quantitative monitoring of the Lisbon Strategy. The bulletin starts with a text on the positive dynamics, concerns and uncertainties of the new year (2022). The rest of the report is structured as it follows:

The first section is a brief overview of the report, which presents its key points, which are analysed in detail in the following sections. The second section focuses on the general economic conditions, including: an analysis of the global economic environment in the third quarter of 2021, as well as the outlook for both the rest of the last year and for 2023, based on the most recent OECD report, ii) an outline of the economic sentiment in Greece in the fourth quarter of this year (2021), based on data from the latest IOBE business and consumer surveys, iii) an assessment of the General Government Budget Balance for the period January-November of the last year 2021, as well as the State Budget of 2022 and iv) an outline of the developments in the domestic financial system between September-November 2021.

The third section focuses on the performance of the Greek economy mainly in the fourth quarter 2021. At first, the macroeconomic environment is mapped over the same quarter and forecasts for the whole 2021 and next year are made, taking into account all the available data on the effects of the pandemic, both domestically and internationally. Developments in key productive sectors in the third quarter of the last year (2021) are recorded, while the export performance of the Greek economy in the ten months January-October 2021 is presented. Next, the developments in the labour market in the third quarter of 2021 are processed. Subsequently, the trend in 2021 inflation is then analysed, while the section is completed with the assessment of the balance of payments for the period January-November last year (2021).

The fourth section of the report includes the presentation of a study on the macroeconomic impact of the reform of the supplementary insurance system.

At a methodological level, this report refers to and is based on data available until 20/01/2022.

IOBE's next quarterly bulletin on the Greek economy will be published in mid-April 2022.



# POSITIVE DYNAMICS, CONCERNS AND UNCERTAINTIES

At the beginning of the new year and as the economy seems to be emerging from the crisis of the pandemic, the Greek economy is recording positive momentum: both for the year that ended and for the new one, the growth rate of real GDP is strong and higher than previous expectations, accompanied by an increase in exports and a decrease in unemployment. At the same time, there are reasons for concern related to the large increase in fiscal deficits and the expected rise in interest rates and the cost of money. Also, for some critical aspects of the economy, developments do not yet have a clear direction. The height and characteristics of inflation, the speed with which fiscal rules are adjusted in Europe, the degree to which the productive model is turning to extroversion and productive investment, and whether the economy is gradually preparing for possible new crises in the external environment of, remain uncertain.

The Greek economy enters the new year with dynamics that creates high expectations. The rate of real growth in the year that is completed is estimated to be particularly high, confirming the recent analyses of IOBE. According to the most recent official data, it is estimated that there can be growth in the range of 9-9.5% for the whole year. This increase will be one of the highest in Europe and will greatly reverse the deep recession that preceded. The strong recovery is largely based on an increase in consumption, but is accompanied by a strong increase in exports of both goods and services, as well as a decrease in unemployment.

Particularly high  
real growth rate

Growth is expected in the range of 4.5-5%

Strong growth is also expected for the new year, albeit at a relatively lower level. Taking into account the current dynamics of the economy, the expected developments in the international environment, the inflow of resources from the Recovery Fund and other European sources, the real GDP growth rate is expected in the range of 4.5-5%. This scenario also supports the fact that the reduction of fiscal deficits is projected to take place only gradually, while the burden of servicing public debt is still relatively low. Of course, in the coming year (2022), risks remain, among other things from a possible prolongation and complications of the pandemic, which, if they prove to be strong, are expected to reduce the growth rate towards half of the above estimate.

Despite the positive momentum described above, there are reasons for concern and vigilance from economic policy.

An essential condition is the achievement of a sustainable fiscal balance

A first issue is how the fiscal situation will evolve with the end of the pandemic. The deficits, the overall but especially the primary one, were particularly deep in the previous two years, during which there was a need to tackle the pandemic and relax fiscal rules in the European context. For a country, however, with a particularly high public debt with a history and a tendency to create deficits, it is essential to achieve a sustainable fiscal balance, in a way that also supports strong growth rates. By comparison, our economy is one of those that moved towards the deepest deficits in the current crisis. Even if there were no European restrictions, the country's finances must be in a situation that does not make it vulnerable to external shocks and crisis scenarios in the near future. Part of the rebalancing will come from the expected end of the pandemic and the growth of the economy, but overall it cannot be done automatically and will require choices on both the revenue and expenditure side.

The expected general increase in interest rates should be accompanied by a decrease in the financing cost spread

A second issue is how to finance the country from abroad. Extraordinary monetary and fiscal policy support measures in Europe are already testing their limits and their reversal is coming closer as inflationary pressures intensify. The expected general increase in interest rates will be crucial not accompanied by an increase, but by a reduction in the differential cost of financing (spread) that separates the Greek economy from other European ones. The experience of the last few weeks is in the opposite direction. In this respect, it will be of high importance to achieve the investment grade as soon as possible, possibly towards the end of the year. Keeping financing costs low is not just about servicing public debt but primarily about financing new investments, complementary to recovery fund resources and strengthening bank financing.

In addition to the positive growth momentum and the reasons for concern, there is also a critical number of factors, the evolution of which in the coming period is uncertain.

First, the evolution of inflation will be of central economic and political importance. First, the evolution of inflation will be of critical economic and political importance. Product and service price



increases are expected when economies recover sharply after a deep recession and demand rises. They can, however, lead to a strong and dangerous upward spin of prices and wages that will undermine real growth. Of course, they can reduce real incomes and many households have a decline in prosperity instead of an increase, after the pandemic crisis. Reading the problem is not simple. The sharp increase in energy costs is a key cause. The vast, unprecedented liquidity and zero-cost money that central banks faced in the recession is certainly inflationary after a point - after all, capital and real estate markets have long had relative effects. But beyond the causes of the initial trigger, the role of the extensive adjustments taking place in the economy is also important. We do not consume, work, produce or buy in the same way as before the pandemic. The shift of supply and demand between goods and markets, even in conditions of uncertainty, leads to imbalances, frictions in production and trade and, as expected, to price increases. In this sense, a significant part of the increases are expected to close its cycle later this year, as new balances will be found.

However, the role of inflation expectations is also crucial. While their proper targeting is a critical aspect of the role of central banks worldwide, the latter are moving into uncharted waters. How and when to reverse their policies cannot yet be determined. In the euro area in particular, turbulence is far from being ruled out, with different economies and governments exerting counter-pressure. In this environment, it is difficult to guide expectations, and they have already gained momentum. Already, a significant part of the European economy is pushing for rapid interest rate hikes to reduce inflation. In addition to the burden, especially for high-debt economies such as ours, there is a risk that an overly rapid increase in the cost of money will lower overall growth prospects. If a significant part of inflation today has cyclical roots and gradually subsides, an overreaction will lead to a contraction in production at a time when this is necessary. In Europe, there was a lag in investment and innovation even before the pandemic, and adapting to the new environment requires resources and entrepreneurship.

Perhaps the most critical aspect of the evolution of inflation is its connection with wages. In our country, the center of the public debate has become the state intervention with increases in the minimum wage and allowances and other possible arrangements in prices and wages. A wage increase is expected and desirable as the economy gets into growth. Administrative interventions, however, help only temporarily and with specific targeting. Otherwise, they risk intensifying distortions and strengthening the part of the economy that depends on the public sector instead of the extrovert, unemployment and the undeclared economy. The proposal that price increases can easily be balanced by wage increases forgets, as in the past, that such a cycle would reduce competitiveness and undermine growth. The aim, of course, should be a sustainable increase in real wages, not a temporary increase in nominal wages.

A second issue is that the evolution of the fiscal course in the country certainly has a critical European dimension. The relevant

debate on the Stability and Growth Pact has at least two parts. First, whether there should be formal changes to the medium-term framework or only expansive interpretations and derogations in implementing the framework in the short term. Secondly, in what direction should any changes be, in particular whether the quantitative targets for debts or deficits will be changed, the expected speed of adaptation to the final targets, or whether expenditures for specific categories, such as tackling the climate crisis and/or emergency health problems, will be excluded. The relevant processes will have both a technocratic and a political side, both of which are very crucial. While at first the scope for expansive interpretations of the rules seems attractive, it will be particularly important for our country that the new framework be such as not to raise uncertainties that would reduce the credibility of the fiscal course and allow for doubts and different readings. After all, through the recovery fund and broader policies, the European Union and the euro area have taken steps towards the "mutualisation" of debts through joint borrowing and other future liabilities to a significantly greater extent than was the case only two years ago. However, the other side of the coin on joint lending and subsidies is that budgetary rules should be in place to guarantee the overall credibility of the system. Finally, the stable fiscal path in the midst of a growth path is important for the country itself and not only because of participation in the European framework. Even if there were no European restrictions, the country's finances should be in such a situation in the coming decades that they do not allow scenarios of new crises and do not make it vulnerable to external shocks. A fiscal path with stable but moderate surpluses, of the order of 1% on average, is not only not a brake on sustainable growth, but also a prerequisite for it.

Shift of the production model in the country by boosting exports and investments

A third issue is shifting the productive model in the country, in particular by boosting exports and investment. In this regard, there are positive signs, such as the interest of foreign companies and investors in the Greek economy, the resilience shown by tourism and the continuing significant increase in exports of goods from critical sectors of the manufacturing industry. As the productive base strengthens, this momentum can be strengthened. On the other hand, during the pandemic, the regulatory role and the importance of state interventions were strengthened in many ways, while in the future the role of funding from sources influenced by state decisions and priorities of the public sector will be crucial. Overall, this trend can contribute to the introversion of the economy. With the end of the pandemic - when it happens - governments in most countries will be weak, especially at a time when the requirements for state intervention will be maintained or intensified. Households and businesses will push for subsidies, debt settlement and the extension of the extreme intervention policies that existed during the crisis. Social and political fatigue from the pandemic and response measures will conflict, at least initially, with the reality of high public debts and the need to reverse deficits. At this juncture, the economies that will move positively will be those that manage to stimulate their productive base, attract natural and human capital

by taking advantage of changes in the global division of labour and reduce prices by increasing supply and competition. Although economies do not change easily, crises are an opportunity to change course, especially when access to finance is now much easier than it was a decade ago. However, the strengthening of the extrovert and innovative part of the economy, by attracting capital and labour to it, means a relative degradation of its more introverted part.

However, the strengthening of the extroverted and innovative part of the economy, by attracting capital and labor to it, means a relative degradation of its more introverted part. The pandemic has not yet abated and while there are good hopes that this will happen towards spring, its cost is still heavy. At the same time, new crises, with health, financial, geopolitical or other sources, cannot be ruled out. Enhancing competitiveness, the productive base, the adaptability of the economy and at the same time the efficiency of the public sector are therefore urgently needed.

Resilience to  
new crises

Assessing the overall prospects of the Greek economy from the new year, one starts from the base that constitute two very positive data. On the one hand, the strong recovery recorded that eliminates much of the previous deep recession. On the other hand, smooth access to finance, centred on the recovery fund, and beyond. On this basis, the economy may soon overcome the heavy trauma of the pandemic. However, these conditions do not ensure that the systemic problems that have characterized the economy for the last many years, following the previous ten-year crisis, are solved. Therefore, how the economic policy will develop, not only in its initial decisions but also in terms of the success of implementation, during the year will be crucial.





## 1 BRIEF OVERVIEW

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### Global economy recovery in 2021 to make up for last year's losses, slight deterioration of forecasts for 2022

The recovery in global economic activity continued at a high pace in the third quarter of 2021, but much slower than in the previous quarter. In July-September last year, the OECD countries experienced a recovery of 4.6%, from 13.1% in the previous quarter, which offset the recession in the same period the year before last by 3.7%. The rate of change of GDP in the most developed economies (G7) reached 4.1% in the third quarter, compared to 12.9% in the previous quarter and a recession of 4.0% in the same quarter of 2020. In the OECD's 20 largest economies, the recovery was also much milder in the third quarter, 4.7%, compared with a rate of 11.8% in the spring quarter. A year earlier GDP in these countries fell by 1.9%. Dominant among these countries is China, which grew by 4.9% in the third quarter last year, from 7.9% in the following quarter. According to recent data, the Chinese economy grew at a rate of 4.0% in the October-December quarter. Among the most developed countries, the largest change in GDP compared to the previous quarter was recorded in the United Kingdom (+6.6% from +23.6%), France (+3.3% from +18.8%) and Italy (+17.0%, versus +3.8%). In contrast, the smallest change was recorded in Japan (+1.3% from +7.7%). India's economy grew at a rate of 8.5% in the July-September quarter, following a 6.8% recession in the relevant quarter the year before last, while in the second quarter last year it recorded a strong recovery (+19.5%). In Latin America, Argentina's economy continued to recover strongly (11.3%), following GDP growth of 19.7% a quarter earlier, covering last year's losses (-10.3%), while similar developments took place in Brazil (+4.0%, compared to -3.7% last year). In Russia, GDP growth slowed to 3.8% from 7.6%, more than offsetting losses a year earlier (-2.5%).

The significant recovery in the third quarter also stems from the positive effects of a number of factors, notably the gradual lifting of protective measures earlier than in 2020, which boosted expectations and international trade, and the significant vaccination rates, which weakened the dynamics of the pandemic and encouraged international travel. GDP growth in this period would have been stronger if the Delta mutation had not appeared in July, which increased the uncertainty about the evolution of the pandemic, without, however, strongly affecting the epidemiological data at that time.



The momentum of the recovery probably weakened further, slightly, in the next quarter from the new escalation of the pandemic as the "Delta" consolidated, but mainly due to the appearance of strong inflationary pressures. It is now possible that the intensity of the effects of the new phase of the health crisis differed between states, affecting mainly developing countries with low vaccination coverage and limited "fiscal space".

Rapid recovery, disruptions in international value chains, continued supportive monetary policy by many central banks, and other restrictions on commodity production (e.g., OPEC+ oil production restrictions, Hurricane Inda effects) are the main causes. rapid rise in prices for energy products and other commodities. These trends are hampering international trade and global development. On the other hand, developing countries with significant production of such products have shown resilience to the slowing pressures from mid-2021, which will continue in early 2022.

The recovery of the pandemic in the autumn led to the reintroduction of some of the protection measures, with a smaller scope than in previous outbreaks. However, towards the end of 2021, the emergence of a new mutation, with a particularly high transmissibility rate, sharply escalated the uncertainty. At present, its effects are difficult to estimate as, on the one hand, the deterioration of epidemiological data is asymmetric between the individual indicators and is manifested mainly in cases, while on the other hand, some countries have restored strong public health protection measures.

In the field of prices, moves are being made to normalise the energy market, e.g. by exploiting strategic oil reserves from the US, China and other countries, while the OPEC+ countries continue to gently expand their production. On the other hand, problems in parts of the value chains remain, while the effects of high energy costs are increasingly pervasive in the industries, especially in food. It is now estimated that inflationary pressures will last longer than originally expected.

The strong dynamics of inflation is one of the factors that have led to a gradual shift of monetary policy by the largest central banks, starting its contraction in early 2022. This development will have an increasing impact on financing costs. These may not be symmetrical between countries, based on factors such as the amount of their public debt, the potential risks they face from the pandemic, etc.

Depending on the trends over the past year and the expected and probable developments analysed, is the forecast for a recovery of the global economy in 2021 at a rate of 5.5-6.0% and its mild slowdown to the next (4.0-4.5%).

### **Strong recovery continued in Greece in the third quarter of 2021**

The recovery of the Greek economy continued at a particularly high rate in the third quarter of last year, slightly lower than in the previous quarter. Specifically, GDP grew in the period July-September last year at a rate of 13.4%, from 16.6% in the previous quarter, while a year earlier it fell by 11.0%. Overall, in January-September 2021, GDP was 8.9% higher than the corresponding period last year, when it fell by 9.3%. It is noted that compared to the nine months of 2019, GDP in the same period of 2021 was lower by €1.66 billion or 1.2%.

In terms of trends in GDP components during the period January-September, domestic consumption expanded by 5.5%, while a year earlier it fell by 5.1%. The strengthening came equally from an increase in private (+5.2%) and public consumption (+5.5%). The growth rate of public consumption in the first three quarters of last year was stable, in the range of 5.0-5.7%. The trend of private consumption showed a significant fluctuation, with



the decline in the first quarter (-4.5%) followed by a strong increase in the next (+13.1%), which slowed slightly in the summer months (+8.6%). ).

Investment widened in the nine months of January-September by 6.4%, much milder than a year earlier (+16.9%). The increase came solely from an expansion of fixed capital formation, which stood by 16.3%, following a marginal decline in 2020 (-0.6%). Investment growth was dampened by a 23.5% decline in inventories. Moreover, their growth came exclusively from the second quarter (+31.4%), as in the first (-2.6%) and in the third (-5.0%) investments declined.

In terms of trends in fixed capital categories in the first nine months of last year, they were up in all except agricultural products. The most intense reinforcement in absolute terms was presented by the Mechanical equipment-weapon systems (+€692 million or +18.6%), reflecting the impact of the procurement of fighter aircraft, and the Residences (+€476 million or +34.7%). Other Construction (+€381 million or +10.1%) and Transportation Equipment (+€333 million or +33.0%) followed in absolute terms, due to the opposite upward trend of vehicle sales from the previous year (new passenger and light truck licenses: +36.2%, from -35.2% the year before last). The mildest expansion was recorded in investments in ICT Equipment (+€292 million or +19.6%) and Other Products (+€192 million or +6.5%). Only gross capital formation in Agricultural Products declined, to a small extent, by €0.5 million. or 0.85%.

In terms of developments in the external balance of the economy, SARS-CoV-2 vaccination and the gradual lifting of restrictions on international travel and the functioning of economies earlier in the second quarter of last year than in 2020, were reflected in the strong annual strengthening of the international tourist traffic and the international transports in this and in the next quarter and then of the exports of services (+44.1% and +84.6% in the second and third quarter respectively). Overall, in the nine months of 2021, exports of services were 25.8% more than the year before last. On the export side, the significant increase continued during the summer period for the fifth quarter (+9.2%), leading to an average increase in the period January-September by 11.6%. In total, exports in the nine months were 21.4% higher than in 2020, with the increase coming from 63.2% from exports of services and by 36.8% from exports of products. They were only 5.0% behind their level the year before last.

On the import side, the rise was much stronger in the third quarter of 2021 on the services side compared to that of goods in the third quarter (+58.1% vs. +10.1%). In the nine months, imports of products were 8.4% higher than a year ago and imports of services were 28.0% higher. The average expansion of total imports by 13.2% in this period came almost equally from imports of goods (47.2%) and imports of services (52.8%). In addition, total imports were 5.1% more than in the same period of 2019. Overall, in the nine-month period, the external balance deficit in national accounting terms was reduced compared to the same period of 2020 by 26.1% from €8.5 billion. to €6.3 billion.

### **Strong recovery in Greece in 2021, likely to cover the losses of the previous year. Recovery at a high rate in 2022.**

The new, unprecedented increase in coronavirus cases at the end of 2021, internationally and a little later in Greece, due to its new mutation, has again reinforced the importance of the pandemic for medium-term economic developments and the uncertainty about them. However, the pressure on health systems is currently proportionally considerably lower than previous outbreaks. Subsequently, the policy interventions so far to deal with the new outbreak are less intense and far-reaching than in the past. As the spread of the





mutation is ongoing, the range of measures in the coming period and their impact on the economy are not a given. The relevant decisions will depend crucially on the degree of pressure on the health system.

On the other hand, the positive developments domestically at the end of 2021 and the beginning of the new year include: a) the extended tourist season, until November, b) the continuation of the integrated vaccinations at a steady rate, compared to the third quarter, and the realization of the booster dose of the vaccine at a high rate and c) the acceleration of inclusion of projects in the Recovery Fund.

Analytically, as it was pointed out in the previous quarterly report of IOBE for the Greek economy, "the entry into autumn can be a source of challenges for dealing with the pandemic, as the climatic conditions favour the spread of the SARS-CoV-2 virus, as well as the transfer of activities from open to closed spaces (e.g. catering, sports). The emergence at the end of November of the Omicron variant confirmed this estimate. The new mutation is highly contagious, but with several milder symptoms for the vast majority of those who are sick. Nevertheless, the rapid increase in cases and the uncertainty about the impact of this trend on other epidemiological data (ICUs, victims) have already led some countries to take additional measures to protect public health. Several European countries have imposed various restrictions on the operation of entertainment and leisure activities (bars, cinemas, theatres, etc.). China has taken more stringent measures, in cities with quite high cases. Nevertheless, the new mutation is coming. As its impact on epidemiological data beyond cases becomes strong, public health protection measures will escalate in many countries, possibly sharply. This possibility is a key assumption of the alternative scenario of macroeconomic developments in the Greek economy in 2022.

In the third quarter of last year, when public health protection measures had eased significantly, the significant recovery continued in many countries and economic zones, but at a much slower pace than in the previous quarter: in OECD countries, GDP increased by 4.6%, instead of 13.1% in the second quarter of last year and fell by 3.7% in the third quarter of 2020, while in the EU the product expanded by 4.1%, following a recovery of 13.8% a quarter earlier and a drop of 3.9% a year ago. In China's economy, growth slowed in the third quarter to 4.9%, from 7.9% in the previous quarter and GDP widened by 4.5% in the corresponding period the year before last year. The strong recovery momentum is judged to have had a respective impact on international trade. The World Trade Organization announced in October that the growth rate of international trade volume would reach 10.8% in 2021, from 8.0% forecast in March last year. For the new year, its widening is expected to slow to 4.7%.

With regard to recent price developments, inflationary pressures escalated at the end of last year. Their dynamics is no longer solely due to rising energy prices, but also to the disruptions it has caused to supply chains and its effects on the cost of producing other products and services. These developments are slowing the economic recovery globally. However, the demand for energy products then weakens, a development which was reflected in the significant decline in the international oil price in December. In particular, the average price of Brent oil in dollars in the last quarter of 2021 was 80% higher than a year earlier, a difference greater than in the eight months of January-August (63.9%). However, at the end of the fourth quarter last year and the beginning of 2022, the difference had narrowed in the area of 50%. Despite this slowdown, the rise remains high. The effects of fairly high energy prices are already strong on industrial production costs and real household incomes.





As for the expected developments in the price of oil, on the demand side, the appearance of the Omicron mutation at the end of November sparked uncertainty, leading to sharp oil sales. The initial strong pessimism was followed by more moderate evaluations of the effects of the mutation. The restrictive measures then implemented to curb the spread of the virus are currently considered more likely to have a significantly milder impact on economic activity internationally than previous outbreaks of the COVID-19 pandemic. Next, a temporary slowdown in oil demand is expected, but not a reversal. In any case, although the pace of recovery of the world economy in 2022 will be slower than in the previous year, the demand for energy goods will be strong again. On the supply side, the most important developments in the New Year are expected to come from producer countries other than OPEC+ members. In the two months of October-November the largest increase in daily production came from the USA. In addition, at the end of November the US announced the allocation of up to EUR 50 million to the company. barrels of oil from their strategic reserves. Similar actions are being carried out or will be carried out by China, India, South Korea, Japan and the United Kingdom. As far as the OPEC+ countries are concerned, unless there is a sharp fluctuation in the world economy due to the pandemic, the policy of phasing out the restrictions that follow will not change.

New measures were announced at the beginning of January to stem the impact of the increases on energy prices for this month. As long as energy product prices remain high, it is expected that household and business subsidies will continue.

Due to the mild outbreak of epidemiological data as a whole for most of the last quarter of 2021, support interventions for businesses and households, which had been applied in previous outbreaks, when a lockdown had been imposed, did not resume. However, the program of covering 100% of insurance contributions continued for six months for 100 thousand new jobs. In addition, since the beginning of the new year, this programme has been expanded by 50 000 posts. The loan instalment subsidy program for households "GEFYRA" was extended for three months, until January 2022. The 2022 budget includes the postponement of the payment of the first of the 60 interest-free instalments of the repayable advance, from 31/01/22 to 30/06/22. Recently, following restrictive measures in entertainment and catering, support measures have resumed for these activities, at least for January (suspension of employment contracts, special purpose allowance, suspension of payment of regulated debts, special supporting-measures program). The extension of some supporting-measures policy interventions and in particular the facilities to service the obligations that have arisen from them, will support the operation of a large part of businesses in the initial six months of this year. On the other hand, the implementation of all support interventions weighed heavily on the fiscal balance in 2020 and 2021. According to the 2022 Budget, their total amount last year reached €15.8 billion, when in the 2021 Budget their budget was €4.54 billion and another €3 billion were available for the same purpose, as appropriations under allocation.

Mild epidemiological data during the autumn and the continuation of the summer months of vaccination internationally at satisfactory rates, led to an extension of the tourist season for most of the fourth quarter, with high traffic. This development took place at a time when the importance of revenues from international tourism for total revenues from exports of services was significant before the health crisis (37.0-39.0%), but lower than in the summer (62, 0-64.0%). According to the most recent data, the average decline in international arrivals at the country's airports weakened further in the September-November quarter compared to their level in 2019, to 23.3%, from an average contraction of 33.6% in the June-August quarter. Overall in the eleven months of 2021, international arrivals at all airports were 44.8% less than in 2019.



IOBE macroeconomic forecasts are based on alternative assumptions for factors that are expected to affect the key macroeconomic variables from time to time and in the medium term. The most important factors in 2020 and 2021 were the evolution of the health crisis, in Greece and internationally, especially in the Eurozone, as well as the size of policy interventions to contain its effects. They are included in the parameters of the macroeconomic forecasts in 2022. An additional, important factor for the course of economic activity in the new year will be the pace of implementation of the projects that are included in the Recovery Fund. The forecast parameters already include the cost of energy through oil prices, which is a key factor of production of companies, mainly in industry, as well as a basic category of goods for households.

As 2021 has passed and developments in the vast majority of these factors are a given, a development scenario for the previous year has been formed. In 2022, various developments are possible in the main parameters, which, because they are interrelated, will not be independent of each other. Given this, two scenarios of developments were formulated. In the scenario for 2021, thanks to the progress in vaccination and the extensive use of diagnostic tests (rapid tests, self-tests), the upward dynamics of the pandemic until the end of the year did not worsen the epidemiological data. Subsequently, no general restrictive measures were imposed, while the support interventions were either stopped or their scope was limited. International tourism continued for most of the fourth quarter to show a strong escalation compared to 2020, significantly expanding the tourist season. Subsequently, revenues from international tourism services strengthened in the region of 57-60% of their level in 2019, compared to 24% in 2020, clearly higher than expected in previous IOBE bulletins. This increase reflects an increase from €6.0 billion up to €6.6 billion. Significant support, more than expected at the beginning of last year, has been received by businesses and households from policy interventions. On the other hand, the inflow of resources from the European Recovery Fund was lagging behind the target in the 2021 Budget (€4.0 vs. €5.5 billion). Regarding the GDP trend in the Eurozone, it is supposed to be in the area of recent forecasts (European Commission: 5.0%). The rise in energy prices has slowed slightly in the last quarter, but remains particularly strong and has affected inflation accordingly.

The baseline scenario for 2022 is also based on the assumption that generalised restrictive measures will not be imposed due to the pandemic, as in outbreaks in the past. However, further targeted measures may be taken or scaled up, e.g. suspension of a small number of activities (entertainment, theatres, cinemas), escalation of restrictions on vulnerable groups of the population. Therefore, business and household support interventions will be much less than last year, with a smaller scope. Under these conditions, there will be a new expansion of the tourist season, mainly towards spring, while the international tourist traffic will be significantly stimulated in the June-August quarter. This data, revenues from international tourism services will strengthen in the region of 80-90% of their level in 2019. Better health data internationally will allow for a continued significant recovery in the euro area. This will be mitigated by the new rise in prices, which will be much milder than this year (Brent oil rise 2022: 7-11%). The result of these effects will be a growth rate for the euro area in the area of the current forecast, perhaps even slightly higher (European Commission: 4.3%). As far as the utilization of RTD is concerned, it is assumed that the target of inputs to the Budget for 2022 (grants of €3.4 billion, loans of €1.85 billion) will be achieved and that the projects that have already been included in the Recovery Fund, as well as others, will be implemented to a high extent, leading to the achievement or even exceeding of the relevant subsidy targets (€3.2 billion). and loans (€586 million).

The main difference between the alternative scenario for 2022 and the baseline lies in the projected health developments and their impact. In particular, the reintroduction of



generalized restrictive measures is expected, due to new escalations of the pandemic. However, their intensity will be milder than in the past, e.g. the one in the third lockdown in the period February-March last year. Indicatively, the protection measures inside the country, may include restriction of the traffic for some hours at night, reduction of people inside the stores, click inside, suspension of operation in the Retail Trade and the Catering. Externally, restrictions may be imposed depending on the health data of each country. This set of measures will be gradually revoked in the spring, as the summer season approaches. The reintroduction of restrictive arrangements would have additional restraining effects in relation to the baseline scenario in the activities mentioned. This data, international tourism receipts will expand against 2021, but milder than in the baseline scenario, at 70-75% of their level the year before last. Of course, the imposition of restrictions will be accompanied by interventions to support the affected businesses and their employees. The new fluctuations of the health crisis will also mitigate the recovery momentum in the eurozone. However, they will greatly weaken the inflationary pressures within the year. Given this, growth in the Eurozone will be lower than the recent forecast (4.3%). No impact is expected from possible new escalations in the ERF inputs and the implementation of the relevant projects, as these procedures are generally independent of health developments.

Analytically in terms of recent and expected developments regarding the pandemic domestically, the spread of the new coronavirus mutation has led, as in most countries where it has entered, to an unprecedented, vertical increase in the number of cases. However, as already mentioned, the rapid spread of the new mutation has not brought about a deterioration for the time being of most other epidemiological data, such as hospitalizations in ICU and deaths. However, hospital admissions have increased significantly, a trend that may also have a negative effect on other epidemiological indicators. The fact that significant pandemic-related markers have not deteriorated is probably due to the milder pathogenic characteristics of Omicron, which affects the upper respiratory tract more and the lungs less than the Delta.

Progress in the vaccination process is considered to have contributed to the relative stability, as by mid-January about 70% of the country's population over the age of 5 had been fully vaccinated and almost 49% of the population aged 18 and over had received a booster dose. which has generally strengthened the population's immune system against the virus. Given these data, it is considered more likely that there will be no significant deterioration of the set of epidemiological indicators in the next period but also in the medium term. Subsequently, there will be no need for extensive health protection measures, such as those implemented during the lockdowns. However, it is not excluded to expand what has been received so far, e.g. more activities, in areas of the country with severe epidemiological features, in sections of the population more vulnerable to the virus.

The rapid outbreak of cases from the new mutation has led to an increase in public health protection measures. Their characteristic that differentiates them from corresponding cycles of policy interventions in the past, is the non-imposition of suspension of operation of an activity as well as restrictions on the movement of citizens.

Regarding the measures for international passenger traffic in Greece, the ban on entry by air of third-country nationals other than the countries of the European Union and the Schengen Agreement continued. At the end of October, compared to the previous month, the number of countries whose passengers traveling for essential reasons and permanent residents are exempted from this ban increased to 41 from 36, while from mid-December another country was added. The excluded countries are clearly more than those a year ago, which were only 9. With the appearance of the new mutation in South African



countries, the conditions for entry to Greece for nine of these countries have been strengthened since November 27. Greek nationals and travellers traveling from nine African countries can enter the country subject to three negative tests, a 10-day quarantine and a special entry permit to the Greek territory by the competent consular authorities of the Ministry of Foreign Affairs, regardless of their vaccination. Apart from the specific entry conditions for the protection of public health, overall the much fewer restrictions compared to the same period of 2020, contributed to the continuation of much higher tourist traffic in the fourth quarter of last year, which has already been recorded in part of this period. These effects may continue or even intensify in the first half of this year, as long as the constraints are not increased or if they are further reduced. Countervailing to these positive effects will be the travel caution due to the rapid spread of Omicron.

As far as land travel is concerned, as of July 1st, all border posts in the country are open. Admission requires a negative COVID-19 molecular test (PCR) up to 72 hours prior to arrival or a negative coronary antigen test using rapid COVID-19 antigen (rapid test) within 24 hours prior to arrival. As these arrangements did not stop in the autumn, as was the case last year, it is considered that they mainly stimulated tourism in Northern Greece (winter tourism, city break). As long as they are maintained, their effects will continue, possibly weakened by reticence due to the new mutation. An additional source of revenue for Tourism compared to the year before last was cruise revenue, an activity which has been allowed since 14 May.

Although the vast majority of business and household support interventions have been completed, as mentioned above, they are considered to be and are a particularly important source of support, through the very large volume of relevant transfers. Households restrained the weakening of consumer demand but also the reduction of business activity and employment. A significant part of the liquidity from the beginning of the pandemic that companies needed in order to maintain their jobs and meet their current obligations has come from emergency financing tools. A part of the interventions to support businesses and the self-employed has affected fixed capital formation since 2020. The completion of the interventions or the fact that they are now quite targeted to their beneficiaries (sectors-professions), implies that the supported businesses and households will have to adapt to conditions of exit from the pandemic and then outside the pandemic. This process will be one of the biggest challenges in the Greek economy this year and next.

In terms of developments in financing, which may play a key role in halting the impact of the pandemic, especially on investment, banks in Greece continue to expand the use of ECB financial instruments to provide liquidity, which have emerged as response to the extraordinary circumstances, ie the Pandemic Emergency Purchase Program (PEPP), budget €1.85 trillion, and the extraordinary operations of longer-term refinancing due to the pandemic (PELTROs). In this context of financial capabilities, the liquidity of Greek banks from the Eurosystem, excluding the PEPP, reached in the period April 2020 - November 2021 €34.5 billion and totalled €46.83 billion in the end. In the recent period since the previous IOBE bulletin on the Greek economy (September-November), capital raising was marginally limited, by €50 million. Regarding the use of the Pandemic Securities Purchase Programme, the ECB has made net purchases of securities from Greece by the end of November amounting to €34.9 billion, of which €5.5 billion. in the four months of August-November. Therefore, the availability of funds from the ECB's banking system to provide financing to businesses, among other objectives, is high and has continued to increase, taking into account recent developments.

Lending is also favoured by the continued growth of private sector deposits (households and non-financial corporations) since the beginning of 2019, at a high rate. Following their



strong expansion in 2020 by 13.6% or €19.3 billion, private deposits rose in the eight months of January-August 2021 compared to the corresponding period with an average annual rate of 13.7% or €19.9 billion. In the recent quarter of September-November, deposit expansion slowed slightly, to 11.7% or €18.2 billion. The new rise in this period came mainly from most household deposits, by €10.8 billion (+8.8% compared to a year ago), while corporate deposits expanded by €7.4 billion (+24.0%).

While the abundant liquidity from the ECB, the strong upward trend in private deposits, as well as the activation of the lending part of the Recovery Fund favour the credit expansion by banks at the end of last year and in the new year, there are some factors that mitigate this dynamic. The most important are the suspension of payment of bank loan instalments until the end of 2021 at most and the ongoing loan instalment percentage subsidy in the first quarter of the new year (Bridge II program), which do not allow the manifestation of real dynamics in non-performing loans (MES). According to the Bank of Greece's Interim Monetary Policy Report 2020-2021, the balance of non-performing loans under legal protection in September 2021 was €3.3 billion, well below €12.9 billion a year earlier. In the same report, the BoG expresses the view that "Part also of the loans that are under support (e.g. through programs such as the "Bridge") is likely to be recorded as NPLs when the facility period expires." Another deterrent factor is the new escalation of uncertainty regarding the development of the health crisis, due to the significant increase in cases during the fourth quarter last year, especially at the end of December.

The current recovery in uncertainty over the evolution of the pandemic is one of the reasons that will weaken the demand for capital from businesses and households, at least temporarily, in early 2022. On the other hand, the continuous, strong recovery in some sectors will stimulate the demand for bank loans. For example, in Industry, the production index rose strongly in the period January-November 2021, averaging 10.0%. The recovery of a significant part of the previous year's losses in Tourism in some areas, will also contribute to the greater demand for liquidity from the banking system.

Regarding the evolution of non-performing loans (NPLs), the most recent data refer to the third quarter of 2021. Based on these, their strong decline compared to the previous quarter continued in the specific period, by €8.4 billion or 28.8%, to €20.9 billion or 15.0% of total loans. Thus, they were well below the revised target for the end of 2021 (below 20% of loans). A year earlier it reached €60.0 billion or 36.3% of loans. The sharpest contraction in NPLs occurred in business (-€4.2 billion or -21.9%) and housing loans (-€3.2 billion or -45.8%). Overall, the reduction was achieved primarily through portfolio transfers and securitisations, mainly through the use of the Hercules programme. Following these developments, the level of NPLs is around €86.3 billion or 80.5% below its peak in March 2016.

Under these developments in the banking system, the provision of more bank loans to non-financial corporations continued. On the other hand, the relative rate de-escalated sharply in the period January-September and since then, until November is much lower than those at the beginning of last year and the period March-December 2020. Specifically, it stood at 5.3% in the eleven months of 2021, as much as a year earlier (5.2%). However, while last year it was at 10.3% in January, eight months later it had slowed down to 2.0%, a level close to which it was at least until last November (2.4%). During the same period, the average rate of credit contraction to households was stable, both during the year and compared to the previous year, at 2.7% compared to 2.5%. In the private sector as a whole, there was an average credit expansion of 1.6% in the period January-November, compared to a rate of 1.0% in 2020. While in 2021 the rate was slightly higher on average,





in the five months of July-November it ranged between 0, 3-0.6%. As has been pointed out in previous IOBE bulletins on the Greek economy, the smaller increase in loans to the business sector is mainly related to the sharp escalation of lending to the General Government, with the relative average rate reaching 60.8% in the last four months. from 30.8% a year ago, both the highest over time. Therefore, the interconnection of the banking system with the government has increased significantly. This trend creates uncertainty about banks' funding priorities and more broadly, about whether the significant additional liquidity is being used for productive purposes.

The provision of liquidity to enterprises continues to be done on very favourable terms: the average interest rate on new regular loans to non-financial corporations stood at 2.64% in the September-November quarter, lower than in the previous four months (3.11%), with the recent average level is a new historical minimum, at least since 2010. The lower interest rates on bank lending to businesses and freelancers in 2021 are also related to the sharp de-escalation of lending rates of the Greek government. This trend is due, on the one hand, to the evolution of Greece's creditworthiness and, on the other hand, to the ECB monetary policy measures mentioned above. In August, the average interest rate on the 10-year bond reached its all-time low (0.59%). Recently, Fitch maintained last year's BB rating, upgrading the country's outlook to positive from stable. This paves the way for an upgrade to BB+, i.e. one tier below the investment category. On the other hand, the continuous rise in the interest rate on the 10-year Greek government bond in the period September-December is highlighted, which has cumulatively reached 70 basis points, reaching 1.29%, which is the highest level in the last 1.5 years. At the same time, the corresponding yield on German bonds stood by 16 basis points, at -0.38%. Therefore, the spread with the Greek bond widened by 54 points. The upward trend for four months of the performance of the Greek 10-year and the increase of the spread with the German for the time being is not feasible to interpret. In any case, these trends highlight the possibility that financing conditions on international markets will change and deteriorate when the exceptional liquidity support interventions by the largest central banks are greatly reduced or completed.

It is estimated that the start of the recovery of the credit resources of the Recovery Fund can be reversed by the extensive slowdown of the credit expansion to the companies. Recently, business agreements were concluded between the Ministry of Finance and six credit institutions for the utilization of loan resources amounting to €970 million. Based on the procedure provided by the Recovery Fund, within 30 working days, the credit institutions will publish calls for expressions of interest to investors who wish to receive a loan from "Greece 2.0" for the implementation of their plans. In addition, an operational agreement has been concluded with the European Investment Bank (EIB) to raise up to €5 billion out of a total of €12.7 billion, as well as a corresponding agreement with the European Bank for Reconstruction and Development (EBRD) for co-financing of private investment. €600 million will soon be disbursed. to the institutions concerned. The Recovery Fund loan resources that have been allocated so far are those raised last year. An additional €1.85 billion is planned for this year. in loan funds, which will be allocated to the above categories of credit institutions.

Regarding the regular state financing of investments, through the Public Investment Program, in the period January-November its aid reached €7.8 billion, far exceeding the relevant target in the 2021 Budget (€5.7 billion), but falling short of the corresponding capital disbursements the year before last year (€8.4 billion). However, a significant part of the expenditure in the eleven months, approximately €2.7 billion or 34.6%, was related to pandemic aid, mainly in the form of a repayable advance (€1.1 billion) and SME aid which affected by COVID-19 (€741 million). Excluding these, the expenditure of the PIP



amounted to €5.1 billion in the eleven-month period. Therefore, they were below the target in last year's budget. Taking into account the dynamics of the provision of funds through the PIP until November, its particularly high payments in the last month of each year, as well as the fact that the Programming Period 2014-2020 is nearing its completion, it is estimated that the support of investment projects through PIP was formed in the whole of last year close to its level in 2020 (€6.37 billion). For the 2022, the Preliminary Draft of the State Budget foresees the allocation of resources amounting to €7.8 billion through the PIP. These do not include Expenditure under the Recovery and Sustainability Plan, as well as emergency interventions due to the health crisis. Next, a stronger contribution of regular public investment to investment activity is expected.

Regarding the developments in the field of privatizations-concessions, the strong uncertainty in the first half of last year about the dynamics of the pandemic had a negative impact on the activity of HRDH and on investment interest. Although several tender procedures were started and completed two very important ones (Egnatia Odos, DEPA Infrastructure), nevertheless the revenues from privatizations that took place in 2021 are those that come from Hellenic SA, Golf-North Afandou and the granting of rights to use radio frequencies. In total, it is estimated in the 2022 Budget that they reached €625.7 million, corresponding to 42.6% of the relevant target for 2021. Subsequently, the low impact of privatizations on investment activity intensifies. In the new year, the procedures required for the formal completion of the tenders for Egnatia Odos and DEPA Infrastructure will be completed and the corresponding prices will be collected. These are the most important components of the privatization revenue target in 2022 of €2,151 million. (91.7% of the target). Given the number of ongoing actions since last year, combined with some new ones planned this year, it is considered that the target should include some of them and be higher.

Taking into account for the realization of macroeconomic forecasts mainly the recent and possible developments regarding the COVID-19 pandemic, e.g. the recent rapid spread of the new mutation and its impact on epidemiological data, the rate of increase in vaccination coverage of the population, the faster recovery of the world economy, the largest increase in international tourism, the households in the second and third quarters of last year, will continue at high, but at a slower pace in the last quarter of 2021. The expansion of private consumption will be supported by the sharp de-escalation of unemployment. The large accumulation of savings by households, amounting to almost €15.6 billion since the onset of the health crisis, could fuel the increase in their consumption in the final quarter of last year. Under these effects, it is predicted that the strengthening of private consumption will be in the range of 5.5-6.0%.

In 2022, it is now considered possible that, despite the outbreaks of the pandemic, generalized and strong restrictive measures will not be imposed, as in the past (basic forecast scenario). Subsequently, the economy is expected to operate with the existing, relatively few restrictions, possibly some additional at times. This development will stimulate private consumption so directly, with the continuous, living operation of sectors in which the previous years had been suspended and in which a significant part of private consumption takes place (Retail, Tourism, Catering, Arts-Entertainment, Transport etc.), as well as indirectly, from the expansion of employment and the creation of income in them, as over time their contribution to employment is high. Jobs will be created by most investments, e.g. in industries with high export performance, in Tourism, as well as the largest contribution of the public sector to investment activity (expansion of PIP, Recovery Fund). On the other hand, the increase in private consumption will be halted by the rise in energy prices, especially in the first half of this year, which will gradually weaken.



Inflationary pressures on consumption will be alleviated by interventions to support households (electricity and gas consumption subsidy, increased heating allowance). Much less than last year will be the impetus from emergency support measures due to the pandemic. But the real disposable income of a section of the population will be boosted by the middle of the year by the increase in the minimum wage. Depending on these effects on disposable real income and consumer mood, a further expansion in household consumption is expected to be, by 3.0% to 4.0%.

The alternative scenario is different from the baseline scenario in terms of the impact of health developments, which in this case will be worse. However, no re-lockdown or suspension of a significant part of the economy is expected, nor a ban on entry into the country, but some targeted restrictions. Therefore, there will be no significant obstacles to private consumption, nor will consumer mood be significantly diversified. However, due in part to the warnings of potential adverse developments, companies will make fewer recruitments. The strengthening of investment activity would be milder than the baseline scenario, as well as the expansion of international tourism, mitigating job and income creation by these factors. The rise in prices will also be smaller, which may turn into a slight drop towards the end of the year. In addition, some of the measures to support businesses and households will be reinstated, maintaining a larger part of this year's fiscal stimulus. Subsequently, household consumption expenditure is expected to remain on an upward trajectory, at a slower pace than the baseline scenario (+1.5 - +2.5%).

On the consumption side by the public sector, the expansion of emergency spending due to COVID-19, mainly for staff, ICT infrastructure and equipment, for the supply of drugs, vaccines and tests, etc., is considered to have continued to stimulate consumer demand. in the last quarter of 2021. In addition, emergencies arose to deal with the disasters caused by the large fires of summer, in Evia and Attica. On the other hand, the technical result of their clearly higher level one year earlier, compared to the one in the first half of 2020 (base result), had a restraining effect on the expansion of government consumer spending at the end of 2021. Also, they were not paid to retirees last year retroactively, as in the fourth quarter of 2020. Taking into account the effects of the above factors that affect public consumption, it is expected that the average expansion of last year reached 5.5-6.0%.

The expected continuation of the pandemic in 2022 with some outbreaks, will maintain a large part of the needs it creates in logistics. However, this year it is planned to expand employment in the public sector, with 20.6 thousand recruitments and appointments. Especially in the first half, staff costs will be boosted by those due to the recruitment of 11.7 thousand primary and secondary teachers in the third quarter last year. The increase in employment will mitigate the reduction of public spending, with the result that their decline will be in the range of 2.5-3.5%. If there is a strong recovery of the pandemic, which will lead to some strong restrictive measures, which include corresponding support interventions, the relevant needs will be higher than the baseline scenario, therefore the reduction of consumer revenues will be less (-1.0 to -2.0%).

In terms of investment, the high corporate bank lending from 2020, which is expected to continue this year at a much lower rate, has already made it possible for a large number of companies to make investments. As long as public health protection measures remain around current levels, possibly with temporary small fluctuations, pandemic caution will not recover significantly, favouring the implementation of many of these investment plans. Companies from Manufacturing activities are considered the most likely to expand their investment activity. The strong recovery of international tourism in 2021, which under the assumptions of the basic macroeconomic scenario will continue and escalate this year, will





revive investment activity in this sector. This will also apply to the renovation of real estate for Airbnb. The industry will make more investments in the case of the alternative macroeconomic scenario, however these will be less and will be realized in areas of the country with strong tourism recovery last year and signs of its continuation this year.

The completion or significant weakening in 2022 of the positive effects of emergency support interventions due to the pandemic will be offset by the resources available under the Recovery and Resilience Plan (Greece 2.0), in combination with the domestic resources that will be leveraged for the projects which will be considered eligible for support. 109 projects have already been included in the Recovery and Resilience Fund (RRF) for implementation, with a budget of €6.11 billion. The advance payment of the funds corresponding to Greece has been disbursed and at the end of December a request for payment was submitted to the European Commission for their first instalment, amounting to €3.56 billion. These funds are the expected revenue for the new year. On the aid side, the relevant budget provision reaches €3.2 billion. As noted in the macroeconomic scenario cases, the implementation of the Recovery Plan is considered to be largely independent of health developments, as the relevant procedures, both domestically and at European Commission level, are not affected by them. Therefore, investment support through the Recovery Fund will depend on the effectiveness of the actors involved, domestically and at the level of the European Commission.

Following the small lag in the implementation of the EDP in the eleven months of last year, it is estimated that its total expenditures in 2021 were close to their level in 2020 (€6.37 billion) and lower than the target (€6.75 million). Taking into account the higher than for 2021 aid target of the PDE for this year (€7.8 against €6.75 billion), the fact that the NSRF 2021-2027 starts, but also the experience of implementation of the program in the past, it is estimated that Its expenditures will increase slightly in 2022, to around €7 billion, providing correspondingly greater support to investment activity.

The large-scale implementation of the privatization-privatization program in 2020, which continued more leniently last year, due to the effects of the pandemic, will result in a small contribution to investment activity this year as well, given the long maturation period required for this scale of investment. However, the recent completion of the concession of Hellinikon, Egnatia Odos, DEPA Infrastructure, HEDNO, creates very important medium-term prospects for investments, economic activity in general, as well as for employment.

Taking into account these effects, it is estimated that the recovery of investments last year was in the range of 10-12%. In 2022, will be added to last year the effects primarily of the utilization of resources from the EDF and the clearly higher than expected growth of international tourism, which will escalate further. Thereafter, investments this year will expand in relation to 2021 between 20-23%. A further escalation of restrictive measures will moderate to a small extent the rise in investment activity, in the region of 15-18%.

In the external sector of the economy, in the field of exports, the strong dynamics of exports of services, mainly due to the recovery of international tourism, is the one that mainly determined the change in total exports last year and will probably have the same importance in 2022. The first data from the bookings for 2022 are very positive, as in October they significantly exceeded those of 2019. This dynamic also favours the provision of international transport services. In the event of a significant escalation of protection measures, e.g. during winter or early spring, the increase in tourist traffic will be temporarily mitigated. As far as exports of goods are concerned, their significant strengthening will continue to be supported by the strong recovery in the Eurozone. The



rise will be mitigated by the sharp escalation of prices of energy goods and other commodities, mainly in the last quarter of 2021 and the first of the new year. Subsequently, their gradual weakening is expected, which in the case of the alternative scenario for the new year, may lead to deflation in the fourth quarter. Taking into account the mostly positive trends in the factors presented and related to export demand, it is estimated that in 2021 the increase in total exports amounted to 19-21%. Its continuation next year will take place at a slightly milder pace in the baseline scenario, in the range of 12-14%. Should there be a "resurgence" of the health issue and expansion of measures, the increase in the new year will be slightly lower than in the baseline scenario, in the range of 8-10%.

The strengthening of domestic demand, as well as exports of products in 2021, had a strong growth footprint on product imports. In the alternative to imports of products, imports of transport services are strongly supported. These trends are estimated to have continued until the end of 2021 and will largely persist in 2022. They may be affected on both sides of imports by the strong rise in international prices of energy products and commodities. Domestic demand for travel services seems to have strengthened particularly strongly last year, with the increase escalating in the fourth quarter, as predicted in the previous IOBE report on the Greek economy. This trend is expected to de-escalate at the beginning of this year, due to the scepticism about the evolution of the new mutation. Taking into account the above factors, it is predicted that imports expanded last year by 14% to 16%, an increase which will show a slowdown this year, in the area of 11-13% under the baseline scenario. Their reinforcement will be smaller under the alternative development scenario (7.5-9%).

From the process of estimating the trends in the components of GDP this year and next year, corresponding forecasts for the change of the domestic product emerged. According to them, in 2021, in the last quarter of which no general restrictive measures were imposed, the growth of international tourism was higher than expected, but the escalation of inflation was much stronger, and the inflow of Recovery Fund resources was lower than the target in Budget of 2021, the Greek economy grew at a rate in the range of 9.0-9.5%. In 2022, under similar health conditions, which will favour the further significant escalation of tourism and the continuation of the strong growth of the Eurozone, with a boost in investments from the Recovery and Sustainability Fund, but also far fewer interventions to support businesses and households than in 2021, the strong recovery will continue, at a rate of 4.5-5.0%. In case of imposition of some important restrictive measures due to severe deterioration of all epidemiological data, slower recovery of the Eurozone and tourism, but also milder inflation, the GDP growth rate will slow down in the region of 2.5-3.0%.

### **State Budget 2021: achievement of targets in the period January-November, due to slight cost containment**

According to the state budget implementation data, in the period January-November this year, its deficit reached €12.3 billion, against a deficit target of €13.4 billion in this period and a deficit of €18.3 billion a year ago. The primary balance of the State Budget during the same period was in deficit, by €7.9 billion, compared to a deficit of €13.7 billion a year ago and against a deficit target for the same period of €9.0 billion. The overshooting of the target came mainly from the expenditure side of the State Budget. Specifically, they lagged by €803 million against the relevant target, resulting in €60.7 billion. This development is mainly due to the restraint of transfers by €477 million and the expenditures of the Public Investment Program by €145 million.



The net revenue of the State Budget exceeded the relevant target by €326 million, almost exclusively from most tax revenues, by €784 million. These came mainly from the most income tax receipts, by €397 million. On the other hand, the transfer income was €374 million less.

## State Budget 2022

According to the Explanatory Report of the Budget for 2022, the primary result of the General Government this year according to the Enhanced Surveillance methodology will be in deficit, by €2.30 billion or 1.2% of GDP, against a deficit of €12.8 billion or 7.3% of GDP last year. The primary balance will be in deficit and according to ESA, by €2.68 billion or 1.4% of GDP, from a deficit of €12.35 billion or 7.0% of GDP in 2021. The overall balance of the State Budget is projected to be in deficit in 2022 by €10.17 billion, or 5.4%, from a deficit of €19.9 billion or 11.2% of GDP this year. The reduction of the deficit of the State Budget is expected to come primarily from a reduction of primary expenditure (excluding interest payments) by €5.24 billion, mainly from fewer transfers (-€8.12 billion) and fewer purchases of goods and services (+€825 million), despite the increase of appropriations under allocation by €4.3 billion, from a transfer of Recovery Fund expenditure from 2021 to the current year. Net revenues are expected to increase by €4.5 billion, primarily from more taxes on goods-services (+€2.27 billion) and income taxes (+€1.3 billion). Given the projected deficit in the State Budget, the smallest deficit at the General Government level will come from the surplus of legal entities (€1.95 billion from €2.79 billion last year) and the surplus of Social Security Institutions (€960 from €392 million in 2021).

## Unemployment decline in 2021 mainly from jobs in export-oriented sectors and the public sector. Higher employment in these sectors in 2022, as well as in consumer goods sectors.

The continuation of the strong growth of GDP in the third quarter was accompanied by a significant expansion of employment, by 4.9% or 191.5 thousand, clearly stronger than in the previous quarter. In fact, in contrast to the second quarter, this trend came mainly from a decrease in the number of unemployed (by 73.6% or 141 thousand), not from the reduction of the inactive population, which expands the workforce. Subsequently, the decline in the unemployment rate compared to the corresponding period a year earlier escalated sharply in the July-September quarter, to 3.2 from 0.9 percentage points in the previous quarter. Thus, the unemployment rate stood at 13.0%. This level is similar to that in the third quarter of 2010, when the domestic adjustment process began.

At the sectoral level, most jobs compared to the third quarter of last year were created in the Accommodation-Catering Services (+49.1 thousand or +12.4%), in the Primary sector (+39.1 thousand or +9 , 7%), in Public administration-defence-compulsory social security (+37.5 thousand or +15.5%) and in Manufacturing (+31.3 thousand or +8.4%). On the other hand, the largest decrease in jobs in the third quarter was recorded in Education (-12.2 thousand or -4.0%), in Financial-insurance activities (-7.5 thousand or -8.5%) , in the Wholesale-retail trade (-6.0 thousand or -0.8%) and in the Administrative-supporting activities (-3.4 thousand or -4.0%).

In the field of trends in employment and unemployment, the developments related to the health crisis were the most decisive ones last year. If this factor does not show new fluctuations in 2022, it will be followed in terms of the importance of their impact on the



labour market by the strengthening of consumer demand, the further strengthening of Tourism and investment, while the impact of high inflation will be smaller.

In the field of the expected trends in employment and unemployment, the strong new outbreak of the pandemic towards the end of last year led to the adoption of targeted new measures for the protection of public health, which concern significantly fewer activities than in similar circumstances in the past (Catering, Entertainment). No restrictions have been imposed on movement within borders and from abroad. Subsequently, most companies in the Retail, Tourism and Catering sectors, which were severely affected by the pandemic a year ago, continue to operate, with positive effects on their employment, and the normalization of socio-economic conditions as well as no lockdown has been imposed for more than nine months. These conditions are supposed to be maintained throughout the winter in the basic scenario. The strengthening of the consumer demand will be mitigated at the end of 2021 and at least in the first months of 2022 the strong inflation.

In the case of the alternative scenario, the restrictions will be extended to other sectors, with a high share of employment (e.g. Retail), as well as for vulnerable social groups. More broadly, companies will be less recruited, mainly due to caution in the face of potential adverse developments. In addition, consumer demand will increase more slowly, as consumer sentiment will weaken.

But inflation will also be milder, turning into deflation during the second half of the year, so real income will be less constrained.

The faster-than-expected faster recovery of the Eurozone last year boosted export demand more than expected, supporting employment in export sectors, mainly industry. The equally strong growth of the Eurozone projected for this year, as long as the evolution of the pandemic does not lead to strong restrictions, will continue to provide a boost to exports and employment. Otherwise, GDP growth in the Eurozone is expected to decelerate mildly, as is the rise in demand for Greek exports.

The increase of investments, in export sectors of industry and in Tourism, but mainly utilizing the resources of the Recovery Fund, as well as from the start of investments in significant privatizations (e.g. Greek), will significantly stimulate the creation of jobs this year, mainly in Construction.

An expected development whose impact on employment is premature is to change the minimum wage, which is likely to be positive. Its effects will depend on the extent of its change. In anticipation of this development and as views are heard in the public debate on a significant increase, a part of the enterprises will postpone part of its decisions on the number of its workforce, especially those in sectors with a high proportion of unskilled labour.

Taking into account the above effects on the labour market, the estimate for the unemployment rate in 2021 is revised for the better, in the region of 14.9%. As far as 2022 is concerned, in the baseline scenario the unemployment rate is expected to be in the region of 13.5%, while in the alternative scenario in the range of 14.0%.

**Consumer prices rose 1.2% last year, from a strong increase in energy costs. Continued inflationary pressures in 2022, with gradual weakening.**

In the whole of 2021, there was on average a significant increase in prices compared to a year ago, with the average rate of change of the National Consumer Price Index (CPI)



reaching 1.2%, from a decline of 1.2% the year before. This rise was the largest in the last nine years. In December 2021 the domestic CPI increased significantly, to 5.1% from 4.8% in the previous month. However, in the same month last year it fell by 2.3%, deflation that was the strongest in almost the last six years, since February 2015. Therefore, the significant price rise in November and December 2021 is due to a 'baseline effect', due to the low level of the GCPI a year earlier.

Regarding the trends in the categories of products and services included in the CPI, the largest increase last year was recorded in Housing and Transport, reflecting the significant increase in energy prices by 5.3% (from a weakening of 3.8% the year before last). and 4.2% (from a decline of 5.3% in 2020). Noticeably milder was the change in Nutrition, where there was an increase of 1.4% as in 2020, and in Education, with 0.3% from 0.4% the year before last. On the other hand, the sharpest price decline was recorded in Communications, by 2.1%, following a weakening of 1.8% a year earlier. In Other Goods and Clothing-Footwear the price drop reached 1.5% and 2.0% respectively, from a milder decline of 1.3% and a mild rise of 0.9% in 2020.

In terms of the expected trends in the key components of the Consumer Price Index in 2022, on the demand side, unless strong restrictive measures return, sectors in which a significant part of domestic consumption takes place and which were suspended in the fall of 2020 and in the winter of 2021 (Retail, Catering, Tourism), will operate largely in pre-crisis conditions and will increase their employment. Combined with job creation in extroverted industry, as well as more investment, it will increase domestic disposable income, stimulating consumer demand and then prices. But if there is another pandemic recovery next year, increases in economic activity, employment and income will be milder. However, strong demand on demand is not expected, as protection measures are likely to be clearly more targeted, in terms of the sectors and social groups concerned. It is too early to predict the impact of the forthcoming increase in the minimum wage on employment and subsequently on domestic disposable income and consumption, as the extent of the increase is not known, but is expected to be positive.

On the energy front, a slight reduction in cuts in daily oil production by OPEC+ countries (including Russia) is not enough to offset the rapid rise in global warming demand. The most important developments in the new year are expected from producer countries outside OPEC+. After all, towards the end of 2021, the largest increase in daily production came from the USA, which are successively disposing of part of their strategic stocks. Similar actions are being carried out by China, India, South Korea, Japan and the United Kingdom. On the oil demand side, the stabilizing or declining effect on prices from the rapid spread of the new mutation is estimated to be temporary. After all, in 2022 overall, although the global economy will be slower than last year, it will remain strong. In this context of developments, global oil consumption is expected to expand to 2019 levels. Therefore, no de-escalation of energy costs is expected and a new small increase is now likely this year.

As regards the effect of indirect tax interventions, the VAT reduction in force since June last year for certain goods and services was extended until the first half of 2022. However, as a year has now passed since its implementation, no further substantial effect on prices is expected. The VAT deduction on some other goods and services (gyms, dance schools, etc.), will have a limited deterrent effect on price increases, as it concerns a small part of consumer spending. Slightly stronger is expected to be the result of the reduction of the mobile subscriber fee. Overall, therefore, indirect taxation will act as a mild deflationary effect this year.



Taking into account the above possible trends in the key components of the domestic Consumer Price Index, as well as its rate of change in 2021 (1.2%), under the baseline scenario of macroeconomic developments for 2022, the General Consumer Price Index is expected to strengthen again. , in the area of 1.5-1.8%, due to the new, milder rise in energy prices than last year and the further strengthening of demand. If the protection measures are escalated, with a targeted nature, and without imposing a lockdown (alternative macroeconomic forecast scenario), in combination with the expected trends in the other factors affecting the domestic CPI, it is predicted that the average annual rate of change will be 0 , 7% to 1.0%.

### **Special study: The macroeconomic impact of the reform of supplementary pensions**

This special study of IOBE evaluates the effect of the reform of supplementary pensions introduced by law 4826/2021 on macroeconomic variables and fiscal figures, both short-term and long-term, based on alternative scenarios, under a series of assumptions. The implementation of the reform is estimated to lead to a significant increase in GDP and employment domestically, compared to the level at which economic activity would be without the implementation of the reform. The implementation of the reform has direct budgetary costs, which, however, are offset by the beneficial effects of boosting economic activity and boosting public tax revenues over the medium term. The reform does not worsen the adequacy of pensions compared to the "no reform" scenario.





## 2 ECONOMIC ENVIRONMENT

### 2.1 Trends and Prospects of the Global Economy

#### A. The Global Environment

- The global economy is estimated to have rebounded at a rate of 5.6% in 2021, marginally lower than expected earlier last year. Growth in the region of 4.5-5.0% is forecast for this year.
- Inflation has strengthened to multi-year high levels, mainly due to the inability of the global supply chain to meet increased demand and the strong rise in energy prices.
- The speed of the recovery varies from country to country depending on the extent of budget support, dependence on vulnerable sectors, but also the vaccination coverage of the population.
- Sources of uncertainty and challenges remain, related to the resilience of strong inflationary pressures and the expansion of public debt worldwide, following the extensive pandemic support measures.

The global economy continues to recover, along with international trade, employment and incomes. Although the spread of the COVID-19 pandemic has not been brought under control, with a new mutation of the coronavirus recently spreading rapidly, escalating the relative uncertainty again, its economic impact has weakened. In addition to the progress in vaccination, the non-reintroduction of strong restrictive protection measures in the vast majority of countries since last spring is contributing to this development.

The economies of the OECD countries grew at an annual rate of 4.6% in the third quarter of 2021, following an increase of 13.2% in the previous quarter and a contraction of 3.7% in the third quarter of 2020. The annual GDP growth rate in the most developed economies (G7) stood at 4.1%, compared to 12.9% in the previous quarter and down 4.0% in the corresponding quarter of 2020. The OECD's 20 largest economies grew at a rate of 4.7% in the third quarter of last year, up from 11.8% in the previous quarter and a 1.9%



recession in the third quarter of 2020. Trends at country level, among the most developed, the largest change in the annual rate of GDP compared to the previous quarter was in the United Kingdom (+6.6% from 23.6%), France (+3.3% from +18.8%) and Italy (+17.0%, versus +3.8%). In the major Asian emerging economies, China's economy grew in the third quarter of 2021 at a rate of 4.9% from 7.9% a quarter earlier, while according to recent data, the Chinese economy grew by 4.0% in the October-December quarter. India's economy saw a strong recovery, by 8.5%, from 19.5% in the second quarter of 2021. In Latin America, the economies of Argentina and Brazil recovered in the July-September period at rates of 11.3% and 4% respectively, from growth of 19.7% and 12.2% in the previous quarter.

Recovery rates continue to vary significantly across countries, reflecting health conditions, the policy mix, but also different degrees of dependence on pandemic-vulnerable sectors (e.g. tourism).

The developments around the health issue that support the improvement of economic and social conditions are the widespread availability of vaccines, the increased ability to perform diagnostic tests (e.g. self-tests) and the progress in the discovery of drugs against the novel coronavirus. Moreover, the adaptation to the conditions of the pandemic by businesses and households has helped the global economy to perform better despite any restrictive measures in place.

Vaccines remain effective against new COVID-19 mutations. However, limited access to them from the poorest countries and the reluctance of a significant proportion of the population in many developed countries to be vaccinated poses a risk of new, more dangerous mutations prolonging the pandemic.

A recent major concern about the speed of the economic recovery is the rise in international prices of a multitude of raw materials for goods and services. A strong recovery in demand, loose financial conditions and supply-side disruptions have brought about these significant increases. Moreover, this threatens to delay the energy transition to cleaner forms of energy.

Price pressures are expected to start to abate in most countries in 2022, as the services sector recovers and the supply of goods manages to match the high demand. A major factor in the global recovery path remains access to vaccines. It is estimated that most developing countries will gain wide access to vaccines by the end of 2022. As the vaccination process increases globally, the cross-border restrictions due to the coronavirus are expected to be lifted by the end of the year. Also, although fiscal pandemic support measures are gradually being withdrawn, policymakers are expected to continue to support economic activity with appropriate policies, while private consumption will return to pre-pandemic levels.

According to the OECD, the growth rate of global GDP in 2021 stood at 5.6%, while growth of 4.5% is forecast for the following year. Table 2.1 shows the annual changes in GDP in 2020 and the recent OECD estimates and forecasts of its annual changes in the years 2021 and 2022, in the global economy and in selected developed and developing countries.

The following is an analysis of recent and expected trends in the economies of major countries and associations of countries for 2021 and 2022.

Among the most developed countries, the U.S. economy in the third quarter of 2021 saw an annual growth rate of 4.9% from 12.2% in the previous quarter and a recession of 2.9% in the third quarter of 2020. Following the explosion of coronavirus cases and supply-side shocks that caused growth to moderate in the third quarter of 2021, recent high-





frequency data suggest an acceleration in economic activity, with private consumption and industrial production as the main drivers. Growth of 5.6% is estimated for the whole of 2021. As vaccination coverage remains patchy within the country, the risk of local outbreaks of the virus remains, delaying the full resumption of economic activity. Government investments in infrastructure in 2022 and the decline in household savings are expected to offset the significant fiscal adjustment that inevitably takes place in 2022. Thus, a growth rate of 3.7% is forecast for this year.

**Table 2.1**

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

Economy	2020	2021		2022	
		Forecast	Difference from previous forecast *	Forecast	Difference from previous forecast *
World	-3.4	5.6	-0.2	4.5	0.1
Developed	-3.4	5.6	-1.3	3.7	0.1
Developing	-4.6	1.8	-0.8	3.4	1.4
USA	-5.3	4.8	-1.3	3.9	0.1
Japan	-9.7	6.9	-0.3	4.7	-0.8
Canada	-6.5	5.2	0.9	4.3	-0.1
United Kingdom	-4.9	2.9	-0.4	4.1	-0.3
Eurozone	-8.0	6.8	1.0	4.2	0.2
<i>Germany</i>	-9.0	6.3	1.8	4.6	0.2
<i>France</i>					
<i>Italy</i>	-3.0	4.3	1.1	2.4	-0.8
	1.8	9.0	3.3	3.3	-0.1
Russia	2.3	8.1	-0.4	5.1	-0.7
Turkey	-7.3	9.4	-0.5	8.1	-0.1
China	-4.4	5.0	1.3	1.4	-0.9
World trade	-8.4	9.3	1.1	4.9	-0.9

\* \* Difference in percentage points from previous OECD Economic Outlook (MAY 2021) and Global Economic Prospects, World Bank, June 2021 for Russia

Sources: Economic Outlook, OECD, December 2021 and Global Economic Prospects, World Bank, January 2022 for Russia

The Eurozone economy grew at a rate of 3.9% in the third quarter of 2021, from growth of 14.4% in the previous quarter and from a contraction by 4.1% in the same quarter of 2020. The dynamic recovery that is underway is expected to continue, despite the recent outbreaks of coronavirus which create uncertainty in the short term. As pandemic restrictions are lifted, economic activity will be supported by strong consumption by households and higher investment, also due to the allocation of resources from the European Recovery Fund to member countries. This will also allow for the gradual tightening of fiscal policy, in order to address the increased public debt accumulated during the pandemic. For 2021, a recovery of 5.2% is estimated, higher than predicted earlier last year, which will continue this year at a slightly milder pace (+4.3%), bringing GDP back to pre-pandemic levels.



In the UK, GDP strengthened by 6.6% in the third quarter of last year, from an increase of 23.6% in the previous quarter and a contraction of 6.4% a year ago. For the whole of 2021, a strong growth of 6.9% and a return to pre-pandemic levels from 2022 are estimated, with a growth of 4.7%.

In Japan, GDP grew by 1.3% in the third quarter of 2021, following a 7.7% increase in the previous quarter and a contraction of 5.4% a year ago. The increase in coronavirus cases observed during the summer months and the continuing health constraints restrained economic activity. For the past year an estimated recovery rate of 1.8%. The recovery is projected to accelerate to 3.4% this year, as boosting private consumption and the recently announced fiscal support package are expected to boost economic activity.

The current subsection presents recent trends in the economy and economic policy challenges in five developing countries and economic regions, which together produce almost 1/3 of world GDP.

In detail, as mentioned earlier, China's economy recorded an increase in its growth rate in the third quarter of 2021 of 4.9%, from a rate of 7.9% in the previous quarter and 4.9% a year earlier. The rapid recovery in the first quarter of 2021, due to strong exports, did not continue at the same pace in the second half of the year. The bankruptcy of Evergrande, a large real estate company, has caused strife in the country's financial markets and worsened investment in the real estate sector, which is a key driver of China's growth. In addition, the prospects for investment in manufacturing have deteriorated due to ongoing power cuts in a large number of provinces. Monetary policy remains prudent, ensuring sufficient liquidity, but without significant easing, and fiscal policy is restrained in order to achieve the fiscal targets set. Overall, strong growth is estimated for 2021, at a rate of 8.1%, while for 2022 it is projected to slow to 5.1%.

India's economy grew 8.5% in the third quarter of last year, from 19.5% growth in the previous quarter and a 6.8% recession a year earlier. Inflation has remained close to the upper limit set by the country's central bank, but is expected to decline as supply chain disruptions are addressed. Financial markets remain strong, and capital inflows support the country's foreign exchange reserves. For the whole of last year, a strong growth of 9.4% is estimated, which will partially compensate for last year's losses (7.3%) and will continue with a slightly lower intensity next year (8.1%).

Russia's gross domestic product increased by 3.8% on an annual basis in the third quarter of 2021, following an increase of 7.6% in the previous quarter and a decrease of 2.5% in the corresponding quarter of 2020. Overall, in 2021 the Russian economy is estimated to have grown at a rate of 4.3%, while for the current year growth of 2.4% is forecast.

The Turkish economy recorded a growth rate of 8.1% on an annual basis in the third quarter of 2021 from 22.5% in the previous quarter, compared to growth of 5.8% a year earlier. For the whole of 2021, the Turkish economy is estimated to have recovered at a rate of 9.0%, while next year its recovery rate will slow significantly, to 3.3%. The annual inflation rate, according to official data, soared to 36.08% last December, while the Turkish lira's exchange rate is falling sharply (-44.7% and -39.8% against the dollar and the euro in 2021). Nevertheless, the country's central bank cut interest rates by 100 basis points in December, to 14%.

Of the Latin American countries, the Brazilian economy grew by 4% in the third quarter of 2021, from 12.2% in the previous quarter and shrinking by 3.7% in the corresponding quarter of 2020. For 2021, a recovery of 5.0% is estimated, which will continue milder in 2022 (1.4%), covering the losses due to the health crisis.



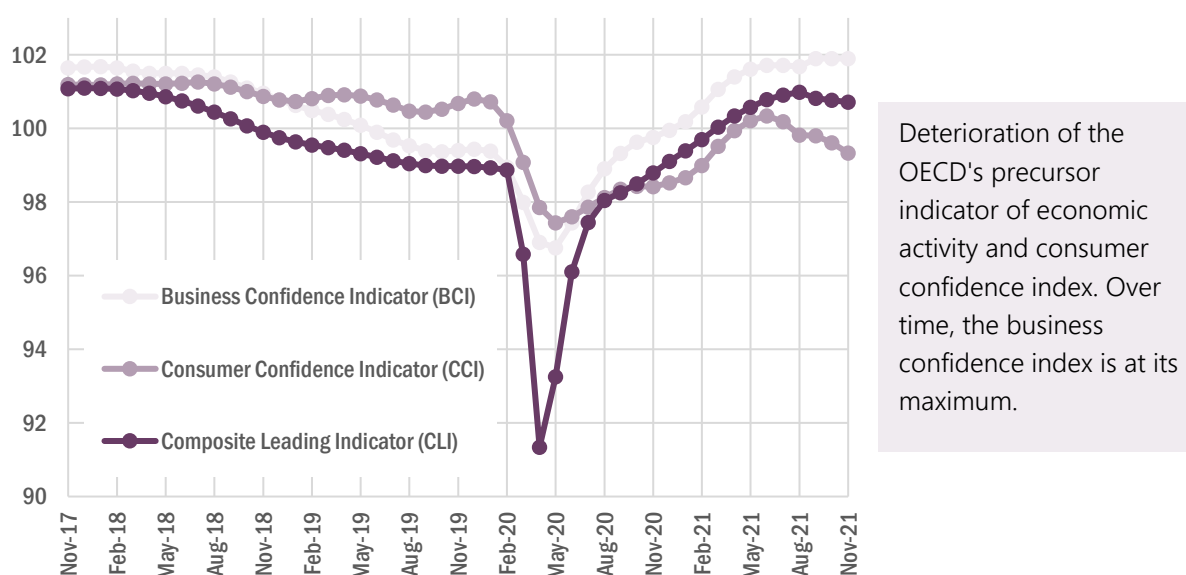
The OECD's Composite Leading Indicator for its member countries has been on a downward trajectory since last September, after a 16-month rise and a three-year high in August. However, it is still above its long-term average. The OECD business confidence index climbed to a record high of 101.9 points last September, where it remains until November. On the other hand, consumer confidence remains weak, with the relevant index falling for the fifth consecutive month in November, to 99.33 points.

Inflation reached a 26-year high in the 38 OECD countries last November (5.8%), mainly due to the inability of the global supply chain to meet the increased demand and the strong rise in energy prices. Price pressure is expected to subside in 2022 and gradually return to the 3% range in 2023.

Higher-than-expected inflation, combined with the gradual strengthening of employment at pre-pandemic levels, is putting pressure on global monetary policy to gradually reduce the support it provides in the medium term, without jeopardizing the recovery process. The way central banks around the world react, under the threat of more persistent inflationary pressures than originally expected, creates additional uncertainty in the financial markets. In most developed economies, monetary policy remains accommodative, as the recovery remains uneven and incomplete, despite exceeding inflation targets close to 2%.

Figure 2.1

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



Source: OECD

In particular, the Fed, noting the rapid recovery of the economy, has begun to restrict asset markets, and intends to use all the tools at its disposal to prevent high inflation. However, the head assured that the increase in interest rates will be done carefully so as not to hurt the growth of the US economy. The ECB has also slowed the pace of bond purchases, a process that will be completed in March 2022, it announced in mid-December. However, it seems more hesitant to raise its key interest rate in 2022.



World trade volume is estimated to have increased by 9.3% in 2021 despite supply chain disruptions and the continuing weakness of trade in services. For the next year, the rise is expected to continue, at a slower pace (4.9%).

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

- Managing the COVID-19 pandemic remains a challenge, especially in dealing with mutations
- Decline in public health protection measures in the European Union in the third quarter of 2021
- Positive GDP growth in the EU and the euro area in the third quarter of 2021, 3.8% and 4.0% respectively
- Decline in the Economic Sentiment Index in both zones in the third quarter
- Marginally positive contribution of net exports to growth in the period July – September in the Eurozone and the European Union
- Euro area growth forecasts of 5.0% in 2021 and 4.3% in the following year (November 2021)
- The European Recovery Fund (NextGenerationEU) has been launched, the ECB's PEPP continues to operate, with asset purchases completed in March 2022

The COVID-19 pandemic and the restrictive measures implemented to protect public health throughout Europe have resulted in disruption of the functioning of the EU economy. At the same time, monetary and fiscal policy interventions have been taking place since the onset of the pandemic to mitigate the impact of protection measures.

During the second half of 2021, the emergence of two mutations, Delta and Omicron, resulted in comparatively smaller restrictions on economic operation compared to the previous period. The effects of the pandemic in 2020 and the first 6 months of 2021 were strong on demand, supply chains, labour supply, industrial production, prices, trade and capital flows. The effects of the health crisis were also determined by the fact that the European economy at this time was relatively vulnerable to a shock, as it had already experienced a significant slowdown in 2019, mainly due to certain structural problems in its industries. In the third quarter of 2021, the global economic recovery continued. However, the rapid spread of the Omicron mutation and the threat of new mutations have raised uncertainty about how quickly the pandemic can be overcome.

Economic policy-making faces significant multidimensional challenges such as sluggish employment growth, rapidly accelerating inflation, food insecurity and climate change. Especially in terms of inflation, if supply constraints prove to be persistent, then it is expected that the increase in consumer prices will be passed on and that the increase in inflation will exceed the forecasts so far. The effects of the pandemic this year and next will depend mainly on the occurrence of mutations and their effects on epidemiological data, progress on vaccination and its effectiveness, in combination with medical treatments, in halting the COVID-19 pandemic.

In order to mitigate the effects of the health crisis, the European Commission has since its inception proceeded with the implementation of policy, both monetary and fiscal interventions. The most important of these are the European Recovery Fund (NextGenerationEU), with a budget of €1.85 billion and the enhanced EU budget for the period 2021-2027, close to €1.05 trillion. Recent developments in the ECB's COVID-19 policy actions are presented at the end of the current subsection of this bulletin.



Specifically, in terms of economic developments in the third quarter of 2021 in the European Union and the Eurozone, they showed growth, by 4.0% and 3.8% respectively, compared to a recession of 3.9% in the EU and 4.0% in EZ a year earlier. According to the European Commission's recent forecast report<sup>1</sup>, following a recession of 6.4% in 2020, growth in the euro area is expected to reach 5.0% for 2021 while a milder recovery of 4.3% is forecast for 2022. For the European Union, a recession of 5.9% is forecast in 2020, growth of 5.0% in 2021 and a partial slowdown in 2022, to 4.3%.

Growth in the economies of the European Union in the period July-September 2021 resulted from the increase in domestic demand, with the contribution of investment reaching 1.9% of GDP, from a larger contribution in the previous quarter (3.7%). The contribution of consumption reached 1.6 percentage points, compared to a larger contribution of 6.3 p.m. of GDP, in the second quarter of 2021. The impact of net exports on GDP change in the third quarter of 2021 was marginally negative, by 0.1%, from positive and equal to 2.0% in the previous quarter. Growth in the economies of the European Union in the period July-September 2021 resulted from the increase in domestic demand, with the contribution of investment reaching 1.9% of GDP, from a larger contribution in the previous quarter (3.7%). There was also a positive contribution of investment compared to the third quarter of the previous year (1.7% of GDP), of less intensity compared to the previous quarter (3.7% of GDP), while a positive effect of consumption of 1.3 pp. was observed, compared to a high impact in the second quarter of 6.5 pp. Moreover, in this quarter, the contribution of net exports to the Eurozone was positive, by 0.2%, while a quarter earlier it was 2.4%.

The structure of the components of GDP on the expenditure side remains similar in the EU-27 and the euro area, with consumption representing 74.5% and 74.6% of GDP respectively, investment making up 22.1% and 21.5% of GDP, exports 51.5% and 50.2% and imports 48.2% and 46.2% of GDP.

Stronger growth was in Croatia in the third quarter of the year among EU countries (annual changes in seasonally adjusted data), at a rate of 15.5%. They are followed by Greece (13.4%), Ireland (11.4%) and Malta (9.8%). The countries with the lowest growth were Slovakia (1.3%), France (3.3%) and the Czech Republic (3.3%). There was no recession in any country. At a 12-month rolling level, Greece experienced a positive growth rate of 5.2%, well above the average performance in both the EU and the EA (3.2%). The country with the lowest growth, on a twelve-month basis, was the Czech Republic (1.0%), followed by Bulgaria (1.8). In contrast, the country with the highest positive growth rate in the EU was Ireland (12.0%), followed by Croatia (6.1%) and Luxembourg (6.0%).

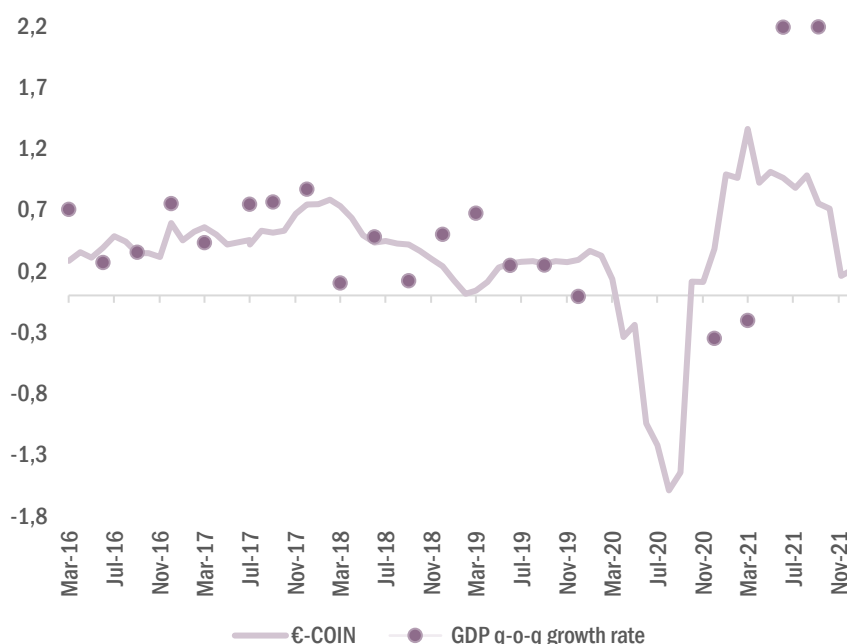
Figure 2.2

Monthly €-COIN Index & Eurozone GDP\*

<sup>1</sup> European Economic Forecasts, Autumn 2021, European Commission, November 2021



The €-COIN index fell in the fourth quarter to 0.36 points, from 0.87 points a quarter ago and 0.20 a year ago



\*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

In terms of economic climate trends and key precursors to economic activity in the Eurozone and the European Union, the €-COIN index fell in the fourth quarter of 2021 to 0.36 points, from 0.87 points in the previous quarter, while it was higher than fourth quarter of the previous year (0.20). On the other hand, the monthly performance of December 2021, at 0.21 points is lower than last December 0.38 indicating the decline in GDP.

The European Commission's Economic Sentiment Index for the EU and the Euro area decreased in the period October – December of last year compared to the previous quarter, by 0.8 and 1.0 points respectively. Compared to the same period last year it was in the fourth quarter 25.6 and 25.8 points higher. Specifically, the index stood at 116.2 and 117.2 points respectively. Last December, the Economic Sentiment Index stood at 114.5 points in the EU-27 and 115.3 points in the euro area, at a lower level than in the previous month. On the other hand, it stood 22.8 points higher than a year ago in both the EU and EA.

Among the largest EU economies, in France the index in the fourth quarter of this year increased compared to the previous quarter (1.7 points difference), while compared to the fourth quarter of 2020 the index was 24.1 points higher. A decrease compared to the third quarter of the previous year was observed in Germany, by 2.1 points, where the index was 22.1 points higher than in the fourth quarter of 2020. In Italy the index increased marginally by 0.6 points compared to the previous quarter and strengthened by 34.5 points compared to the corresponding quarter of 2020. Finally, in the period October-January 2021, the Economic Climate Index in Greece increased compared to the previous quarter by points, to 112.0, a level that is about 21.4 points higher than a year earlier (90.6 points).

Table 2.2



Economic Sentiment Index EU-28 &amp; Euro Area (av. 2000-2020=100)

Month	Jan - 20	Feb - 20	Mar - 20	Apr - 20	May - 20	June - 20	Jul - 20	Aug - 20	Sep - 20	Oct - 20	Nov - 20	Dec - 20
EU-27 (2020)	102.5	103	94.5	67.1	69.4	77.2	83.7	88.4	91.5	91.7	88.6	91.6
Euro area	102.6	103.4	94.1	67.8	70.2	78.1	84.2	89.1	92.3	92.5	89.3	92.4

Μήνας	Jan - 21	Feb - 21	Mar - 21	Apr - 21	May - 21	June - 21	Jul - 21	Aug - 21	Sep - 21	Oct - 21	Nov - 21	Dec - 21
EU-27 (2020)	91.1	93.1	99.9	109.9	114	117.1	118	116.6	116.6	117.6	116.6	114.5
Euro area	91.5	93.4	100.9	110.5	114.5	117.9	119	117.6	117.8	118.6	117.6	115.3

Source: European Commission (DG ECFIN), December 2021

More complete information on the trends in the figures that make up the GDP of the Eurozone and the EU in the first quarter of 2021 and the other macroeconomic variables, as well as on the estimated trends in the near future is provided in the continuation of this subsection. The forecasts for the period 2020-2021 are presented, as they appear for the EU and the Eurozone in the latest forecast report of the European Commission.

Analytically, according to Eurostat data for the third quarter of 2021 (annual changes in seasonally adjusted data), private consumption in the European Union increased by 3.0%, while in the previous quarter a significant increase of 12.0% was recorded, while in corresponding period of 2020 its trend was downward (4.3%). In the Eurozone, household consumption increased by 2.5%, from a higher increase of 12.2% in the previous quarter, while a year earlier it decreased by 4.6%. The European Commission last November forecast a 3.5% increase in total household consumption in the EU in 2021 and a larger recovery in 2022, by 5.5%. For the Eurozone, it forecast a rise in private consumption of 3.2% last year and an expansion of 5.5% next year (Table 2.3). At country level, private consumption in Germany was 1.6% higher in the third quarter, up from 6.6% in the previous quarter and lower in France (0.7%). In Italy it strengthened more, by 4.0%, from a much higher increase of 14.2% a quarter ago, while in Spain it increased by 2.7% when last quarter the increase was 23.1%. In Greece, private consumption increased by 8.6%, from an increase of 13.1% in the previous quarter, while in the same period in 2020 there was a decrease of 9.0%.

Public consumption in the EU and the Eurozone increased in the third quarter of 2021 by 2.7% and 2.6% respectively, from aid of 7.3% and 7.8% a quarter before. In the same quarter of 2020, public consumption increased by 2.4% in the EU and 2.8% in the Eurozone. For 2021, the European Commission expects the growth of public consumption in the EU to escalate, mainly due to the measures to deal with the effects of the health crisis, to 3.4% from 1.3%, while for the Eurozone it estimated a similar enlargement (3.6%). Next year the increase in public spending will slow down, to 0.8% and 0.9% in the EU and EZ respectively, by completing most of the measures. In the third quarter of 2021 there was an increase in public consumption in Greece by 5.7% compared to a year ago, when it expanded by 5.3%, while in the previous quarter it had shown a similar increase by 5.6%.

Table 2.3





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

	EU			Eurozone		
	2020	2021	2022	2020	2021	2022
GDP	-5.9	5.0	4.3	-6.4	5.0	4.3
Private Consumption	-7.3	3.5	5.5	-7.9	3.2	5.5
Public Consumption	1.3	3.4	0.8	1.3	3.6	0.9
Gross Investment	-6.3	5.5	4.8	-7	5.2	4.4
Exports of Goods and Services	-8.5	9.7	7.2	-9.1	9.7	7.3
Imports of Goods and Services	-8.3	8.6	7.1	-9.1	8.2	7.2
Employment	-1.4	0.8	1.0	-1.5	0.8	1.0
Unemployment (% labour force)	7.1	7.1	6.7	7.9	7.9	7.5
Inflation	0.7	2.6	2.5	0.3	2.4	2.2
Balance of General Government (% GDP)	-6.9	-6.6	-3.6	-7.2	-7.1	-3.9
Debt of General Government (% GDP)	91.8	92.1	90	99.3	100.0	97.9
Current Account Balance (% GDP)	2.7	3	3	2.6	3.1	3.2

Source: European Economic Forecasts, Autumn 2021, European Commission, November 2021.

Investment increased in the period July-September 2021 in the EU by 9.2%, from 17.0% in the previous quarter. Similarly in the Eurozone, the increase in investment expenditures was of the order of 8.2%, compared to an increase of 17.0% in the second quarter of last year. In the corresponding quarter of 2020, investments shrank by 8.8% in the EU and 9.5% in the Eurozone. The European Commission forecasts an average increase of 5.5% in 2021 and 4.8% for 2022 in the EU, while it expects an increase of 5.2% and a recovery of 4.4% respectively in the Eurozone. In the third quarter of 2021, investment in Germany increased by 10.6% after a similar increase of 10.0% in the previous quarter, while in Italy there was a significant increase of 14.1%, from a vertical increase of 32.2% in the quarter. April - June 2021. The growth rate of investments in France was at the level of 5.6%, from a sharp increase of 25.8% in the previous quarter. In Greece, investments decreased by 5.0%, compared to a high change of 31.4% in the second quarter of 2021.

Strong growth was recorded in exports of goods and services to the EU (8.7%), which in the Eurozone was slightly higher (9.4%), but stronger growth, by 25.9% in both the previous quarter, and shrinking 8, 2% and 8.9% in the third quarter of 2020. For 2021, the European Commission forecasts an increase in exports to the EU compared to 2020 by 9.7% and an increase in the following year by 7.2%. For the Eurozone expects enlargement of 9.7% for the whole of 2021 and an increase in 2022 by 7.3%. At country level, Germany saw exports increase by 5.6% in the third quarter of 2021, from a much stronger increase of 25.3% in the second quarter of the year. Export support to France in the third quarter of last year was 8.9%, up from 28.8% earlier in the year. In Italy there was an increase of 9.0% from a vertical increase of 39.2%. In Greece there was an extremely significant increase in the third quarter, 48.6%, faster than in the second quarter (26.3%). Exports expanded in Spain, by 14.8%, from an increase of 39.4% in the previous quarter, as well as in Cyprus (24.4%), after an increase of 12.3% in the second quarter of the year.

A large increase in the third quarter of 2021 was recorded in the other part of the external sector. The rise in imports to the EU compared to the previous quarter reached 9.7%, from a positive change of 22.5% a quarter earlier. A similar change was observed in EZ, by



9.7% from an increase of 21.6% in the second quarter of 2020. A year earlier, 8.6% and 9.6% shrinkage had been recorded, respectively. For the years 2021 and 2022, the European Commission has projected for the EU to increase imports by 8.6% and 7.1% respectively. For the Eurozone expects an increase in 2021 by 8.2% and an increase in 2021 7.2%. At country level, in the third quarter of 2021, imports to Spain increased by 12.2%, compared to a sharp increase of 38.9% in the previous quarter. Similarly in France they were on an upward trajectory, at a rate of 4.9%, from an increase of 22.2% a quarter ago, while in Italy there was an increase of 15.0% from a double increase of 29.8%. A positive rate was recorded in Germany (8.7%), after strengthening by 19.5% in its second quarter. In Greece, imports increased by 21.7%, the same as in the previous quarter (23.7%).

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 components of GDP in the Eurozone, the contribution of net exports was marginally positive (0.3%) from higher and also positive in the previous quarter (2.4%). The smallest positive contribution of net exports in the third quarter came from the simultaneous decrease in the contribution of exports to 4.5% in the third quarter from 11.9% in April-June last year, as well as the lesser negative impact of imports, from 9.5% in the second quarter to 4.2% in the following quarter. As already mentioned, the contribution of domestic demand was of the order of 3.6% of GDP, compared to a much stronger positive effect in the previous quarter (12.0%). The tonic effect came mainly from investments, which had a positive effect of 1.7% of GDP in the third quarter of 2021 while in the second quarter their positive contribution was at 3.7 p.p.

Harmonized inflation rose in the third quarter of 2021 in the EU and the Eurozone, recording a rate of 3.1% and 2.8% from 2.2% and 1.8% respectively a quarter earlier. In the third quarter of 2020, harmonized inflation stood at 0.5% in the EU and 0% in the EA. Overall for 2021 the European Commission has recently predicted that inflation will increase in the EC to 2.4%, but also in the EU to 2.6%, while in 2022 it will be at similar levels, 2.5% and 2, 2% respectively.



Employment increased in the third quarter of 2021, by 2.1% in both the EU and the EC, while in the same period of 2020 there was a decline in jobs by 1.9% and 2.0% respectively. The European Commission forecasts an increase in job creation in the EU for 2021 and 2022, by 0.8%, and 1.0% respectively. For the Eurozone, it also forecast an increase in employment last year, by 0.8%, and an increase (1.0%) in 2022, compared to a decrease by 1.5% in 2020. Employment growth in the third quarter of 2021 was recorded in Ireland (7.6%), Hungary (4.1%), Spain (4.0%) and Portugal (4.3%). By contrast, employment fell in Romania (6.9%) and Latvia (0.9%). The change in Greece was equal to 2.4%.

Unemployment rose to 7.2% in the EU in the first quarter of 2021 and to 7.9% in the Eurozone from 7.8% and 8.6% respectively in the first quarter of last year. In the second quarter of 2021 it stood at 6.7% in the EU and 7.3% in the EA. For 2021, the European Commission has estimated stagnation of unemployment rates in the EU-27 and the Eurozone, at 7.1% and 7.9%, while for 2022 it expects unemployment rates of 6.7% and 7.5%. In the period April - June 2021 the highest unemployment rate was recorded, in Greece (15.8%), with Spain (15.3%) and Italy (9.6%) following, while in France unemployment was of the order of 7.6%.

In the area of fiscal performance, the general government deficit in the EU in the second quarter of 2021 was around 5.6% of GDP, while in the first quarter of 2021 it was equal to 8.0%. The European Commission predicts that it will change in 2021 and 2022, to -6.6% and -3.6% of GDP respectively. Regarding the average budget deficit in the Eurozone, it expects to reach -7.1% of GDP in 2021 and -3.9% in 2022, from -7.2% in 2020. As far as public debt is concerned, it stood at 98.3% of GDP in the euro area countries in the second quarter last year. It is estimated that on average in 2021 it increased by 100.0% and this year it will decrease to 97.9% of GDP respectively. Public debt, as a percentage of GDP, decreased in the second quarter of 2021 in many member countries, with its highest level being recorded in Greece (207.2%), Italy (156.3%), Portugal (135, 4%), Spain (122.8%) and France (114.6%).

As for the monetary policy framework, due to the COVID-19 epidemic and the related adverse economic effects, it is recalled that the ECB started in mid-March 2020 to take a series of monetary and credit policy measures aimed at stimulating liquidity. According to a recent announcement by the ECB, the interest rate on major refinancing operations as well as the marginal lending facility and the deposit facility remain unchanged at 0.00%, 0.25% and -0.50% respectively. However, as the ECB announced in mid-December, the rate of net purchases in the first quarter of 2022 under the Pandemic Emergency Purchase Program (PEPP) will be significantly lower, while at the end of March this year the net purchases will be completed. This decision is probably largely related to the desire to avoid the "overheating" of the EU economy and inflationary pressures from the provision of excessive liquidity. On the other hand, it was decided to extend the time horizon for reinvestment of funds from the repayment of securities acquired under the PEPP program at least until the end of 2024.

In summary, the economy in Europe, and in particular in the Eurozone, is currently facing a number of challenges. The main ones are:

- Managing the COVID-19 pandemic, which remains a global challenge, mainly in dealing with mutations
- Possible need for additional fiscal and monetary measures at collective level, beyond those taken to deal with the consequences



- Rapid increases in wholesale prices, mainly for gas and electricity, but also for oil and, more recently, for coal
- Rising consumer inflation and further signs of price pressures across different parts of the production chain
- Effects of the pandemic on the global supply chain. Unusually for the EU economy, the growth in demand is not covered by sufficient supply in various sectors, in particular the production of durable and investment goods.
- The health crisis causes significant regional disparities, which will be felt when it is completed
- The implementation of the consensual Brexit by the EU, the terms of which were agreed at the end of 2020
- Geopolitical tensions in the Middle East and migration flows.

## 2.2 The Economic Environment in Greece

### A. Economic Sentiment

- Marginal strengthening of the Economic Sentiment Index in Greece in the fourth quarter of 2021 compared to the immediately preceding quarter (112.0 from 111.3 points). Stronger improvement compared to the same quarter last year (91.8 points). The recent level is similar to the 2001 average, which is the second highest over time.
- Business expectations declined in the recent quarter compared to the previous one in most sectors, with the exception of Services and Retail.
- The Consumer Confidence Index stood lower in the October-December period than in the third quarter of last year, at -42.9 from -35.4 points. At the same time, it is slightly higher than a year earlier (-46.2 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 fourth quarter of this year, the Economic Sentiment Index strengthened marginally compared to the immediately preceding quarter (+0.7 points). As a result of this reinforcement, the indicator has remained at pre-health crisis levels, at the maximum level of the last 21 years. In contrast, the Consumer Confidence Index stood 7.5 points lower than in the previous quarter last year, at -42.9. The new strengthening came mainly from the improvement of expectations in the Retail Trade and secondarily from their strengthening in the Services. The extension of the tourist season and the non-imposition of strong restrictive measures, despite the strong outbreak of the pandemic in the fourth quarter, seem to have given a boost to the two sectors. While the industrial sector is

<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, in order 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.



favoured by the significant recovery of the world economy and international trade, it is suffering from the rise in prices for energy and other goods, which have caused difficulties internationally in the operation of supply chains. The escalation of inflationary pressures has also increased households' concern about the evolution of their real incomes. This development is part of the wider uncertainty about how their economic situation will evolve after the pandemic and as the scope for immediate support measures is now quite limited. Household expectations were also negatively affected by prolonged uncertainty about the evolution of the pandemic, as epidemiological data deteriorated continuously in the last quarter of 2021. As the outbreak of the new mutation, which for the time being has not been reflected in the results of the Business and Consumer Surveys, is ongoing, the range of protection measures in the coming period and their impact on the economy are not a given. Developments in the implementation of the Recovery Fund projects, along with the accompanying reforms, will also be important for expectations.

In detail, the Economic Sentiment Index in Greece in the October-December quarter was mildly strengthened compared to the previous quarter of 2021, at 112.0 from 111.3 points, while it was significantly higher than the average corresponding previous year (91.8 points). Its recent level is similar to the 2001 average (112.1 points), which is the second highest over time.

In Europe, the relevant median index was slightly lower during the period under review compared to the previous one, both in the EU and in the Eurozone. Specifically, the Economic Sentiment Index stood at 116.2 (from 117.1) points in the last quarter of last year in the EU, and at 117.2 (from 118.1) points in the Eurozone.

At the sectoral level, business expectations in Greece declined in Industry and Construction and strengthened in Services and Retail trade. In particular, there was a marginal deterioration in Industry and a small deterioration in Construction, while on the contrary, the improvement in Services was small and more pronounced in retail trade. On the consumer side, there was a marked deterioration in the consumer confidence index. Compared to the same period last year, average indicators improved in all sectors except consumer confidence. Analytically:

The Consumer Confidence Index in Greece in the October-December quarter of the previous year was lower on average than the third quarter of 2021, at -42.9 from -35.4 points, a level slightly higher than the corresponding previous year (-46.2 points). The corresponding average index fell sharply in the EU, to -8.0 (from -5.7) points, as well as in the Eurozone (-6.6 from -4.6 points). These levels are clearly higher than a year ago (-16.6 and -15.6 units respectively).

Trends in the individual key elements that make up the overall index were mainly declining in the last quarter of 2021 compared to the third quarter of the index. Thus, the ominous forecasts of consumers in Greece for the financial situation of their households over the next 12 months, were significantly strengthened, as were those for the economic situation of the country. At the same time, households' estimates of their current situation deteriorated mildly, as did the intention for major purchases in the coming period, which declined significantly.

More specifically, the percentage of those who are pessimistic about the financial situation of their household in the next 12 months strengthened significantly, to 51% (from 38% in the previous quarter), while the percentage of those who say otherwise fell to 6% (from 8%). At the same time, the percentage of consumers in Greece who make ominous



forecasts about the country's economic situation increased to 61% (from 59%), with 15% (from 16%) expecting an improvement. In terms of the intention to save, the percentage of households that do not consider savings as likely in the next 12 months strengthened to 81% (from 79%), while the percentage of those who consider it possible weakened to 17%. In the forecasts for the development of unemployment, it fell slightly, to 56% (from 64%) the percentage of those who thought that the situation will deteriorate, with 15% (from 14%) on average expressing an opposing view. The percentage of consumers reporting that they are "indebted" in the fourth quarter of 2021 weakened marginally, to 5% (from 7%), at the same level as in the corresponding quarter of 2020. It also fell slightly to 19% (from 21%) the percentage of respondents who say they save a little (from 22% in the corresponding quarter of 2020). Finally, the percentage of those reporting that they "barely make ends meet" increased further to 65% (from 64% in the previous quarter) and the percentage of households reporting that they "draw on their savings" hovered at 9%, with the corresponding figure for 2020 hovering at 10%.

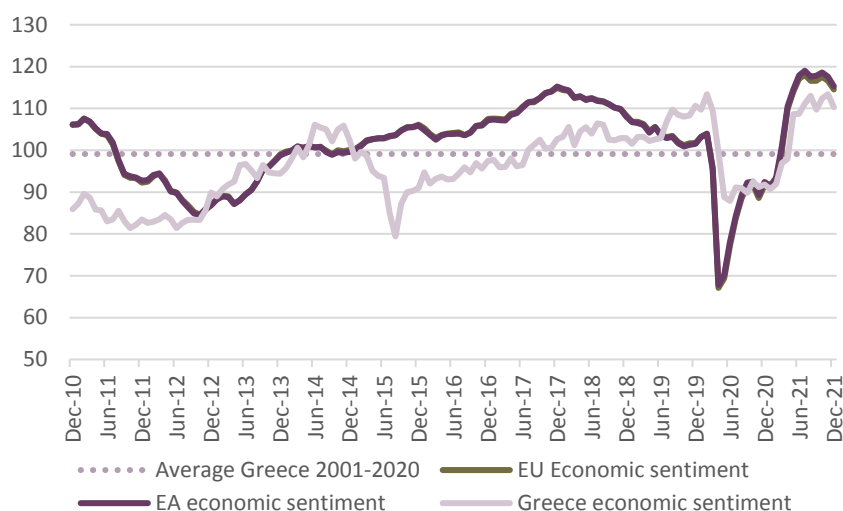
The index of business expectations in Industry in the last quarter of 2021 stood at 110.7 (third quarter of 2021) points, much higher than the corresponding (92.6 points). In the key activity data, the index in the forecasts for production from +23.3 points in the third quarter of 2021 considered quarter and stood on average at +19.5 points. On the positive estimates for the level of orders and demand were significantly 4 from +0.6 points the relevant index). Estimates for finished goods slight escalation (at +6.6 from +1.1 units the relevant index), while tables are mixed: forecasts for export dynamics for the next quarter from +33.4 units), while on the contrary the current estimates for the moved significantly upwards (at +30.9 from +19.7 units), with the and demand abroad to be slightly strengthened (+6.5 from +0.2) ment forecasts, the relevant average quarterly balance recorded a 0.9 (from +9.5) points on average. The percentage of factory capacity marginally, to 77.4% (from 78.6%), while the months of guaranteed lies increased slightly, to 4.6 (from 4.3) months on average.

The index of business expectations in Retail trade in the quarter under review was significantly higher than the previous one, at 110.7 points (from 102.0), a performance much higher than in the corresponding quarter last year (83.0 points). Of the key variables in the index, the average balance for current sales estimates strengthened markedly to +19 (from +11) points. Of the companies in the sector, 32% consider that its sales have decreased, with 51% (from 41%) estimating the opposite. In terms of projected sales, the +15-point index improved significantly to +30, with inventories de-escalating mildly (at -5 from -1 points the index). Of the rest of the activity data, the balance of forecasts for orders to suppliers moved strongly upwards to +30 points (from +17 points), while at the same time, in terms of employment in the sector, the average forecast balance shows a strong improvement to +37 (from +12) points. Finally, in terms of prices, the corresponding balance strengthened sharply (+60 from +37) points, with none of the firms expressing expectations of a de-escalation of prices and 60% (from 42%) predicting the opposite. Strengthening of business expectations was recorded in the last quarter of 2021 in all the sub-examined sectors of retail trade except the textile-clothing-footwear sector and vehicles and spare parts, where there was a marked decline.

Figure 2.4

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





Source: European Commission , DG ECFIN

Business expectations in Construction declined significantly in the fourth quarter of 2021, with the relative balance at 137.2 (from 144.7) points on average, which was the second largest among the main sectors of activity, after that of Retail. This performance is at a sharply higher level than in the corresponding quarter of 2020 (just 70.7 points). In the main variables, the sector's employment forecasts have weakened significantly, with the relative balance from +32 points now at +23 points, and 42% of firms expecting more jobs, when 19% (from just 8%) expect them to fall. The negative forecasts of the enterprises for the planned work were maintained (at -29 from -28 points the index), while the estimates for the current level of the work programme improved significantly (at +22 from +5 points the relevant balance).

The months of secured activity of the companies in the sector slightly increased to 10.0, while at the same time the balance in price forecasts moved slightly upwards to +11 (from +2) points, with 30% (from 22%) of companies expecting a decrease their short-term and 41% (from 25%) increase. Finally, the percentage of companies that report that they do not face obstacles in its operation fell marginally to 15% (from 16%), while of the other companies, 32% consider low demand as the most important obstacle, 18% (from 13% insufficient funding and a 19% (from 24%) factors such as the general economic situation of the country, capital controls, high taxation, lack of projects, late payment by the state, etc. as the biggest obstacles in its operation. At the sectoral level, business expectations moved strongly upwards in the Public Construction sector, while in the Private Construction sector there was a significant decline.

The index of business expectations in Services in the quarter under review was mildly higher than the previous one, at 125.4 points (from 123.4). At the same time, this performance was much higher than in the corresponding quarter of 2020 (70.0 points). Of the key variables, estimates for current demand strengthened marginally, with the relative index gaining 1 point on average and standing at +45 points. Estimates for the current state of the company (+54 from +45 points the average balance) also moved strongly upwards, with the balance in the forecasts for short-term demand of enterprises in the sector weakening marginally (+40 from +41 points). From the rest of the activity data, the employment forecast balance showed a marginal improvement, which strengthened by 1 point, to +26 points, while in prices the average corporate expectations index strengthened significantly and stood at +20 (from +5) units. Finally, it increased

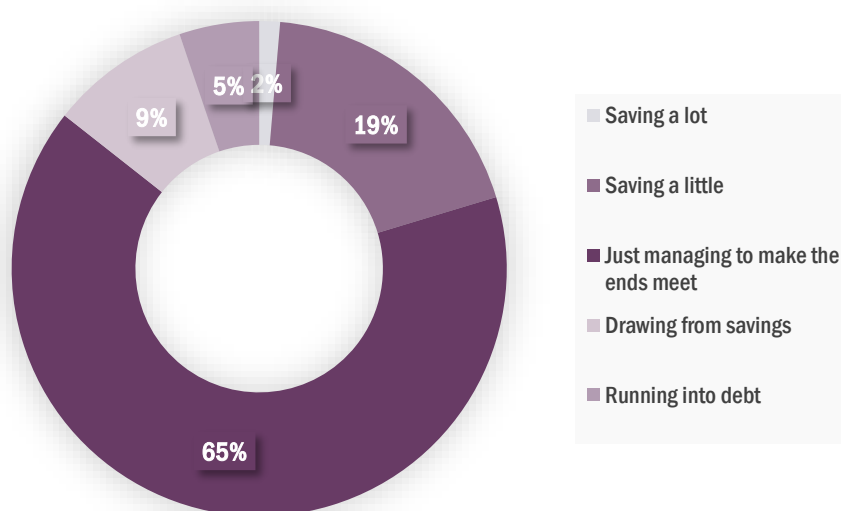




significantly, to 23% (from 17%) on average the percentage of respondents who report smooth business operation, with 20% stating that insufficient demand as the main obstacle to its operation, 10% the lack of working capital and 29% (from 43%) other factors, which are related to the general financial situation, the impossibility of borrowing, the high taxation, the late payment, etc. From the examined sectors of Services, the sub-indices strengthened significantly in the fourth quarter of 2021 in all sectors, with the exception of the sector of Hotels-Restaurants-Travel agencies where there was a strong weakening.

Figure 2.5

Consumer survey data on the financial situation of households (October-December 2021)



Source: IOBE

The percentage that says that they are only making ends meet increased quarter on quarter (65%). Slight decline in the percentage of those who say they are running into debt.



Table 2.4

## Economic Sentiment Indicators

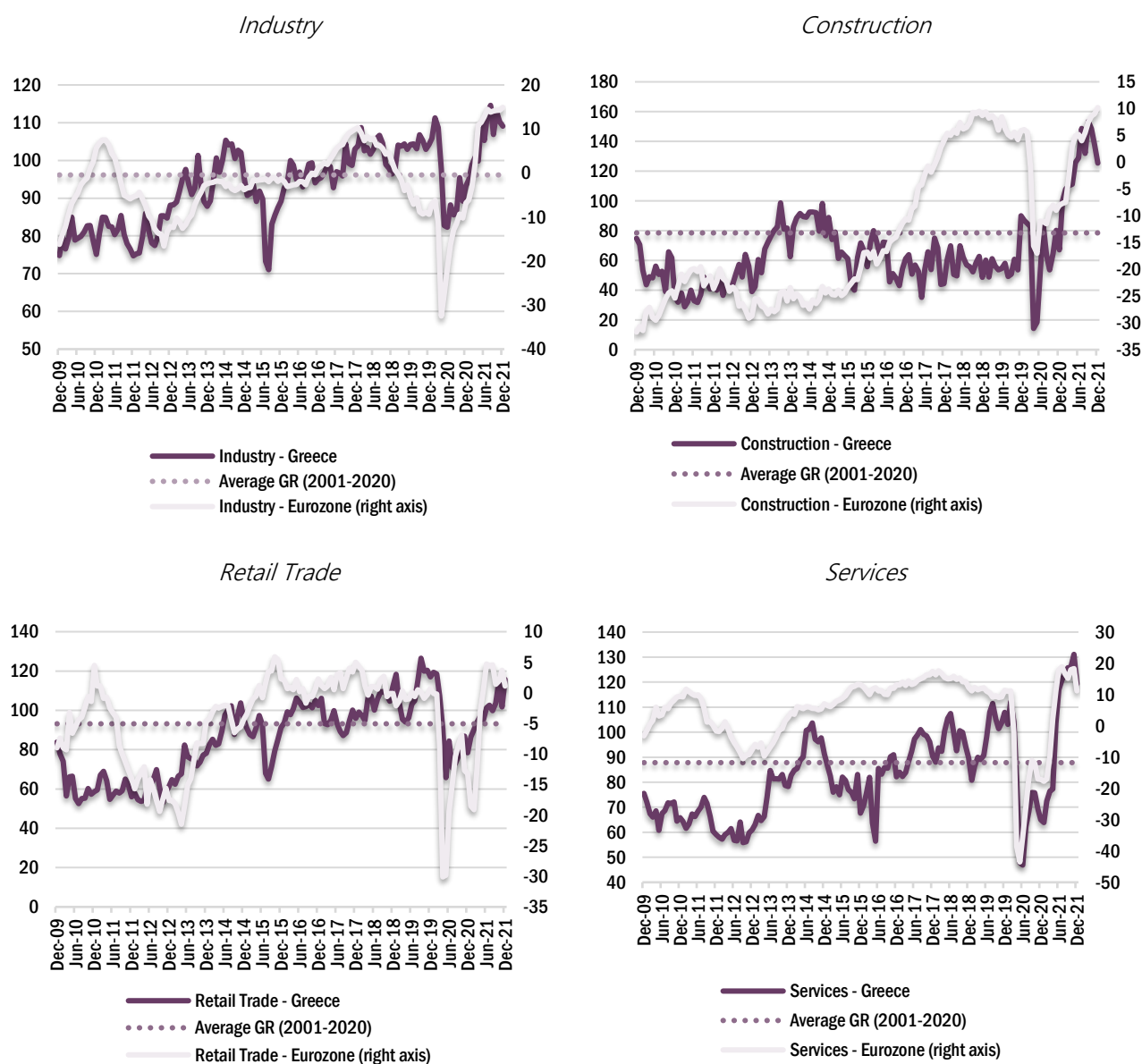
Time Period	Economic Sentiment Indicator			Business Expectations Index (Greece)				Consumer Confidence Index (Greece)
	EU-27	Eurozone	Greece	Industry	Construction	Retail Trade	Services	
2010	99.3	99.1	86.3	79.9	52.2	61.3	68.1	-56.9
2011	99.8	99.9	84.8	81.1	37.7	60.9	66.1	-70.5
2012	88.0	88.1	83.7	81.4	47.5	59.1	58.8	-73.9
2013	90.8	90.8	93.6	92.6	71.5	72.6	75.3	-69.3
2014	99.6	99.4	102.0	99.7	88.4	92.3	93.3	-52.8
2015	102.9	102.9	91.7	86.3	62.0	83.9	78.2	-50.3
2016	104.2	104.0	94.4	96.1	61.3	101.4	79.3	-62.9
2017	110.4	110.4	98.9	98.1	55.4	94.6	92.7	-58.9
2018	111.5	111.5	103.8	102.8	58.1	104.5	97.0	-44.0
Q1 2019	106.6	106.4	102.6	101.8	56.7	105.8	85.7	-31.1
Q2 2019	104.7	104.4	102.6	103.8	54.8	97.8	92.6	-29.4
Q3 2019	102.8	102.6	108.3	104.8	52.7	115.5	108.2	-11.7
Q4 2019	101.5	101.2	109.0	104.1	68.1	119.1	104.4	-7.1
Q1 2020	101.0	100.8	110.9	108.6	84.9	115.1	106.5	-10.4
Q2 2020	71.4	72.2	92.1	87.6	28.1	80.3	58.6	-31.1
Q3 2020	87.9	88.6	90.6	86.7	67.0	73.5	68.8	-36.9
Q4 2020	90.7	91.4	91.8	92.6	70.7	83.0	70.0	-46.2
Q1 2021	94.7	95.3	93.2	98.2	106.2	90.2	70.9	-43.0
Q2 2021	113.7	114.3	105.1	105.0	121.9	97.9	99.3	-27.5
Q3 2021	117.1	118.1	111.3	111.3	144.7	102.0	123.4	-35.4
Q4 2021	116.2	117.2	112.0	110.7	137.2	110.7	125.4	-42.9

Sources: European Commission, DG ECFIN, IOBE



Figure 2.6

## Business Confidence Indicators



Source: IOBE

Business expectations deteriorated in the last quarter of 2021 compared to the third quarter of 2021 in Industry and Construction, and improved in Services and Retail trade



## B. Fiscal Developments and Outlook

- General government data (GG) 2020 (second notification): deficit of 10.1% of GDP and debt of 206.3%, from 9.7% and 205.6% of GDP in the first notification. Slight deterioration due to higher general government deficit and revision of GDP. Estimates for 2021 (Budget 2022): deficit of 9.6% of GDP and debt of 197.1% of GDP.
- The deficit of the State Budget (SB) for the period January -November 2021 stood at €12,267 million, compared with a deficit of €18,252 million in the corresponding period of 2020. Primary deficit of €7,882 million (4.4% of GDP), compared with a primary deficit of €13,747 million (8.3% of GDP) in 2020.
- 85.9% of the deficit is found in the OB and 14.1% in the PIP and RRF. The Recovery and Resilience Fund inflows had a significant contribution to the deficit reduction.
- State Budget 2022: An improvement in the balance of the State budget compared to 2021 is foreseen. A deficit of €10,170 million is expected, from €19,921 million this year. Primary deficit of €4,620 million (2.5% of GDP) from an estimate of €14,361 million (8.1% of GDP) for 2021.
- To achieve the projected nominal GDP growth of 7.4% compared to 2021 is considered key for the consolidation of the State budget this year..

### *General Government Figures (National Accounting Base)*

#### **Final General Government Balance of 2020**

According to recent<sup>3</sup> fiscal data, compiled using the national accounts methodology (ESA 2010), in 2020 the General Government (GG) recorded a particularly high deficit, by €16,674 million or 10.1% of GDP. Also, the GG primary deficit for the same year reached €11,726 million or 7.1% of GDP (Table 2.5), against a primary budget surplus target of €7.488 million or 3.8% of the current year. GDP.

The reversal of the initial target for a surplus in 2020 to a large deficit is mainly due to the result of the State Budget, which was in deficit by €21,219 million, compared to an initial deficit forecast of €2,453 million. Next rank (by lagging behind the target) Social Security Funds (SSFs) which fell short of the target with a surplus of €581 million instead of a target of €1.799 million and hospitals, with a deficit of €266 million, i.e. 241 million higher than the target. The smallest lag was recorded in the Local Government Organizations, with their surplus reaching €60 million, lower than the €201 million initially expected. On the other hand, the balance of the other legal entities and the reclassified DEKOs (within the central government) was clearly better than expected, with their surplus reaching €4,165 million, against a target for a surplus of €2,785 million.

<sup>3</sup> ELSTAT Press Release of October 21, 2021



Table 2.5

General Government Balance on a national accounting basis (ESA 2010) (% of GDP)

	2017	2018	2019	2020	2021 <sup>1</sup>		2022
					Initial	Estimate	
GG Balance	0.6	0.9	1.1	-10.1	-6.7	-9.6	-4.0
GG Primary Balance	3.7	4.3	4.1	-7.1	-3.8	-7.0	-1.4
GG Primary Balance (EU Financial (Stability) Facility Agreement (FFA) / Enhanced Surveillance)	4.1	4.2	3.6 <sup>2</sup>	-7.9 <sup>2</sup>	-3.9 <sup>2</sup>	-7.3 <sup>2</sup>	-1.2 <sup>2</sup>
FFA Target	1.75	3.5	-	-	-	-	-
Enhanced Surveillance Target	-	3.5	3.5	3.5	-	-	-
GDP (million €)	176,903	179,558	183,250	165,326	171,934	177,608	187,278

Sources: Press Release ELSTAT, 22 October 2021 and Explanatory Reports of the Budgets 2021 and 2022, Ministry of Finance, November 2020 and 2021. 1.Provisional data and estimates. 2.Enhanced Surveillance Methodology

### Estimates for the 2021 General Government Balance

According to the Explanatory Report of the 2022 Budget, the balance (result) of 2021 is expected to be again severely deficient, under the influence of the COVID-19 pandemic, by €17.1 billion or 9.6% of GDP, against an initial forecast for a deficit of €11,516 million or 6.7% of GDP (Table 2.5). The biggest deterioration is estimated to have occurred in the State Budget, as its balance will be negative by €19.9 billion, instead of a deficit target of €14,715 million. On the contrary, the balance of the legal entities will exceed the target by €326 million, to €2,789 million.

### Public debt

The amount and evolution of GG's Debt incorporate and reflect fiscal performance more adequately than any other variable. This is because some transactions of public legal entities, inside or outside the GG, are not recorded -for various reasons- in the annual balance result, but they are directly recorded in the public debt (deficit-debt adjustments). This is why monitoring the development of GG's debt is necessary to provide a comprehensive picture of the state of public finances. Moreover, the amount and changes in a country's debt are closely monitored by the investment community and international rating agencies. Any negative developments usually adversely affect the country's rating and cause its borrowing rates to rise.

General Government debt increased in 2020, in absolute terms and as a percentage of GDP (Table 2.6). The expansion of public debt came in part from the much worse result in the General Government balance, with a deficit of €16,674 million instead of a surplus target of €7.488 million, as mentioned above. Depending on the incremental impact of the fiscal balance as well as the higher fiscal adjustments (approximately +€5.3 billion against the target) and, on the other hand, the significant reduction of the available and intra-government debt (approximately -€13.7 billion instead of +2.1 billion) on the change in the absolute level of public debt between 2019 and 2020, was its expansion by €9,995 million. If GDP was stable between the two years, then public debt as a percentage of GDP would rise from 180.7% to 186.1%. Therefore, most of the increase in 25.6 points of GDP of public debt in 2020, about 20 points, is due to the strong decline of domestic product because of the pandemic. This fact implies that a sharp change in GDP in the opposite direction in the coming years will reverse the upward trend of the previous year. In any case, Greece's public debt as a percentage of GDP (206.3%), was the highest in the EU in 2020, with Italy (157.9%), Portugal (147.3%) and Spain (120.1%) to follow.



Table 2.6  
Consolidated General Government Debt (€million)

	2016	2017	2018	2019	2020	2021*
Debt	315,012	317,481	334,721	331,091	341,086	350,000
% GDP	180.7	179.5	186.4	180.7	206.3	197.1

\* Estimate

Sources: Eurostat, ELSTAT, data disclosure under the EU Excessive Deficit Procedure (EDP),, October 2021 and Explanatory Budget Report 2022 Ministry of Finance, November 2021

In the first quarter of 2021, due to the imposition of strong restrictive measures on economic activity and intra-country travel and international travel (lockdown), the pressures on economic activity continued. However, their intensity was much lower than at the end of 2020 (recession 1.9% instead of 7.3%). The restrictions were accompanied with an extension of the extensive support measures, with a respective budgetary impact. The gradual lifting of restrictive measures in the operation of industries and movements earlier compared to 2020, gradually from the beginning of the second quarter (Retail in early April, Catering in early May and Accommodation services in the middle of the same month, when they were released and movements), combined with significant vaccination rates and the use of SARS-CoV-2 rapid diagnostics (self-tests), boosted the economy particularly strongly in the second quarter, with the recovery rate reaching 16.6%. At the same time, measures to support businesses and households continued, inflating their increasing impact on public spending.

Progress in vaccination internationally in the first half was the main reason for the easing of restrictions on international passenger transport clearly more than in the summer of 2020 and the sharp escalation of international tourist traffic in the third quarter. However, at the beginning of the quarter a strong new mutation of the virus appeared, which again escalated the uncertainty about the evolution of the pandemic. Compared to the same period in 2019, the shortfall, including on the travel revenue side, was significant, but smaller than expected at the beginning of the year: -33.6% in international arrivals at the country's airports in the June-August quarter, -39.7% in international travel receipts. The lifting of restrictions on economic activity also led to the completion of the vast majority of support measures. However, due to the new mutation, restrictive measures for unvaccinated people came into force at the beginning of last September. In addition, since mid-July, the rate of vaccinations has slowed down. The strong escalation of international tourism has had a respective impact on services exports, which are the main cause of the continuation of the strong recovery in the third quarter (rate of 13.4%).

From the beginning of the fourth quarter the epidemiological data began to deteriorate, mainly the number of cases. The rate of vaccinations remained constant throughout. In the context of these developments, restrictions on the unvaccinated were intensified in mid-November, but no general public health protection measures were taken, followed by corresponding measures to support businesses and households. The dynamics of the pandemic were significantly enhanced by the appearance of a new, highly contagious mutation in early December, with mild but pathogenic characteristics. Its rapid spread domestically during the last fortnight of 2021, brought restrictive measures to the operation of specific activities for the first time within its second half (entertainment, catering) and accompanying support interventions. However, a year earlier, general lockdown measures had been imposed since the first ten days of November, which were only partially lifted for Retail from the beginning of the following month (click-away). This fact has formed a low basis of comparison in 2020 for economic activity in the quarter



October-December last year, which is expected to be reflected in the rate of change in GDP.

In summary, the support interventions of the initial half of the previous year are the main cause of the higher of the initial fiscal deficit target last year, which approaches that of 2020, as an absolute level (€17,073 million versus €16,674 million) and as a percentage of GDP (9.6% versus 10.1%). According to the State Budget for 2022, the total amount of measures last year reached €15.8 billion, when in the Draft Budget Report for 2021 their budget was €4.54 billion and another €3 billion was available for the same purpose as appropriations to be allocated<sup>4</sup>. The widening budget deficit is the main reason for the estimated increase in the absolute level of public debt by €8.914 million last year, to €341.1 billion (Table 2.6). Another factor in this increase is the smaller-than expected in the 2021 Budget reduction of reserves and intra-government debt, by €1.4 billion, to €7.4 billion. On the contrary, the national accounting adjustments restrained its expansion, as they were negative and amounted to €2,178 million. If GDP did not change in 2021 compared to the previous year, then public debt as a percentage of GDP would rise from 206.3% to 211.7%. The estimated nominal growth rate of 7.4% in the 2022 Budget last year, mainly related to the shorter period in which parts of the economy were closed and the strong rise in exports, services and goods, is the reason for the decline of this ratio from 206.3% to 197.1%. IOBE estimates that this rate will eventually be slightly higher, contributing to a small further decline in this ratio. Despite this reduction, the level of public debt in Greece remains by far the highest in the EU.

As noted in previous IOBE bulletins, there are still other sources of macroeconomic imbalances in the Greek economy beyond the particularly high public debt, which make it particularly vulnerable to external disturbances. These include taxpayers' debts to the tax authorities and insurance companies, non-performing loans, the trend of which is difficult to determine due to the suspension of payments due to COVID-19, the extremely low levels of investments, etc.

### **Implementation of the 2021 Budget (January –November)**

2020 was a special year marked by the outbreak and spread of the COVID-19 pandemic. The negative consequences of the pandemic were significant, both in the health part of the issue, with the number of cases, hospitalizations and deaths, and in its economic side, which was reflected mainly in the strong recession, by 9.0%. Therefore, the unprecedented measures implemented during the year in order to protect public health, limited not only physical movement but also economic activity. The "support net" with business and household support interventions implemented prevented a much sharper recession, but significantly burdened the state budget, with the primary deficit exceeding 7.0% of GDP, as previously shown in the current subsection of the bulletin. The unprecedented health event of the last many decades has resulted in the European Commission activating the general escape clause of the Stability and Growth Pact. The consequence of this action was the relaxation of European fiscal rules for the years 2020 and 2021. During 2021, the clause was extended to 2022.

In the first quarter of 2021, public health protection measures were maintained, and therefore support interventions were maintained. Their gradual lifting began at the beginning of April last year, thanks mainly to progress in vaccination, and from the retail sector. It expanded to Catering in early May and accommodation services from the middle

<sup>4</sup> Sources: Explanatory Report on the Budget 2022, p. 139 and Explanatory Report on the Budget 2022, p. 133





of the same month. As a result, the vast majority of support measures were maintained in the first half of last year, with a correspondingly high budgetary impact. According to government estimates, the budget of interventions in 2021 already from the beginning of June, to address the effects of the pandemic, reached €15.9 billion. In the Explanatory Report of the Budget for 2021, their budget was €4.54 billion, while another €3 billion were available for the same purpose, as appropriations under allocation.

The lifting of almost all restrictions on the operation of businesses by the beginning of the third quarter also allowed the completion of most of the support measures. At the same time, the satisfactory rate of vaccinations worldwide, which weakened the coronavirus warnings, combined with the earlier opening of international tourism domestically last year, led to a strong increase in tourist traffic, higher than expected in early 2021. According to data from the Bank of Greece, international arrivals in the nine months of January-September were 94.2% more than last year. However, they did not exceed 42% of 2019. Subsequently, international travel receipts were 139.1% more than the year before, but 45.7% less than in 2019 in the nine months.<sup>5</sup> These developments in tourism are thought to have favoured, in addition to economic activity, tax revenues, primarily from indirect taxes.

Although the epidemiological data began to deteriorate from the beginning of the fourth quarter, mainly the number of cases, no public health protection measures were reinstated. For this reason, there was no need for measures to support businesses and households, which would further inflate the relevant public expenditure, as had been done in the two months of November-December 2020. However, measures were needed to support those affected by natural disasters, amounting to €500 million, as well as against energy price increases of €523 million.

At the same time, the tourism sector continued to operate. Based on the indications from the available data, this appears to have been proportionally less than in 2019 or less, compared to the previous months last year. The data of the Civil Aviation Service show that in the two months of October-November the international arrivals in all the airports of the country were lower than those of 2019 by 21.5%, while in the third quarter the lag was 27.1%. Therefore, the tourist season was extended last year, which probably also had a positive effect on tax revenues.

The new coronavirus variant (Omicron) has spread rapidly domestically in the last fortnight of 2021. The related restrictive measures on economic activity were announced on 27/12. In contrast to outbreaks of the pandemic in the past, they concern far fewer activities (Catering, Entertainment), due to the mild pathogens of the disease from Omicron. In addition, they were accompanied by measures to support businesses which were finalized at the beginning of this year (suspension of employment contracts, special purpose compensation, suspension of payment of instalment of regulated debts, special aid program, depending on the decrease in turnover). Of course, the concern that has been caused to households and businesses is once again intense and is expected to be reflected in their economic decisions in the new year, e.g. in consumer spending. Given the above, the impact of the new mutation on public finances is expected to be felt by January 2022.

## Deficit and primary State Budget deficit

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<sup>5</sup> Bank of Greece, Στοιχεία ταξιδιωτικών υπηρεσιών



According to the available data of the State Budget (SB), on a modified cash basis, for the period January - November 2021, there was a deficit in the balance by €12,267 million against a target for a deficit of €13,399 million that has been included for this year. period in the Presentation Report of the Budget 2022 and a deficit of €18,252 million in the corresponding period of 2020 (11.0% of GDP). The primary result was a deficit of €7,882 million (4.4% of GDP), compared to a target for a primary deficit of €8,973 million and a primary deficit of €13,747 million (8.3% of GDP) for the same period in 2020. (Table 2.7).

Table 2.7

Revenue, expenditure and balance of the State Budget \* (Million €)

	Jan. – November		% Change 21/20	2020*	2021* Budget	2021 Estimates	% Change 21E/20
	2020*	2021*					
I. SB NET REVENUE (1+2)	42,126	48,476	15.1	47,364	52,970	53,420	12.8
1. Net OB revenue	37,276	42,398	13.7	41,822	46,143	46,317	10.7
OB revenue before tax refunds	42,341	46,668	10.2	47,494	51,399	50,977	7.3
Less Tax refunds	5,065	4,270	-15.7	5,672	5,256	4,660	-17.8
2. PIP revenue + RRF <sup>6</sup>	4,850	6,078	25.3	5,542	6,827	7,103	28.2
of which: revenue from EU	10,148	9,287	-8.5	11,029	;;	9,788	-11.3
II. SB EXPENDITURE (3+4)	60,378	60,743	0.6	70,169	67,811	70,907	1.1
3. OB expenditure	51,959	52,936	1.9	59,522	58,426	61,957	4.1
Primary expenditure OB	47,410	48,285	1.8	54,748	53,916	57,156	4.4
Interest	4,549	4,651	2.2	4,774	4,510	4,801	0.6
4. PIP expenditure + RRF <sup>7</sup>	8,419	7,807	-7.2	10,647	9,385	8,950	-15.9
III. SB Deficit (-)/Surplus (+) (I-II)	-18,252	-12,267		-22,806	-14,841	-17,487	
% of GDP	-11.0	-6.9		-13.8	-8.6	-9.8	
OB Deficit (-)/Surplus (1-3)	-14,683	-10,538		-17,700	-12,283	-15,640	
Deficit (-)/Surplus PIP (2-4)	-3,569	-1,729		-5,105	-2,558	-1847	
IV. SB Primary Balance	-13,747	-7,882		-18,195	-10,331	-12,946	
% of GDP	-8.3	-4.4		-11.0	-6.0	-7.3	
GDP (at current prices)	165,326	177,608	5.4	165,326	171,934	177,608	7.4

Sources: Monthly SB Execution Bulletin November 2021, Ministry of Finance, December 2021 and Explanatory (Introductory) Reports of Budgets 2021 and 2022, Ministry of Finance, November 2020 and November 2021.

\*On a modified cash basis. According to the new revenue classification in force from 01/01/2019.

The 85.9% of the deficit is located in the Ordinary Budget (OB) and the remaining 14.1% in the PIP (Table 2.7). Both deficits are reduced compared to 2020: From €14,683 million in 2020 to €10,538 million in 2021 in OB and from €3,569 million in 2020 to €1,729 million last year in the PIP. The improvement of the balance of the State Budget is due to the fact that expenditure was essentially stable between years (€60,378 million in 2020, €60,743 million in 2021) while revenues increased (€42,126 million in 2020, €48,476 million last year). In particular, the inflows from the Recovery and Resilience Fund contributed to the improvement in terms of revenues, while in terms of expenditures, the expenditures of the PIP were reduced, compared to the year before last. As GDP will be quite high, this

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

<sup>7</sup> As above



development also contributes to an improvement in the fiscal picture of the previous year compared to 2020.

## Ordinary Budget Revenue

The net revenue of the State Budget for the eleven-month period amounted to €48,476 million, presenting an increase by €326 million, or 0.7% against the estimate for this period in the Explanatory Report of the Budget 2022, as well as an increase of 15.1% compared to the same period the year before last year (€42,126 million, Table 2.8).

Table 2.8  
State Budget Revenue\* (million €)

	Jan. – November		% change 21/20	2020*	2021* Προϋπ.	2021 Εκτιμ.	% change 21E/20
	2020*	2021*					
Net SB revenue	42.126	48.476	15,1	47.364	52.970	53.420	12,8
Net OB revenue	37.276	42.398	13,7	41.822	46.143	46.317	10,7
<i>Tax refunds</i>	42.341	46.668	10,2	47.494	51.399	50.977	7,3
OB revenue	5.065	4.270	-15,7	5.672	5.256	4.660	-17,8
Income tax, of which:	12.332	13.237	7,3	13.589	15.429	13.975	2,8
-- <i>Personal</i>	9.287	9.284	-0,0	10.155	10.383	9.653	-4,9
-- <i>Corporate</i>	2.085	2.934	40,7	2.934	3.922	3.167	7,9
Property tax	2.133	2.348	10,1	2.427	2.847	2.549	5,0
Taxes on donations, inheritance etc.	161	171	6,2	180	214	182	1,1
Tariffs	226	277	22,6	245	286	274	11,8
Taxes on goods and services, of which:	22.033	24.239	10,0	23.945	26.418	26.111	9,0
-- <i>VAT</i>	13.889	15.933	14,7	15.008	17.492	17.036	13,5
-- <i>Excise duties</i>	5.905	5.996	1,5	6.427	6.599	6.540	1,8
Other production taxes	954	960	0,6	1.069	1.046	1.046	-2,1
Other current taxes	1.296	1.699	31,1	1.743	2.412	2.723	56,2
Social contributions	50	50	0,0	54	54	55	1,9
Transfers	5.201	7.161	37,7	6.537	6.842	8.177	25,1
Sales of goods and services, of which:	472	552	16,9	507	507	590	16,4
Other current revenue	2.326	2.047	-12,0	2.731	1.636	2.369	-13,3
Sales of fixed assets	7	4	-42,9	8	330	30	275
PIP Revenue +RRF <sup>8</sup>	4.850	6.078	25,3	5.542	6.827	7.103	28,2

Sources: Monthly SB Execution Bulletin November 2021, Ministry of Finance, December 2021 and Explanatory Report of the Budget 2022, Ministry of Finance, November 2021.

\* In adjusted cash-based accounting. According to the new revenue classification in effect since 01/01/2019.

If we take into account the reduced revenues of the PIP (by €419 million), then the net revenues show an increase of €745 million compared to the updated target. OB's net revenues increased from €37,276m. in 2020 to €42,398 million in 2021 (+13.7%). Ordinary Budget revenues increased less (+10.2%), but tax refunds decreased (-15.7%).

Most subcategories showed an increase compared to 2020, probably due to increased economic activity. Income tax revenue increased by 7.3%, solely due to an increase in

<sup>8</sup> Η κατηγορία ΠΔΕ πλέον περιλαμβάνει και τις ροές του Ταμείου Ανάκαμψης και Ανθεκτικότητας για το 2021 και το 2022



corporate taxation (+40,7%). The sharp rise is partly due to certified amounts from the 2020 income tax returns and reflects that the decline in corporate profits due to the pandemic was lower than initially estimated. Revenues from property taxes increased by 10.1%, revenues from taxes on goods and services by 10.0% (with an increase of 14.7% in VAT revenues), other current revenues by 31.1% and revenues from sales of goods and services by 16.9% (Table 2.8). A significant part of the increase in other current revenues came from the increased revenues from dividends of public entities and from the national part of the PIP.

Table 2.9

State Budget Expenditure\* (million €)

	January- November		% change 21/20	2020*	2021* Budget	2021* Estimate	% change 21E/20
	2020*	2021*					
SB Expenditure (1+2+3)	60,378	60,743	0.6	70,169	67,811	70,907	1.0
OB Expenditure (1+2)	51,959	52,936	1.9	59,522	58,426	61,957	4.1
1.Primary OB Expenditure	47,410	48,285	1.8	54,748	53,916	57,156	4.4
Compensation of employees	12,199	12,259	0.5	13,335	13,544	13,472	1.0
Social benefits	116	177	52.6	137	199	271	97.8
Transfers	33,566	31,886	-5.0	38,751	31,394	37,605	-3.0
(of which SSFs)	19,153	18,730	-2.2	21,625	20,610	21,574	-0.2
Purchase of goods and services	1,146	1,481	29.2	1,618	1,251	2,044	26.3
Subsidies	68	282	314.7	248	80	345	39.1
Other current expenditure	28	47	67.9	29	91	89	206.9
Non allocated expenditure	0	0	-	0	4,709	671	-
Purchase of fixed assets	288	2,150	646.5	631	2,646	2,657	321.1
2. Interest <sup>1</sup> (gross basis)	4,549	4,651	2.2	4,774	4,510	4,801	0.6
3. PIP Expenditure +RRF <sup>9</sup>	8,419	7,807	-7.3	10,647	9,385	8,950	-15.9

Sources: Monthly SB Execution Bulletin November 2021, Ministry of Finance, December 2021 and Explanatory Report of the Budget 2022, Ministry of Finance, November 2021.

\* In adjusted cash-based accounting. According to the new revenue classification in effect since 01/01/2019.

## Ordinary Budget Expenditure

The State Budget expenditures for the period January - November 2021 are slightly increased compared to the corresponding period of 2020 (+€365 million or +0.6%), mainly due to the increased payments of armament programs in the Ordinary Budget. The State Budget expenditures for the period January - November 2021 are slightly increased compared to the same period of 2020 (+€365 million or +0.6%), mainly due to the increased payments of armament programs in the Ordinary Budget. Primary OB expenditure increased by 1.8%, to €48,285 million, while interest by 2.2%, to €4651 million.

Most categories of expenditure showed an increase compared to 2020. Transfers, which decreased by 5.0%, to €31,886m, are an exception. Significant increases were recorded in social benefits (+52.6%), partly from most spending on heating allowance, in goods and services (+29.2%), in subsidies (+314.7%), and due to of the redistribution of the state aid measure in the form of subsidy of fixed costs, to other costs (+67.9%), and to the purchase of fixed assets, as a result of increased armaments costs (+646.5%, Table 2.9).

<sup>9</sup> The PIP category now includes the flows of the Recovery and Resilience Fund for 2021 and 2022



## Public Investment Programme (PIP)

Public Investment Budget (PIB) revenues, excluding those of the Recovery Fund, reached €3,768 million, lagging behind by €419 million against the target (€4,187 million). However, taking into account the inflows of the Recovery and Resilience Fund (€2,310 million), total revenues of PIP and RRF increased by 25.3%, to €6,078 million. PIP and Resilience Fund expenditure decreased by 7.3% or €145 million. compared to 2020. Of course, as the RRF was not activated in 2020, the total expenditure of the two years is not comparable. On the other hand, given this, it was expected that the total of these expenditures would be higher in 2021. The implementation of the PIP and the Recovery Fund in the coming years is necessary to continue a strong recovery in the medium term.

## The 2022 Budget

The 2022 Budget is being prepared for the second consecutive year under the uncertainty caused by the global health crisis. The current strong upward trend in prices, due to increased energy costs, is an additional factor of uncertainty. On the other hand, there were some positive macroeconomic developments last year, marking the start of the decline in the immediate economic impact of the pandemic crisis. The recovery rate for 2021 has been significantly revised upwards over its duration. Indicatively, from 3.6% in the Medium-Term Fiscal Strategy Programme (MTFSP) 2022-2025 and 6.1% in the Preliminary Draft State Budget 2022, to 6.9% in the final budget for this year. Based on the macroeconomic forecasts in the current bulletin, it will be considerably higher, in the range of 9.0-9.5%, offsetting the recession of 9.0% in 2020. In addition, for 2022, the budget foresees a continuation of the recovery, at a significant rate (4.5%). The macroeconomic environment will therefore be further improved.

The fiscal figures for the year 2022, in which, as mentioned above, the objective of enhanced surveillance to achieve a general government primary surplus of 3.5% of GDP will not apply, are expected to be affected by the COVID-19 pandemic to a lesser extent than in the previous two years, thanks to the significant progress in vaccination in Greece, but also worldwide, a development favourable to the functioning of economies without restrictions. The mild characteristics of the recent mutation of the SARS-CoV-2 virus contribute to this perspective. The weakening of the effects is reflected in the forecasts for increased revenues and reduced expenditures of the State Budget, as well as for an improved primary result compared to the previous two years. These figures reflect the assessment of a gradual return to normality. Of course, the above does not imply the completion of the implementation of measures to deal with the consequences of the pandemic. After all, targeted support measures for businesses in catering and entertainment were recently announced, which were subject to restrictions at the end of 2021. However, the fiscal impact of such measures is now expected to be considerably lower than in the previous two years.

In addition to tackling the health crisis, key budget priorities for 2022 are utilizing the resources of the Recovery and Resilience Mechanism, strengthening the armed forces, increasing spending and physical receipts of armaments systems, and strengthening businesses, now pandemic measures, by reducing the corporate income tax by two percentage points, reducing the capital gains tax and reducing the tax in the event of a merger, introducing tax incentives for the use of reduce tax evasion and improve the efficiency of the tax system. Also, the strengthening of the green economy and digital



investments, through the introduction of tax credits for expenses of small and medium-sized enterprises that fall into the above categories.

Table 2.10

Revenue, expenditure and balance of the State Budget 2022\* (in €million)

	2021 Estimates	2022 Budget	% Change 22Π/21
I. SB NET REVENUE (1+2)	50,927	55,425	8.8
1. Net OB revenue	45,935	47,736	3.9
<i>Less Tax refunds</i>	4,660	4,957	6.4
OB revenue	50,595	52,693	4.1
2 PIP revenue +RRF <sup>10</sup>	4,992	7,689	54.0
<i>of which: revenue from EU</i>	4,593	3,800	-17.3
II. SB EXPENDITURE (3+4)	70,847	65,594	-7.4
3. OB expenditure	62,197	54,595	-12.2
OB Primary expenditure	56,637	49,045	-13.4
Interest	5,560	5,550	-0.2
4. PIP expenditure +RRF <sup>11</sup>	8,650	10,999	27.2
III. SB Deficit (-)/Surplus (+)	-19,921	-10,170	
<i>% of GDP</i>	-11.2	-5.4	
OB deficit/surplus (1-3)	-16,262	-6,859	
PIP deficit/surplus (2-4)	-3,658	-3,310	
IV. SB Primary Balance	-14,361	-4,620	
<i>% of GDP</i>	-8.1	-2.5	
GDP (at current prices)	177,608	187,278	5.4

\* On a national accounting basis (ESA 2010)

Source: Explanatory Report of the Budget 2022, Ministry of Finance, November 2021, Table 3.2

### Balance and primary State Budget Balance

In 2022 an improvement of the State Budget balance is foreseen in relation to 2021. It will come from an increase in the net income of SB by 8.8% and a decrease in its expenses by 7.4% (Table 2.10). Subsequently, the SB deficit is expected to reach €10,170 million or 5.4% of GDP from €19,921 million last year. The primary deficit is expected to reach €4,620 million or 2.5% of GDP from €14,361 million or 8.1% of GDP in 2021. The decrease is expected to come mainly from the corresponding change in the OB deficit from €16,262 million to €6,859 million. The PIP deficit is projected to decrease less proportionately, from €3,658 million to €3,310 million (Table 2.10).

The net revenues of the State Budget, after the deduction of tax refunds, are projected to amount to €55,425 million, increased by €1.8 billion or 3.9%, compared to the previous year. The total expenditures of the State Budget for 2022 are projected to amount to

<sup>10</sup> The PIP category now includes the flows of the Recovery and Resilience Fund for 2021 and 2022.

<sup>11</sup> As above.





€65,594 million, reduced by €5,253 compared to the previous year (-7.4%). The primary expenditures of the State Budget are projected to amount to €60,044 million, less by €7,592 million or 13.4% compared to the previous year. The main reason for spending cuts is less aid to citizens and businesses against the pandemic.

### Ordinary Budget Revenue

OB's net revenue (before tax refunds) is expected to increase by 3.9% in 2022 compared to 2021, to €47,736m. (Table 2.11). OB revenues are projected to increase by 4.1% but an increase in tax refunds of 6.4% is also forecast. Revenues from income tax are expected to increase by 9.3%, from €14,040 million to €15,348 million. The increase will occur as a result of the increase in tax revenues of both individuals (+6.7%) and legal entities (+19.3%). Specifically, the income taxes of legal entities are projected to increase by €614 million from last year and to reach €3,794 million, while those from individuals by €753 million, to €10,352 million.

Tax revenues on goods and services are projected to increase by 8.7% in 2022 compared to the previous year, with VAT revenues increasing by 9.6%. Revenues from sales of goods and services are also expected to increase by €577m. to €665 million. (+15,3%). On the other hand, revenues from other production taxes (-5.1%), other current taxes (-7.9%), other current revenues (-19.7%) and sales of fixed assets (-56.7%, Table 2.11) are expected to decrease. The decrease in other current taxes is partly due to reduced unclassified tax revenues and their correct classification, according to their nature, in the categories of revenue. Other current revenues will also be limited due to the provision of reduced revenues in the national part of the PIP.

Capital taxes are projected at €170 million, down €12 million from last year, mainly due to the abolition of the parental benefit tax - donations up to €800,000, for first degree relatives. In contrast, transfer revenue is expected to reach €7,567 million, up €1,725 million from last year, due to increased PIP revenues in the co-financed arm. In particular, an amount of €4,265 million. concerns PIP revenues and an amount of €3,199 million revenues from the Recovery and Resilience Fund.

### Ordinary Budget Expenditure

OB expenditures are projected to decrease from €62,197 million in 2021 to €54,595 million in 2022 (-12.2%) with a reduction of primary expenditures by 13.4% and a reduction of interest by 0.2% (Table 2.12 ). A decrease is expected in social benefits (-17.4%), transfers (-18.5%), purchases of goods and services (-42.1%), subsidies (-76.8%) and fixed assets markets (-26.9%). By contrast, increases are expected in employee benefits (+1.0%), other expenditure (+13.5%) and appropriations under allocation (+44.7%).

Table 2.11

State Budget Revenue\* (million €)

	2021 Estimat.	2022 Budget	% Change 22B/21
Net SB revenue	50,927	55,425	8.8
Net OB revenue	45,935	47,736	3.9
<i>Tax refunds</i>	4,660	4,957	6.4
OB revenue	50,595	52,693	4.1





Income tax, of which:	14,040	15,348	9.3
--Personal	9,699	10,352	6.7
--Corporate	3,180	3,794	19.3
Property tax	2,563	2,503	-2.3
Taxes on donations, inheritance etc.	182	170	-6.6
Tariffs	274	297	8.4
Taxes on goods and services, of which:	26,217	28,491	8.7
--VAT	17,112	18,755	9.6
--Excise duties	6,561	7,067	7.7
Other production taxes	1,123	1,034	-5.1
Other current taxes	2,159	2,213	-7.9
Social contributions	55	55	0
Transfers, of which:	5,842	7,567	29.5
--ANFA's and SMP's	910	0	+100.0
Sales of goods and services, of which:	577	665	15.3
Concession extension of the Athens Airport	2,525	2,027	-19.7
Other current revenue	30	13	-56.7
PIP Revenue +RRF <sup>12</sup>	4,992	7,689	54.0

\* On a national accounting basis (ESA 2010)

Source: Explanatory Report of the Budget 2022, Ministry of Finance, November 2021, Table 3.2

Expenditure on employee benefits is expected to reach €13,599 million, up €131 million from last year. The increase is due, among other things, to the increased regular salaries and employer contributions, due to appointments and recruitments that took place in the second half of 2021 and are burdened in 2022, to the increased regular salaries and employer contributions of the Ministry of National Defence, due to the revaluation. staff departures for the period 2021-2022, the additional appointments of 1,200 teachers in the second half of 2021 as well as the new hiring of about 3,000 deputy teachers this year.

Expenditure in the social benefits category is projected to reach €221 million, less by €50 million compared to 2021. Expenditures for transfers to agencies inside and outside the General Government are projected to reach €29,825 million, down by €8,121 million from last year, due to the reduction of emergency support measures due to the pandemic.

Expected expenditure on purchases of goods and services in 2022 amounts to €1,136 million, reduced by €825 million compared to 2021, due to lower costs for dealing with the pandemic. Expected expenditure on subsidies in 2022 amounts to €80 million, from €345 million a year earlier, due to the redistribution of the state aid measure in the form of a subsidy for fixed costs in subsidies. In other expenditure the estimated expenditure amounts to €101 million and is higher by €12 million, partly due to the increased cost of returns from unfulfilled projects in the EU.

The provision for appropriations under distribution amounts to €13,922 million and compared to last year they are increased by €4,301 million. This increase is due, among other things, to the higher expenditure ceiling of the PIP and the provision of more

<sup>12</sup> The PIP category also includes the RRF flows for 2021 and 2022.



appropriations to deal with the pandemic. In terms of fixed asset purchases, the projected expenditure will amount to €1,160 million, an increase of €529 million compared to the previous year, mainly due to the increase in physical receipts of the armaments programs of the Ministry of National Defence.

Table 2.12

State Budget Expenditure 2022\* (in million €)

	2021 Estimate	2022 Budget	% change 22B/21
SB Expenditure (1+2+3)	70,847	65,594	-7.4
OB Expenditure (1+2)	62,197	54,595	-12.2
1.Primary OB Expenditure	56,637	49,045	-13.4
Compensation of employees	13,468	13,599	1.0
Social benefits	271	221	-17.4
Transfers	37,946	29,825	-18.5
(of which SSFs)	20,522	20,562	0.2
Purchase of goods and services	1,961	1,136	-42.1
Subsidies	345	80	-76.8
Other current expenditure	89	101	13.5
Non allocated expenditure	9,621	13,922	44.7
Purchase of fixed assets	1,586	1,160	-26.9
2. Interest <sup>1</sup> (gross basis)	5,560	5,550	-0.2
3. PIP Expenditure +RRF <sup>13</sup>	8,650	10,999	27.2

\* On a national accounting basis (ESA 2010)

Source: Explanatory Report of the Budget 2022, Ministry of Finance, November 2021, Table 3.2

### Public Investment Programme (PIP).

A significant increase in the total revenues of PIP and RRF is expected in 2022, due to the disbursement of further instalments of RRF within the new year. Specifically, they are expected to increase from €4,992 million to €7,689 million (+54.0%). A large increase is expected in the expenses combined of PIP and RRF, from €8,650 million in 2021 to €10,999 million in 2022. The expenditure for the implementation of actions financed by the grant part of the Recovery and Resilience Fund is estimated for 2022 at €3,199 million. The relevant appropriations are foreseen in addition to the amount of appropriations of the PIP, which will decline slightly, from €8,350 million to €7,800 million, following a reduction in transfers due to COVID-19.

### Conclusions

2020 has brought significant difficulties, both in health and economic terms, which have obviously not yet been overcome. The targets set for continuous primary surpluses have been revised for the years 2020, 2021 and 2022. The health crisis has led to large deficits, both because of the restrictive measures on the operation of businesses and on movements, which severely limited economic activity, as well as because of the interventions to support households and businesses and the measures. Overall in 2021 the fiscal outcome is expected to be slightly better than the target, due to the milder

<sup>13</sup> The PIP category also includes the flows of the Recovery and Resilience Fund for 2021 and 2022.



implementation of restrictive measures, the much stronger than expected recovery of tourism, but also the inflows from the Recovery and Resilience Fund. These effects are also reflected in the revised growth rate (to the better) last year, both in the budget and in the IOBE (see section 3.1 of the report).

For 2022, the estimates are clearly more optimistic. A high growth rate is forecast for a second year, but also a significant reduction in the government deficit. However, the exit from the economic and financial crisis brought about by the pandemic will not be easy. Prudent actions are needed to gradually return to primary surpluses and maintain high growth rates. Achieving these objectives requires, among other things, the effective use of the resources of the Recovery and Resilience Fund as well as the building of the foundations for high medium-term growth, with a more outward-looking productive model. In the latter direction, there is a need to accelerate the reforms needed by the Greek economy, the implementation of which was one of the policy areas negatively affected by the pandemic.

## C. Financial developments

- The Eurosystem's exceptional liquidity support measures continue, but with a view to a gradual weakening during the year.
- Non-Performing Loans (NPLs) on banks' balance sheets declined significantly for the second consecutive quarter, mainly through loan sales and securitisations, declining in September 2021 to 15% of total loans.
- The stock of private deposits continued to expand at the end of 2021
- Credit growth to businesses, albeit at a slower pace, offsets credit contraction to households
- The timely implementation of the National Recovery and Resilience Plan is an opportunity for further credit growth in the medium term
- The cost of new borrowing recorded a historic low level for businesses, while it recovered slightly for the Greek government at the end of 2021, to an 18-month high.

The escalation of inflation and the gradual reduction of the negative economic effects of the pandemic lead to a gradual weakening of the exceptional liquidity support measures by the Eurosystem and the domestic authorities. However, the banking system continues to operate in particularly favourable liquidity conditions. The timely implementation of the National Plan for Recovery and Sustainability creates opportunities for medium-term stimulation of credits for productive investments. Banks are called upon to play a co-financing key role for the €12.7 billion loan portfolio of the Recovery Fund for Greece by 2026.

Banks seem to be going through a turning point, moving from a period where the emphasis was on addressing the weaknesses of the past to a time when the emphasis is on strategic growth and improved profitability. Among the challenges of the past are their weak asset quality, as reflected in the high proportion of NPLs and the weak quality of their regulatory capital due to the high share of deferred taxation. Despite the adverse economic situation, on the issue of NPLs, banks made significant progress in the second and third quarters of 2021, dramatically reducing the NPLs ratio by 10 pp. and 5.3 pp. respectively, mainly through sales and securitisations.



Investment sentiment towards domestic banks remained positive in late 2021 and early 2022, with the stock price bank index recording a mild rise. Thus, following the sharp fall in banks' valuations by 60% at the beginning of the pandemic (March 2020), their shares have recovered some of these losses, with current levels being about 20% lower than in early 2020.

Risks and uncertainty for the recovery of the real economy also affect the outlook for the financial sector. Possible mutations may prolong the duration of the effects of the health crisis, while international inflationary pressures stemming from rising energy prices continue, albeit to a milder extent. Both risk factors act as a brake on the rapid recovery in asset quality and banks' short-term profitability prospects.

On the monetary policy side, the ECB has announced that it will stop net purchases under the extraordinary securities purchase programme PEPP in March 2022. In the case of Greece, however, which had been granted exceptional eligibility to this programme, the ECB announced that there is scope for net purchases to continue beyond this time frame in order to continue the smooth monetary policy transition to all members. This is of key importance, as it will continue to facilitate the provision of liquidity to Greek banks, and to stimulate the demand for Greek government bonds through the PEPP. Government bond markets under the PEPP program cumulatively exceeded €34.9 billion or 21.1% of GDP in the 21-month period March 2020-November 2021, which is the highest percentage in the Eurozone. At the same time, low-cost long-term refinancing operations for banks (eg LTROs, PELTROs, TLTROs) provide significant liquidity, as it reached €46.9 billion in the fourth quarter of the year or 28.3% GDP, which is the third highest among the Eurozone member states.

At the national level, the extraordinary fiscal measures to support the borrowers are being de-escalated, as well as the programs of partial payment of instalments and cash facilities of the borrowers, by the banks.

Among the positive trends in the fundamental size of banks, the reduction of NPLs in bank balance sheets by 15% of total loans in September 2021 was impressive, while the goal remains the further reduction, in single digits, within 2022. Also, the rise of private deposits continued in the second half of last year. The protagonists of this trend in recent months have been businesses, further enhancing the liquidity of the banking system. After six years, the resumption of financing of banks from the capital markets through the issuance of bonds is also remarkable. The cost of new private sector bank financing has hovered at new all-time lows, but remains higher than other European partners.

Amid the negative trends, the credit contraction to households continues unabated while it is offset by the credit expansion to businesses, which, however, slowed down in the second half of 2021. At the same time, at the end of 2021, a slight increase in the cost of new borrowing by the Greek government was recorded, as reflected by the yields on government bonds, which in December rebounded to an average interest rate of 1.29%, which is a 18-month high.

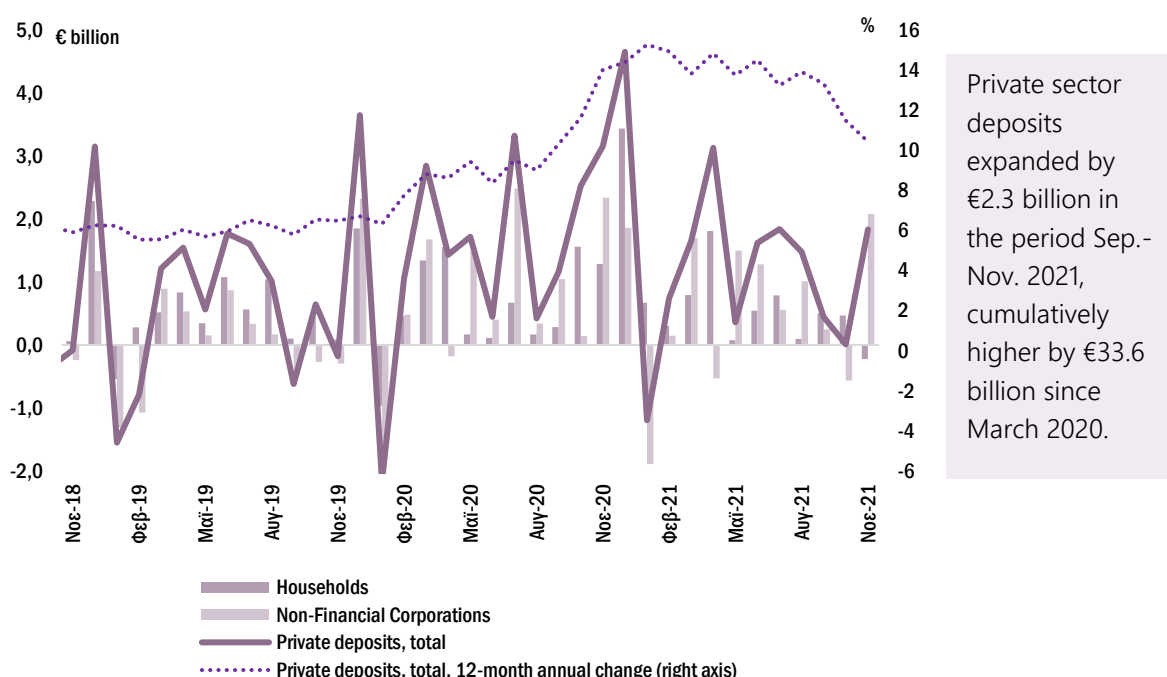
On the liabilities side of banks, private deposits increased in the period September-November 2021 by €2.3 billion, of which €0.7 billion came from households. The twelve-month rate of change remained in double digits, close to 10%. Amid the pandemic and the growing uncertainty it has caused, private deposits have increased cumulatively since March 2020 by €33.6 billion, of which €16.4 billion comes from households, signalling a strengthening depositors' confidence in the banking system.



A mild positive trend in private deposits is expected for 2022. The economic recovery, due to the high uncertainty caused by the pandemic, leads to an increase in the momentum for consumption and a relative de-escalation of the momentum for saving, having a mild inhibitory effect on the increase of deposits.

Figure 2.7

Monthly net flow of private deposits at Greek banks



Source: Bank of Greece

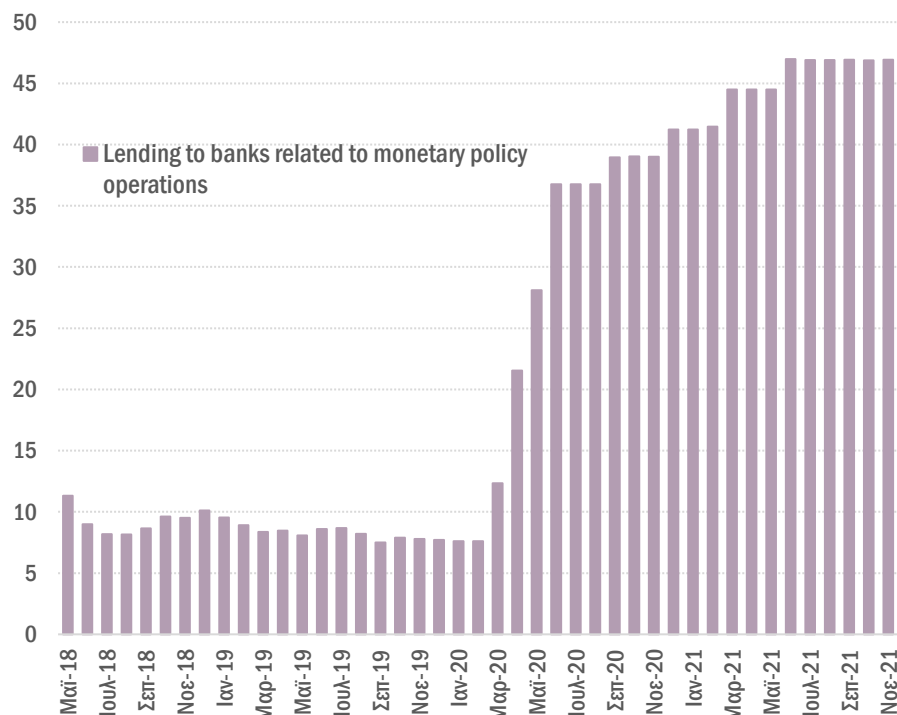
The second part of banks' liabilities concerns Eurosystem funding. The ECB's exceptional measures to enhance the liquidity of European banks also offer Greek banks opportunities to raise liquidity at low cost. Eurosystem funding to banks during the pandemic crisis has increased since February 2020 by at least €39.3bn, including through low-cost loans through long-term finance monetary policy operations (Figure 2.8). At the same time, domestic banking assets accepted by the Eurosystem as collateral for monetary policy operations, as reflected in the financial statements of the Bank of Greece, increased over the same period by around €45.13 billion. The third part of the banks' liabilities concerns the financing from the capital markets, with bond issues gradually taking place in 2021, through which the Greek listed companies raised a total capital of €1.4 billion with yields often below 3%, then from a multi-year crisis period in which this funding opportunity was extremely limited and expensive.

Figure 2.8

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



The low-cost liquidity from the Eurosystem to Greek banks has stabilised around €47 billion in the second half of 2021



Source: Bank of Greece

On the asset side of banks, the 12-month rate of credit growth to the domestic private sector slowed to 0.9% in the period September-November 2021. The corresponding pace for non-financial institutions (NFIs) slowed down and remained at around 3.0% over the same period (Figure 2.9). At the same time, credit growth to freelancers and sole proprietorships continued, at rates close to 2%, while the credit contraction towards households declined marginally, with an annual growth rate of about -2.4%. As a result, the 12-month rate of change of net financing in the private sector as a whole, excluding loan write-offs, stabilised in the period October-November, after a systematic decline in the first nine months of the year (Table 2.13). The highest 12-month rate of credit growth to NFIs in November 2021 was recorded in order in the sectors of Agriculture, Tourism, Professionals, Real Estate Management, Energy, Trade, Communication, Construction, Industry and Shipping.

In these trends in private sector financing, both the changes in the supply of and demand for loans, under the influence of the pandemic, are contributing to these trends in private sector financing. On the supply side, the rapid reduction of NPLs, the launch of the Recovery and Resilience Plan and the exceptional liquidity stimulus measures are positive for NFIs. On the demand side, the de-escalation of uncertainty is positive towards new investment. The Bank of Greece's survey on bank lending in the third quarter of 2021 recorded expectations of a significant increase in loan demand, both for short-term loans, but mainly for long-term loans from large and medium-sized enterprises. The credit criteria remained stagnant, also not expected to change in the short term.

Table 2.13

Domestic Banking Finance per sector (annual % change of 12-month flows\*)

Quarter / Year	4/20	1/21	2/21	3/21	Oct.21	Nov.21
Total private sector	2.9	3.4	2.3	0.9	0.9	1.1



Households & NPIs	-2.4	-2.5	-2.5	-2.6	-2.5	-2.3
Sole proprietors and unincorporated partnerships	1.2	3.2	4.2	2.4	2.0	1.5
Non-financial corporations	9.1	9.8	6.4	3.4	3.0	3.2
Agriculture	3.2	10.6	11.0	8.7	12.4	10.1
Industry	9.7	8.2	1.9	0.1	1.1	1.2
Trade	9.7	10.9	8.5	4.2	3.3	3.6
Tourism	13.7	16.4	16.8	11.0	8.3	8.1
Shipping	9.1	11.2	10.7	3.8	2.5	0.8
Construction	-2.4	-0.3	-0.2	1.2	1.5	1.3
Electricity-gas-water supply	9.4	7.4	-1.0	1.2	0.2	3.9
Transport and logistics	27.6	22.9	20.2	4.9	-1.4	-1.3
Interest rates on new loans (period average, %)						
Consumer credit	9.58	9.59	9.77	10.37	10.32	10.40
Mortgage credit	2.80	2.67	2.80	2.85	2.92	2.84
Loans to non-financial corporations	3.17	3.12	3.12	3.11	2.99	2.68

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.

During the pandemic, there is an increasing role of the Greek state in absorbing the resources of the domestic banking system. On the side of the new bank financing, the high annual rate of credit growth to the General Government continues, which stood at a 12-month rolling basis in November at a rate of 43%. On the banks' asset side, banks slightly reduced their exposure to sovereign debt instruments between September and November 2021, to €29.1 billion in November 2021 or 8.8% of their total assets. Thus, the share of the total assets of Greek banks that has been placed in government bonds is slightly higher than the corresponding share of the rest of the countries of the "south" of the Eurozone, but significantly higher than the corresponding share for the average of the eurozone countries (Figure 2.10).

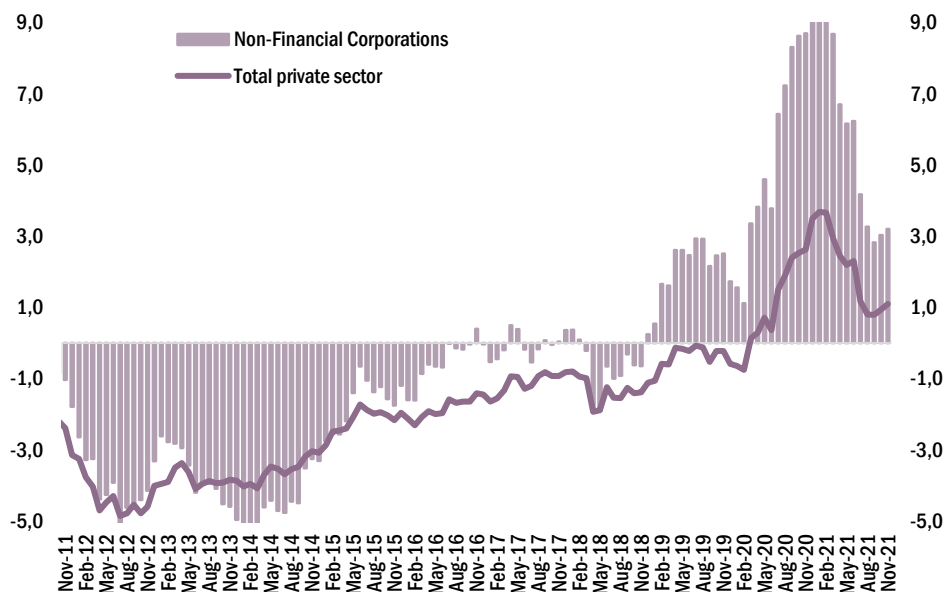
Figure 2.9

Bank financing of the domestic private sector 2011-2021 (annual % change of flows\*)





Credit growth to corporates, albeit at a much lower pace than at the beginning of 2021, offsets the credit contraction to households



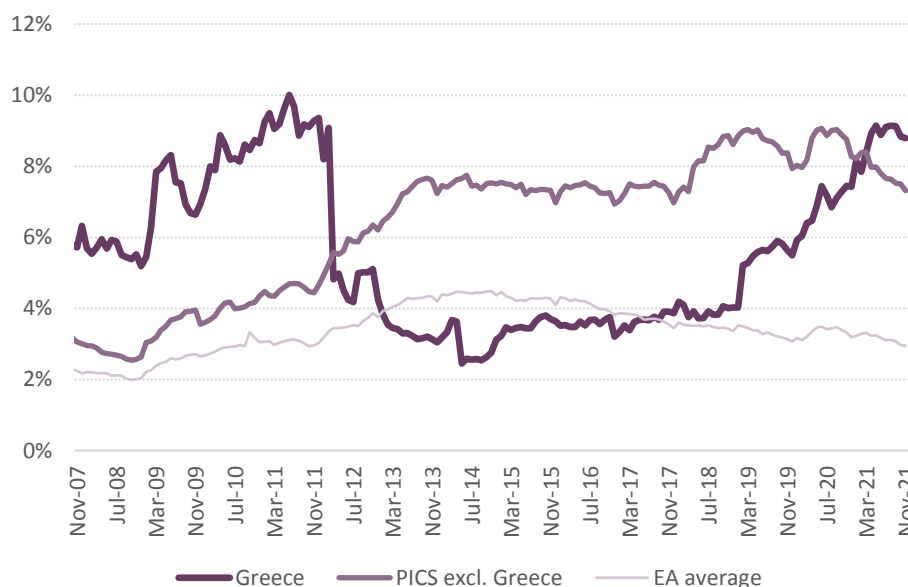
Source: Bank of Greece

\* 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.

Figure 2.10

Banks' government bond holdings over total assets (%)

Greek banks' exposure to government bonds remains above the euro area average



Source: ECB

Non-Performing Loans (NPLs) recorded an impressive decrease for the second consecutive quarter, by 5.3 a.m. or €8.4 billion<sup>14</sup>, reaching €20.9 billion in September 2021 or 15.0% of total loans (Figure 2.11). The decrease is mainly due to non-organic reduction transactions, ie sales and securitization of loans under the Hercules II program. The total

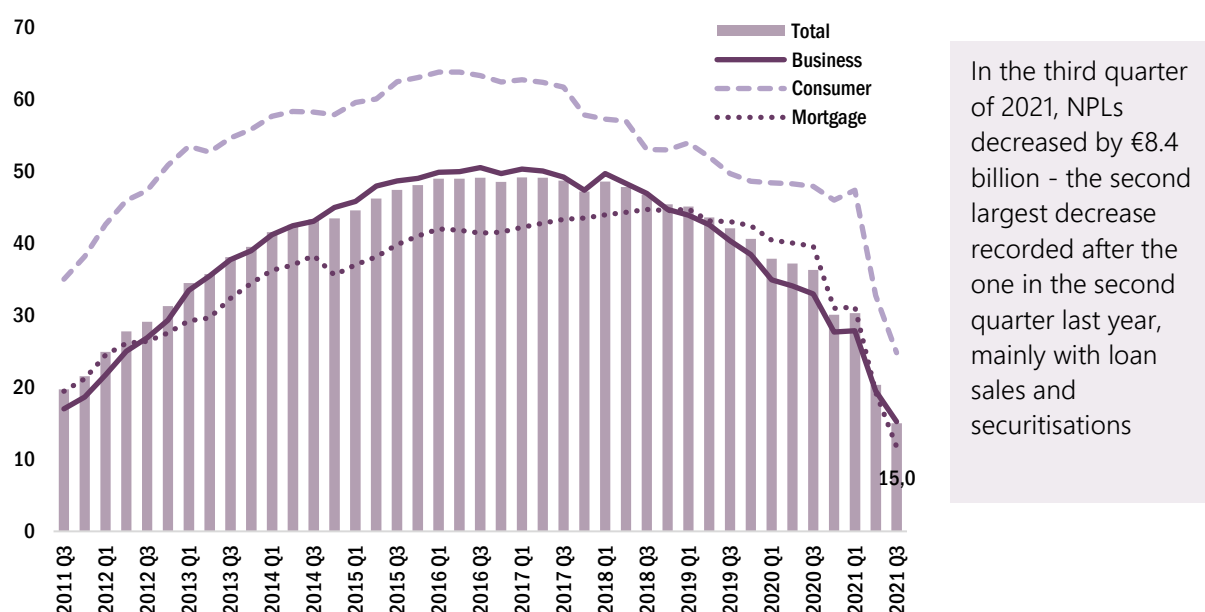
<sup>14</sup> Data are presented for NPLs that include only on-balance sheet items, on an individual basis



level of NPLs in the third quarter of 2021 was €29.4 billion or 20.3% of total loans, approximately €86.3 billion or 80.5% lower than the maximum level of March 2016. However, it remains higher than the rest of the European countries, where it moves in low single digit percentages. In business credit, the percentages of NPLs decreased in the third quarter of 2021, to 15.2% of the relevant loans, from 19.5% in the previous quarter, as well as in the mortgage portfolios, from 19.3% to 11.8%. The largest decrease, from 32.8% to 24.8%, was recorded in consumer loans.

Figure 2.11

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



Source: Bank of Greece

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

Banks have a strategic goal of reducing NPLs to single digits by the end of 2022. In the period of operation of "Hercules I", the non-performing loans of the four systemic banks decreased by approximately €31 billion, while there is the possibility for securitisations of NPLs of up to €32 billion. through "Hercules II" which was launched in the second quarter of 2021. While making full use of the securitisation programme, it is appropriate to stimulate the organic reduction of NPLs, as some tools to reduce them are still under-exploited, such as auction receipts and collateral liquidations.

In the medium term, the downward trend in NPLs is expected to continue, albeit at a declining pace, driven by further sales and securitization of portfolios which move "red" loans out of banks' balance sheets. In the short term, the reduction in NPLs will be partially offset by disruptions due to the effects of the health crisis and the cessation of temporary borrower support measures. The banks themselves, the European Supervisory Mechanism SSM, but also the Bank of Greece, consider it likely that a new "generation" of NPLs will emerge in the near future, with estimates ranging to relatively low levels, between 2 and 7 pp. of the loan balance. This disruption will continue to be offset by the non-organic reduction of NPLs, mainly through the sales and securitisation tools under the Guarantee



Programme by the Greek government that will remain in office until October 2022 ("Hercules 2").

As regards new credits, credit contraction in households is expected to continue, while inflows from the European Recovery Fund (€12.7 billion in loans in the period 2021-2026) and the related leverage of private investment are expected to significantly boost credit growth to businesses. However, at the start of the implementation of the Recovery Plan at the end of 2021, there was already a delay in the allocation of the loan part of the Recovery Fund's resources, which included in its design at least 30% bank financing, at least 20% own funds and up to 50% of the Fund's capital. With a view to making the financing of eligible investment projects more flexible, the Ministry of Finance decided to remove the minimum bank co-financing requirement.

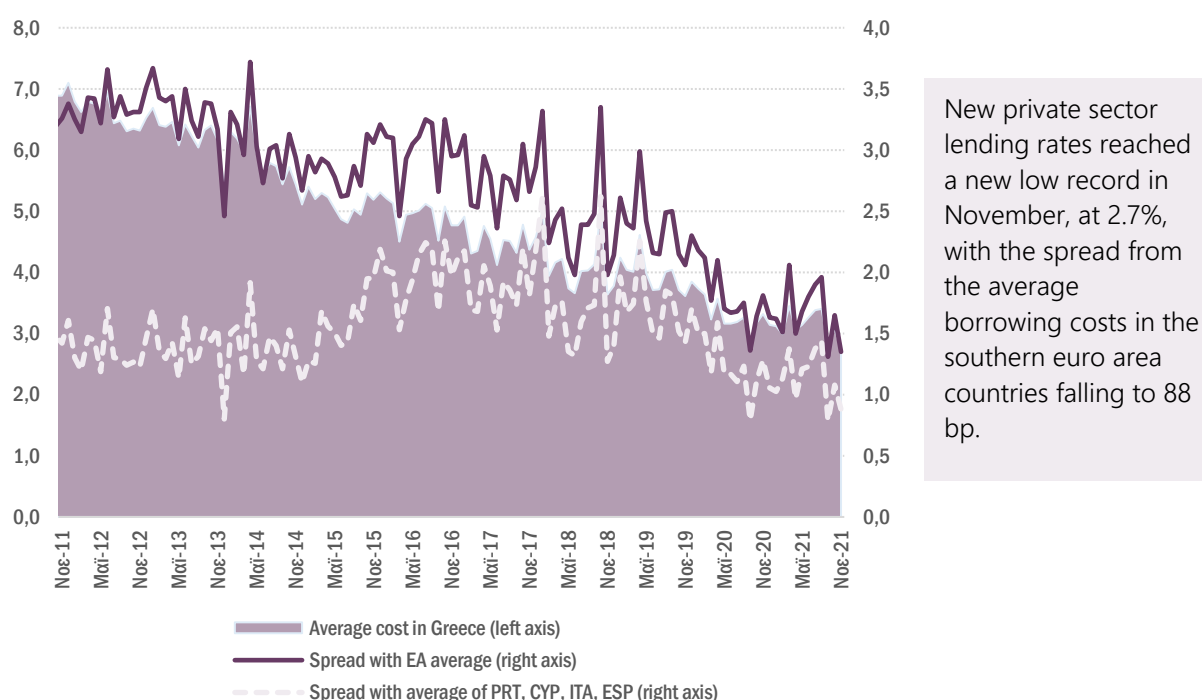
New deposit rates remained extremely low in September-November 2021, at 0.01% and 0.06% for Non-Financial Enterprises (NFIs) and households respectively, from 0.02% and 0.07% respectively in the eight months of 2021. In the same quarter, the average interest rate on new loans decreased to 3.8% from 4.1% in the previous quarter, at around 4.9% for individuals, 5.0% for self-employed persons and 2.8% for NFIs. The spread of the average interest rate on loans and deposits (interest margin) decreased to 3.8%, from 4.0% in the previous quarter, returning to the average levels of the first five months of 2021.

The average cost of new bank financing of private sector NFIs decreased to 2.7% in November, which is also a minimum over time (Figure 2.12). Nevertheless, costs still remain higher than in the rest of the euro area. Indicatively, according to the ECB's weighted bank borrowing cost ratio, the cost to non-financial corporations/institutions in November 2021 stood at 1.4% in the Eurozone and Germany, and 1.9% in the countries of the "south" of the Eurozone (Portugal, Italy, Cyprus, Spain). Subsequently, the spread of borrowing costs for Greek businesses in relation to the Eurozone average and the "south" average decreased to 135 bps and 88 bps respectively. Comparing it with the level before the fiscal crisis of 2010, the spread of borrowing costs for Greek businesses compared to the average of other countries in the "south" of the Eurozone, remains significantly higher.

Greek government bond yields rose at the end of 2021, under the negative impact of the new Omicron mutation, rising inflation and growing uncertainty about both the speed of the economic recovery and the possible weakening of the ECB's liquidity stimulus measures. Thus, for the 10-year securities the average yield rose to a fall to 1.29% in November, which is an 18-month high (Figure 2.13). The additional burden on the new cost of 10-year borrowings of the Greek state compared to the rest of the Eurozone also increased in the fourth quarter of last year. Thus, it stood in December at 167 bps and 68 bps in relation to the German bond and the average of the countries of the "south" of the Eurozone respectively. As a result, spreads remain significantly higher than their average prices in the first decade of the country's accession to the Eurozone (54 bps and 2 bps respectively).

Figure 2.121

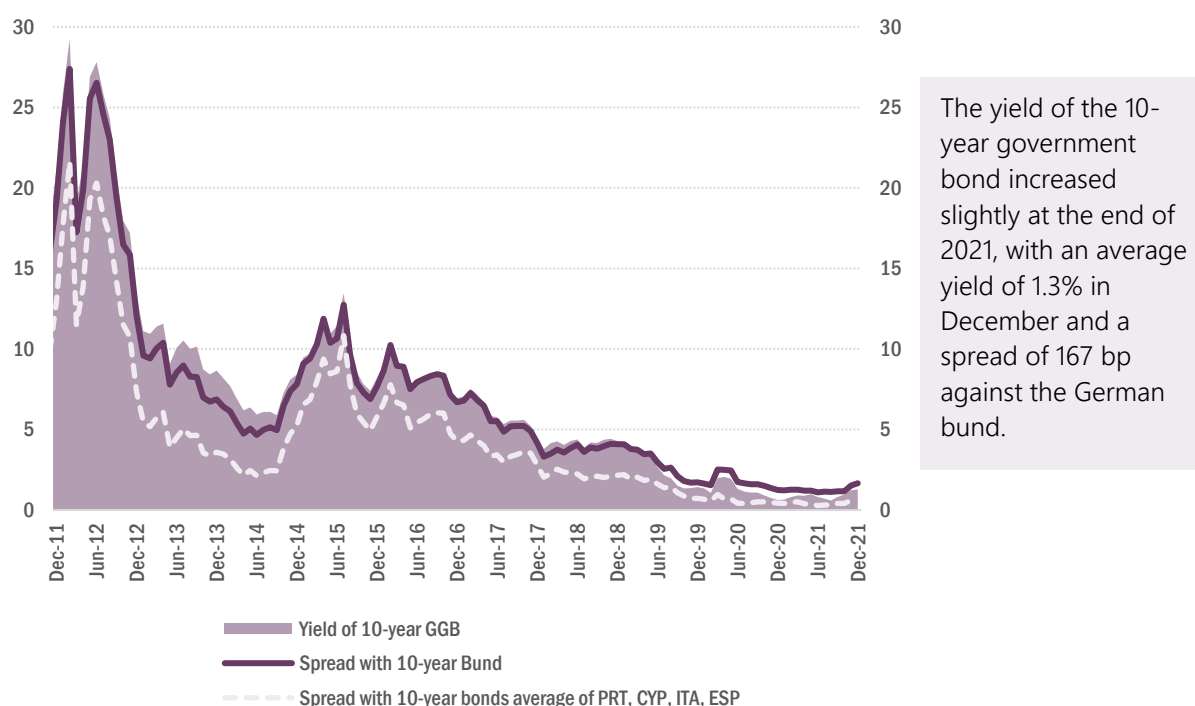
Composite cost of borrowing for non-financial corporations (%)



Source: ECB

Figure 2.132

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



Source: ECB

In the whole of 2021, six successful long-term issues of public debt were completed, raising a total of €14 billion, with very low yields (from 0% for the 5-year to 1.67% for the 30-year period). These versions were oversubscribed by particularly high demand. In terms



of their qualitative characteristics, the vast majority of buyers were long-term institutional investors. Following this, the Greek Government proceeded in January 2022 to issue a new 10-year bond. They raised €3.0 billion with an interest rate close to 1.8%. Despite the continuing favourable financing conditions worldwide, at the end of 2021 there is a slight recovery of government bond yields internationally, with a slightly stronger increase in yields on Greek bonds. At the same time, the amount of Greek public debt remains among the largest internationally as a percentage of GDP. Compensatory to these characteristics are its qualitative elements, such as the high average repayment term, which improves the prospect of its long-term viability.



## 3 PERFORMANCE AND OUTLOOK

### 3.1 Macroeconomic Developments

- In the third quarter of 2021 the strong recovery continued in the Greek economy, at a rate of 13.4%, compared to 16.6% in the previous year and a recession of 11.0% a year earlier.
- In the whole period January-September, GDP increased by 8.9%, in contrast to the recession of 9.3% in the same period of 2020.
- The recovery in the third quarter came mainly from the expansion of exports by 48.6%, from the vertical increase of exports of services (+84.6%), while exports of goods increased significantly (+9.2%). The increase was greater than the decrease in 2020 (-34.7%). It also exceeded the increase in imports (+21.7%), mainly from more imports of services (+58.1%).
- The recovery is secondarily due to an increase in household consumption (+8.6%), which almost offset the fall of the previous year (-9.0%). Again for another quarter the expansion of public consumption (+5.7%) was significant, at the same extent as a year ago (+5.3%).
- Investment declined in the third quarter, by 5.0%, exclusively from a decrease in the accumulation of stocks, as the formation of fixed capital expanded by 18.1%. A year earlier it was expanding by 42.2%, almost exclusively from an increase in inventories.

#### Recent macroeconomic developments in Greece

The recovery of the Greek economy continued at a particularly high pace in the third quarter of last year, slightly lower than in the previous quarter. Specifically, GDP grew in the July-September period last year at a rate of 13.4%, from 16.6% in the previous quarter, while a year earlier it declined by 11.0%. Overall in the period January-September 2021, GDP was 8.9% higher than in the same period the year before, when it declined by 9.3%. It is pointed out that compared to the nine months of 2019, GDP in the same period

last year was lower by €1.66 billion or 1.2%. The strong recovery in the third quarter of this year was mainly driven by strong export growth. Their growth more than offset the significant increase in imports, improving the external balance. Next rank exports followed according their contribution to GDP growth, the expansion of household consumption, while the importance of expanding public spending was the smallest of the key components of the domestic product.

As for the exact developments in the components of GDP during the period January-September, the domestic consumption expanded by 5.5%, while a year earlier it fell by 5.1%. The increase came equally from the rise of private (+5.2%) and public consumption (+5.5%), while a year earlier household consumption expenditures had been significantly reduced (-7.3%) and consumer spending government spending increased by 1.6%. The growth rate of public consumption in the first three quarters of last year was stable, in the range of 5.0-5.7% and is due to the ongoing support interventions for households and businesses. As it has been pointed out in the previous IOBE bulletin on the Greek economy, it could have been more intense if a large part of the business support interventions were not recorded in the Public Investment Program. The trend of private consumption showed a significant fluctuation, with the decline in the initial quarter (-4.5%) followed by a strong increase in the next (+13.1%), which slowed slightly in the summer months (+8.6%).

Investments expanded in the nine months of January-September 2021 by 6.4%, much milder than a year earlier (+16.9%). The increase came exclusively from the expansion of fixed capital formation, which amounted to 16.3%, following its marginal decline in 2020 (-0.6%). The increase in investments was mitigated by the decrease of stocks, by 23.5%. In addition, their increase came exclusively from the second quarter (+31.4%), as in the first (-2.6%) and the third (-5.0%) they decreased.

In terms of trends in fixed capital categories in the first nine months of last year, they were up in all except agricultural products, which showed a slight decline. The strongest reinforcement in absolute terms was presented by the Mechanical equipment-weapons systems (+€692 million or +18.6%), reflecting the effect of the supply of fighter jets, and the Homes (+€476 million or +34.7 million). In the same period of 2020, the increase was milder in both categories, by 4.8% and 19.3% respectively. This was followed by an absolute increase in Other Constructions (+€381 million or +10.1%), after a slight decline a year earlier (-1.8%), and Transport Equipment (+€333 million or +33, 0%), due to the opposite upward trend of vehicle sales from the year before last (new licenses for passenger and light trucks: +36.2%, from -35.2% the year before last), which had then led to a drop of 36.5%. The mildest expansion was recorded in investments in ICT Equipment (+€292 million or +19.6%) and Other Products (+€192 million or +6.5%) while in the same period of 2020 the former declined marginally (-0.4%) and the latter amounted to 3.1%. As already mentioned, only the gross capital formation in Agricultural Products decreased, to a small extent, by €0.5 million or 0.85%. This trend is contrary to their rise of 32.0% the year before, which was the highest at the time among fixed capital categories.

In terms of developments in the external balance of the economy, SARS-CoV-2 vaccination and the gradual lifting of restrictions on international travel and the functioning of economies earlier in the second quarter of last year than in 2020, were reflected in the strong annual increase of the international tourist traffic (+331% and +157%) and of the international transports in this and the next quarter and then of the exports of services (+44.1% and +84.6% respectively). However, international tourism continued to fall significantly below its level in 2019 (-81.6% in the second quarter and -45.2% in the next). Overall, in the first nine months of 2021, exports of services were 25.8% higher than the year-before-last average increase in the period January-September by 11.6%. Overall





exports were 21.4% higher than in 2020, with the increase coming by 63.2% from exports of services and 36.8% from exports of products. However, they continued to fall 5.0% below their level the year before last year.

And on the import side the growth was much stronger in the second (+41.2% versus +18.1%) and in the third quarter (+58.1% versus +10.1%) on the services side compared to that of the goods. Subsequently, imports of products were 8.4% higher in the nine months of 2021 than a year ago and imports of services 28.0% more. The average expansion of total imports by 13.2% came almost equally from imports of goods (47.2%) and imports of services (52.8%). In addition, total imports were 5.1% more than in the same period of 2019. Overall, in the nine-month period, the external balance deficit in national accounting terms decreased compared to the same period the year before last year by 26.1% from €8.5 billion to €6.3 billion.

Approaching GDP on the production side, domestic gross value added expanded by 8.8% in the nine months of January-September last year, from strong strengthening in the second (+14.5%) and third (+13.3%) quarters. Seven of the ten main sectors of the Greek economy showed an expansion of their activity in this period compared to a year ago, in two it declined, while in one it was essentially unchanged. The strongest increase, by 22.3%, occurred in wholesale - retail trade, transport - storage, hotels - restaurants, reflecting the strong rise of international tourism, but also the significant revival of consumer demand following the lifting of restrictive measures on the operation of businesses from the beginning of the second quarter last year. On the other hand, this rise balances the similar contraction in activity the year before last year, which was the strongest among sectors (-22.1%). The strong strengthening of investments in housing mentioned above, but also in other constructions, is reflected in the increase of activity in Construction by 21.1%, following its rise in 2020 by 3.9%, which was the strongest among the sectors. Next are the expansion of their product, at a double-digit rate, the sectors Professional-scientific-technical-administrative activities (+14.9%), Information-Communication (+11.4%) and Industry (+10.4%), then retreat of the previous year in the first two (-8.9% and -2.3% respectively) and a slight increase in the last (+1.7%). The mildest increase was in Arts-Entertainment-Recreation (+3.9%), a sector that had been particularly hard hit a year earlier by public health protection measures (-21.3%) and in Public Administration-Defence-Compulsory Social insurance (+3.3%), overcompensating for the slight decline in the specific period of 2020 (-1.6%). In the Real Estate Management sector, the product moved at the same levels as a year earlier (+0.3%), but when it was 10.4% lower than in 2019.

On the other hand, activity shrank in the first nine months of last year in the Primary sector (-7.4%) and Financial and insurance activities (-3.3%, continuing the same trend in 2020 (by -3.2% and -7.0% respectively).

Although the developments in the economic activity are reflected in a time lag in the labour market, the continuation of the strong growth of the GDP in the third quarter was accompanied by a significant expansion of employment, by 4.9% or 191.5 thousand, clearly stronger than in the previous quarter. In fact, in contrast to the second quarter, this trend came mainly from a decrease in the number of unemployed (by 73.6% or 141 thousand), not from the reduction of the inactive population, which expands the workforce. Subsequently, the weakening of the unemployment rate compared to the period a year earlier escalated sharply in the July-September quarter, to 3.2 from 0.9 percentage points in the previous quarter. Thus, the unemployment rate stood at 13.0%. This level is similar to that in the third quarter of 2010, when the process of economic adjustment began domestically. Overall, in the nine-month period, the number of unemployed decreased

compared to a year earlier by an average of 58.8 thousand. or 7.8%, primarily due to a contraction in the labour force (-47.0 thousand or -1.0%) and less due to the expansion of employment (+11.8 thousand or +0.3%). The average unemployment rate stood at 15.3% compared to 16.4% a year earlier, when it also fell by 1.1 percentage points compared to 2019.

At the sectoral level, employment trends are not relevant in some cases to those in the sectoral product mentioned above, verifying the temporal dimension between developments in economic activity and those in the labour market. In some cases, the discrepancies may be due to employment support measures, mainly last year, but also this year, which prevented fluctuations in employment. For example, the sectors of Wholesale and retail trade, transport - storage, hotels - restaurants and Construction, which showed the strongest growth of economic activity, are not among those with the most new jobs, while in the Primary sector, with a product decline, their most intense increase is noted. On the other hand, in professional-scientific activities and industry, the dynamics of employment are consistent with that in their product. Specifically, most jobs compared to the third quarter last year were created in the Accommodation-catering Services (+49.1 thousand or +12.4%), in the Primary sector (+39.1 thousand or +9.7%), in Public administration-defence-compulsory social security (+37.5 thousand or +15.5%) and in Manufacturing (+31.3 thousand or +8.4%). On the other hand, the largest decrease in jobs in the third quarter was recorded in Education (-12.2 thousand or -4.0%), in Financial-insurance activities (-7.5 thousand or -8.5%) , in the Wholesale-retail trade (-6.0 thousand or -0.8%) and in the Administrative-supporting activities (-3.4 thousand or -4.0%).

In the field of consumer prices, inflationary pressures escalated in the third quarter of 2021, after 13 months. On average in the period July-September, the General Index of Consumer Prices increased by 1.8%, compared with a mild increase of 0.3% in the previous quarter and a decline of 1.9% in the corresponding quarter last year. In September, inflation stood at 2.2%, the highest since February 2012. The strengthening of the inflationary trend is mainly due to the increase in the prices of energy products. The negative impact on the prices of indirect taxes, due to the reduction of VAT from 1/6/2020 on certain products and services, was small one year after its implementation. Among the 12 categories of products and services included in the domestic CPI, there was a price increase in three, while in five prices were almost unchanged. The largest price increase were recorded in those categories affected by energy product prices. Specifically, the prices of transport services amounted by 6.8% and housing by 4.4%. However, these categories showed the sharpest decline a year ago, by 5.0% and 8.5%, so this year's trends are due to a "base result". There was also a 2.6% increase in prices in non-alcoholic beverages, a development related to the aforementioned completion of the effect of the VAT reduction. Among the other categories, prices were almost unchanged in the period July-September in Education (+0.3%), Hotels-cafes-restaurants (+0.1%), Alcoholic beverages-tobacco (-0.2%), Durable goods (-0.2%) and Health Services (-0.4%). The biggest price decline was recorded in Communications (-2.6%), following the similar one; their decline the year before (-2.4%), and in Clothing-footwear (-1.5%), where they were unchanged the year before last.

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
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	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
2008	249,91	-0.2%	221,53	2.1%	59,020	-9.2%	58,48	3.7%	89,87	1.1%
2009	239,15	-4.3%	219,99	-0.7%	43,185	-26.8%	47,79	-18.3%	71,70	-20.2%
2010	226,12	-5.4%	207,01	-5.9%	38,613	-10.6%	49,95	4.5%	69,24	-3.4%
2011	194,71	-13.9%	176,04	-15.0%	25,700	-33.4%	47,87	-4.0%	55,60	-19.7%
2012	180,63	-7.2%	163,32	-7.2%	20,380	-20.7%	48,93	2.2%	52,55	-5.5%
2013	176,01	-2.6%	156,58	-4.1%	19,680	-3.4%	49,90	2.0%	50,82	-3.3%
2014	177,32	0.7%	156,77	0.1%	20,512	4.2%	53,66	7.5%	54,28	6.8%
2015	176,115	-0.7%	156,310	-0.3%	21,404	4.3%	56,39	5.1%	58,45	7.7%
2016	175,61	-0.5%	156,110	-0.3%	22,768	6.6%	56,23	-0.7%	59,88	2.7%
Q1 2017	44,032	0.4%	39,430	1.8%	5,936	0.4%	14,719	7.8%	15,74	7.6%
Q2 2017	44,298	1.3%	39,719	2.2%	5,237	-12.4%	15,510	12.5%	15,89	7.9%
Q3 2017	44,773	2.1%	39,844	1.6%	5,505	2.0%	15,54	7.4%	16,25	7.6%
Q4 2017	44,369	0.5%	40,044	2.0%	4,957	-9.5%	15236	6.4%	16536	7.3%
2017	177,47	1.1%	159,03	1.9%	21,635	-5.0%	61014	8.5%	6443	7.6%
Q1 2018	44,976	2.1%	40,155	1.8%	5,417	-8.7%	16057	9.1%	16522	5.0%
Q2 2018	45,043	1.7%	39,836	0.3%	6,076	16.0%	16801	8.3%	17230	8.4%
Q3 2018	44,945	0.4%	39,960	0.3%	5,438	-1.2%	16621	6.9%	17628	8.4%
Q4 2018	45,213	1.9%	39,937	-0.3%	6,370	28.5%	17289	13.5%	17822	7.8%
2018	180,17	1.5%	159,88	0.5%	23,303	7.7%	6676	9.4%	6920	7.4%
Q1 2019	45,603	1.4%	40,284	0.3%	6,225	14.9%	16970	5.7%	17819	7.8%
Q2 2019	45,953	2.0%	40,558	1.8%	5,325	-12.4%	17454	3.9%	17678	2.6%
Q3 2019	45,967	2.3%	40,224	0.7%	5,006	-8.0%	17905	7.7%	17816	1.1%
Q4 2019	45,859	1.4%	40,805	2.2%	6,015	-5.6%	17506	1.3%	18058	1.3%
2019	183,38	1.8%	161,870	1.2%	22,570	-3.1%	6983	4.6%	71370	3.1%
Q1 2020	45,132	-1.0%	40,658	0.9%	6,575	5.6%	17060	0.5%	17884	0.4%
Q2 2020	38,745	-15.7%	36,068	-11.1%	5,653	6.2%	12221	-30.0%	15114	-14.5%
Q3 2020	40,910	-11.0%	38,121	-5.2%	7,121	42.2%	11693	-34.7%	16489	-7.4%
Q4 2020	42,489	-7.3%	38,793	-4.9%	5,582	-7.2%	15627	-10.7%	16270	-9.9%
2020	167,27	-8.8%	153,63	-5.1%	24,931	10.5%	5660	-18.9%	6575	-7.9%
Q1 2021	44,273	-1.9%	39,728	-2.3%	6,405	-2.6%	16923	-0.8%	17267	-3.4%
Q2 2021	45,182	16.6%	40,530	12.4%	7,426	31.4%	15431	26.3%	18697	23.7%
Q3 2021	46,407	13.4%	40,910	7.3%	6,762	-5.0%	17376	48.6%	2006	21.7%

\* provisional data

Source: Quarterly National Accounts, ELSTAT., December 2021

To sum up, the structure of the strong recovery of the Greek economy in the third quarter was slightly different from the previous one, with exports having a primary role in this trend instead of private consumption, mainly due to the sharp strengthening of exports of services, while the growth rate in exports of products remained high. The continuation of fairly high international tourism traffic in the fourth quarter is considered to have contributed to maintaining the significant upward momentum in service exports in the last quarter last year, at a slightly slower pace than in the previous one, due to the comparatively higher base level in the last quarter of 2020. Overall, in the previous year, the rise of international tourism probably stood slightly above initial expectations. As predicted in the previous IOBE report on the Greek economy, the expansion of exports of products will continue milder in the second half of 2021, mainly under the negative impact on international trade of the strong increase in commodity prices. According to the most recent data, the monthly volume of international trade shows a stabilising trend from March

to October and does not rise any further. Now, its difference from last year's level has receded quite a bit.

The improvement in the external balance (in national accounting terms) will be greatly mitigated by the continuation of the expansion of imports. The containment of the improvement is expected to come mainly from several more imports of products, mainly due to the strong increase in private consumption. Despite the much stronger increase in imports of services in the third quarter, separating the external balance into a balance of products and services, it appears that in the July-September quarter the first deteriorated from the previous year by €520 million, while the second improved by €1.64 billion. Therefore, despite the relatively smaller expansion of imports of goods, the overall external balance deteriorated as a result of them.

In the third quarter of 2021, the strengthening of household consumer demand also contributed greatly to the recovery. As there were no particularly unfavourable developments around the health issue in the last quarter of last year, which would have led to restrictive measures in the operation of sectors in which a significant part of private consumption takes place, its dynamics is considered to have remained strongly upwards in this time period. Consistent with this development is the significant increase in Retail Trade at the beginning of the fourth quarter, as will be shown in the next subsection. At the same time, household savings are clearly lower than in the first seven months of the year, a trend that could contribute to a strong escalation in consumer spending. While the increase in private consumption will be the main reason for the strengthening of domestic demand, it will have a negative impact on the external balance.

In terms of investment, as the pandemic did not show a new escalation in the last quarter of last year, the interventions to support businesses and the self-employed registered in them were significantly reduced. On the other hand, the inflow of resources from the Resilience and Recovery Facility (RRF), which will finance investments in the priorities of the relevant plan (Greece 2.0), has begun. The strong decline in 2020 in investments in means of transport, which was the main cause of the fall in all of them, has been largely offset, at least during the nine months of January-September. In addition, the significant increase in residential investments continued and escalated in 2021, while the increase in production in Industry is reflected in investments in equipment.

As pointed out in the previous bulletin on the Greek economy, the investments are supported by the continuous expansion of financing from the banking system to non-financial corporations since last year, a possibility which is due on the one hand to the consistently high return on deposits in the banking system and on the other hand to liquidity. has drawn and continues to draw on the ECB's emergency mechanisms.

In the next subsection, the sum of the medium-term macroeconomic forecasts is made.



## Medium-term outlook

- The dynamics of the pandemic, domestically and internationally, the activity in the tourism sector, the use of the Recovery Fund, the evolution of inflation, the rate of recovery in the Eurozone, are the key drivers of GDP growth in 2021 and 2022.
- As 2021 has ended and the evolution of many of the forecast parameters is known, there is one macroeconomic development scenario for this year and two scenarios for 2022.
- Revision of the recovery in 2021 to 9.0-9.5%, from 8.0-8.5%, due to stronger growth in international tourism and exports of products and a slightly stronger revival of consumer demand.
- Baseline scenario 2022: growth of 4.5-5.0% from another significant strengthening of international tourism, continuation of a strong recovery in the eurozone, strong escalation of investments, mainly from the activation of the Recovery Fund and the raising of resources from the capital markets.
- Alternative scenario 2022: slower growth of 2.5-3.0% due to stronger restrictive measures, in sectors and vulnerable social groups, without the imposition of lockdown. Weakening in consumer sentiment, slower rise in international tourism, softer growth in Europe.

The new, unprecedented increase in coronavirus cases at the end of 2021, internationally and a little later in Greece, because of its new mutation, reaffirmed the importance of the pandemic for the medium-term economic developments and the uncertainty for them. This development occurred despite increased vaccination rates, even in countries with high vaccination coverage rates. However, the pressure on health systems is currently proportionally lower than previous flare-ups, as the symptoms of those who are sick with the new mutation are generally much milder. In these circumstances, the policy interventions so far to deal with the new outbreak are less intense and far-reaching than in the past. As the spread of the mutation is ongoing, the range of measures in the coming period and their impact on the economy are not a given. The relevant decisions will depend crucially on the degree of pressure on the health system.

With regard to recent price developments, inflationary pressures escalated at the end of last year. Their dynamics are no longer due solely to the increase in the prices of energy products, but also to the disruptions it has caused to supply chains and its effects on the cost of production of other products and services. These developments are slowing down the economic recovery globally. However, the demand for energy products is also weakening, a development that is already reflected in the significant decline in the international price of oil in December.

On the other hand, the positive developments domestically at the end of 2021 and the beginning of the new year include: a) the continuation of integrated vaccinations at a steady pace, compared to the third quarter, and the implementation of the booster dose of the vaccine at a high rate, b) the prolonged tourist season, until November and c) the acceleration of the inclusion of projects in the Recovery Fund.

In detail, as was pointed out in the previous quarterly bulletin of IOBE on the Greek economy, "the entry into autumn can be a focus of challenges for the confrontation of the pandemic, as the climatic conditions favour the spread of the SARS-CoV-2 virus, as well as the transfer of activities from open to closed spaces (e.g. catering, sports), the face-to-face operation of schools, with the vast majority of students not having been vaccinated". The appearance at the end of November of the Omicron mutation in Botswana verified this

estimate. The new mutation is highly contagious, but with several milder symptoms for the vast majority of those who are sick. Nevertheless, the rapid increase in cases and the uncertainty about the impact of this trend on the other epidemiological data (ICU hospitalizations, covid-19 victims have already led some countries to take additional measures to protect public health. The strictest measures were taken in the Netherlands, where a lockdown was imposed again, with the suspension from December 18 of the operation of all non-core stores and wider services. Several European countries have imposed various restrictions on the operation of entertainment and leisure activities (bars, cinemas, theatres, etc.) or part of them (e.g. Germany, Denmark, Greece, Portugal, Sweden, Finland), as well as on colour schemes (e.g. United Kingdom, Ireland). In addition, all countries have strengthened controls on the entry of travellers from abroad and some related restrictions (quarantine). China has taken more stringent measures in cities with several increased cases. Nevertheless, the new mutation is spreading and if its impact on epidemiological data beyond cases develops into a strong one, public health protection measures will escalate in many countries, possibly sharply.

In the third quarter of last year, when the Delta mutation spread and public health measures were greatly relaxed due to unfavourable summer conditions for the virus, the significant recovery continued in many countries and economic zones. However at rates much milder than in the previous quarter: in OECD countries, GDP grew by 4.6%, versus a rate of 13.2% in the second quarter last year and a fall of 3.7% in the third quarter of 2020, while in the EU output expanded by 4.1%, following a recovery of 13.8% a quarter earlier and a fall of 3.9% a year ago. In the U.S., GDP strengthened in the July-September quarter of 2021 at a rate of 4.9%, instead of increasing by 12.2% in the second quarter and a recession of 2.9% in the summer the year before last. In China's economy, growth slowed in the third quarter to 4.9%, from 7.9% in the previous quarter and GDP expansion by 4.59% in the respective period the year before last. The strongest GDP growth among the most developed countries was recorded in the third quarter, as in the previous one, in the United Kingdom (+6.6%), but after its sharpest decline among these countries a year ago (-8.1%). The strong recovery momentum is seen as having had a corresponding impact on international trade. The World Trade Organization announced in October that the growth rate of the volume of international trade would reach 10.8% in 2021, up from 8.0% forecast in March last year. For the new year, enlargement is forecast to slow down to 4.7%, slightly faster than previously expected (4.0%).<sup>15</sup>

As for recent developments in energy prices, the average price of Brent oil in dollars was in the last quarter of 2021 80% higher than a year earlier, a difference greater than in the eight months of January-August (63.9%). However, at the end of the fourth quarter last year and the beginning of 2022, the difference had narrowed in the range of 50%. Despite this slowdown, it remains high. Over the same period, the annual increase in the price of natural gas was similar (88.3%), slightly milder than in the nine months that preceded it (93.2%). The impact of fairly high energy prices is already pronounced on industry's production costs and real household incomes. They extend further, to the operation of supply chains and employment.

To stem the effects of the increases, new measures were announced at the beginning of January, which relate to this month. Specifically, in the first residences of households, for the first 150 KWh of electricity consumption, 80% of the increase is subsidized with 160 €/MWh (i.e. €24), while for consumption between 151-300kWh, 60% of the increase is subsidized with 120 €/MWh (i.e. €18). In households included in the social tariff, the subsidy will amount to 180 €/MWh, for the first 300 KWh. For gas-using households the

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<sup>15</sup> Press release 889, WTO, October 2021





subsidy will be 20 €/MWh, for the total monthly consumption. DEPA Commercial will provide an additional discount of 20 €/MWh for the entire monthly consumption to its customers and a similar contribution has been requested from the other providers in cooperation with it. As far as businesses are concerned, the subsidy will be "horizontal" for the consumption of electricity, at 65 €/MWh, it will concern all non-residential tariffs (farmers' tariffs, commercial use, industrial, professional, etc.). The subsidy of natural gas for businesses is 30 €/MWh for the total consumption. From last November to March this year, the suspension of the payment of utility charges for businesses connected to the Medium Voltage applies. Since February, it is being examined, in cooperation with the European Competition Commission, that the subsidy should be adjusted per professional sector, depending on the weight of the energy costs in the operation of the business. As long as energy product prices remain high, it is expected that household and business subsidies will continue.

At European Union level, at the October European Council, the European Commission presented a "toolbox" to address rising energy prices, both in the short term and in the medium to long term.

Due to the mild outbreak during most of the last quarter of 2021, no new initiatives were taken to support economies and societies by national governments and multinational bodies, while at the same time several of those implemented were completed. The effort to gradually limit fiscal policy interventions highlights how the most powerful developed and developing countries are trying to tame the deterioration of their public finances. Monetary policy interventions continue, with particularly low or negative intervention rates by the largest central banks, public and private sector purchase programmes, credit lines, etc. However, at the beginning of September the ECB announced that the favourable financing conditions of the European economy would henceforth be maintained at a slightly lower pace of net asset purchases under the Pandemic Emergency Securities Purchase Programme (PEPP). Clearly more important was its announcement in mid-December, which stipulated that the pace of net purchases in the initial quarter of 2022 would be significantly lower, while at the end of March this year the net purchases will be completed. This decision is likely to be related to a significant extent to the aim of seeking to avoid "overheating" of the EU economy and inflationary pressures from providing excess liquidity. On the other hand, it was decided to extend the time horizon for the reinvestment of the funds from the redemption of securities acquired under the PEPP programme until at least the end of 2024.

The lifting of the restrictive measures due to the pandemic during the summer months and the improved epidemiological data, led to the completion of the vast majority of interventions to support businesses and households in the final quarter of 2021. However, the program of covering 100% of the social security contributions continued for six months for 100 thousand. new jobs in the private sector. In addition, since the beginning of the new year, this programme has been expanded by 50 000 posts. The "GEFYRA" loan instalment subsidy program was extended for three months, until January 2022, as the issuance of the relevant decision was delayed and took place in mid-October. No further extension has been announced. The SYN-ERGASIA program was extended for one quarter, until March of the new year. According to the 2022 Budget, more than €150 million had been spent under this programme by 2021 last November, about 30,000 workers were included in the mechanism. The current year's budget includes the postponement of the payment of the first of the 60 interest-free instalments of the repayable advance, from 31/01/22 to 30/06/22. Previously, at the end of October, the rate of reimbursement of all repayable advances was reduced in line with the decline in the gross revenues of each enterprise. The total cost of the measure is estimated in this year's budget at €1.23 billion. It was also possible to repay the full amount to be repaid by 31/03/22 with a 15% discount



on this amount. The expiration period of the credits issued under the Fixed Expenditure subsidy program has been extended until 06/30/22. Therefore, in addition to the - small - extension of some existing programmes, businesses have been provided with facilities to repay their obligations in some of them. Recently, following the restrictive measures in entertainment and catering, support measures have been reinstated for these activities, at least for January (suspension of employment contracts, special purpose compensation, suspension of payment of instalment of regulated debts, special aid program, depending on the decrease in turnover).

The extension of some supporters of policy interventions due to the pandemic and in particular the facilities to service the obligations that have arisen from them, will support the operation of a large part of businesses in the initial six months of this year. More broadly, the implementation of all support interventions has significantly weighed on the fiscal balance in 2021 as well. According to the Budget for 2022, their total amount last year reached €15.8 billion, when in the Explanatory Report of the Budget for 2021 their budget was €4.54 billion and another €3 billion were available for the same purpose, as appropriations under allocation. The pandemic budget for 2022 is €3.3 billion, not including the latest in entertainment and catering. In any case, if the development of the pandemic deems necessary other measures of public health protection that will limit the operation of sectors and activities, the relevant costs will increase.

Mild epidemiological data during the autumn and the continuation of the summer months of vaccination internationally at satisfactory rates, led to an extension of the tourist season for most of the fourth quarter, with high traffic. This development took place at a time when the importance of revenues from international tourism for total revenues from exports of services was significant before the health crisis (37.0-39.0%), but lower than in the summer (62.0-64.0%). According to the latest data, the average decline in international arrivals at the country's airports weakened further in the September-November quarter compared to their level in 2019, at 23.3%, from an average contraction of 33.6% in the June-August quarter. In the autumn, international arrivals at Athens International Airport fell by 34.5% from their level in 2019, compared to a lag of 47.7% in the previous quarter and 76.8% in the same quarter of 2020. The decline in AIA was much smaller than in 2020 and December, -40.3% from -87.7%. In total in the eleven months of 2021, international arrivals at all airports were 44.8% less than in 2019.

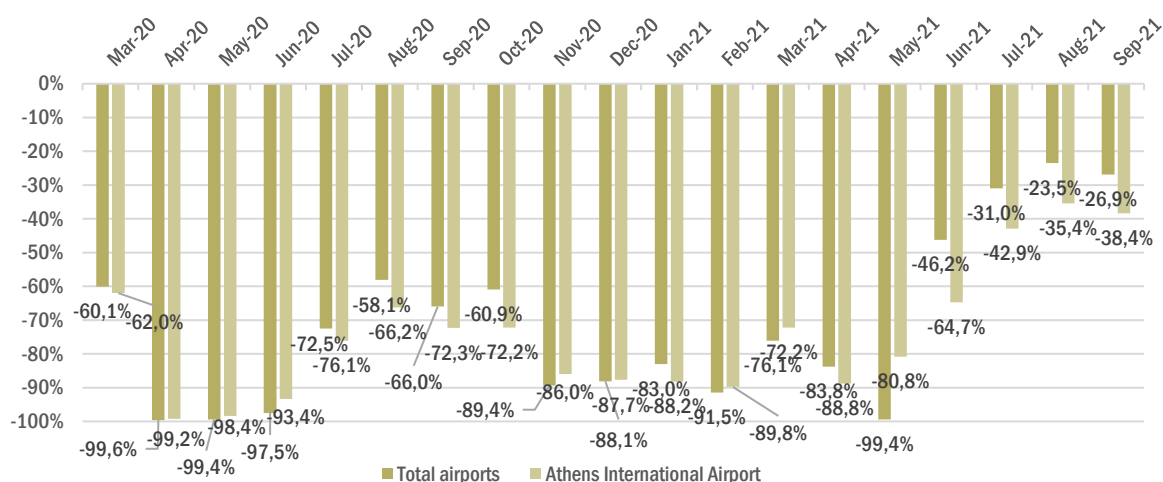
The health crisis has overshadowed other developments in the international environment, which may affect the Greek and European economy in the medium to long term. These include geopolitical issues in the south-eastern Mediterranean and the implementation of the consensual Brexit by the EU, the terms of which were agreed at the end of 2020.

Since the first IOBE bulletin on the Greek economy after the outbreak of the COVID-19 pandemic, the macroeconomic forecasts are based on alternative assumptions for factors that are judged to influence the main macroeconomic variables from each point in time and in the medium term. The most important factors in 2020 and 2021 were the evolution of the health crisis, in Greece and internationally, especially in the Eurozone, as well as the size of policy interventions to contain its effects. They are included in the macroeconomic forecast parameters for 2022 as well. An additional, important factor for the course of economic activity in the new year will be the pace of implementation of the projects included in the Recovery Fund. The parameters of the forecasts already include the cost of energy, which is a key factor of production of enterprises, mainly in industry, as well as a basic category of goods for households. Its strong upward trend in recent times has enhanced the importance and effects of energy costs on the forecasting process.



Figure 3.1

## International arrivals at airports (annual % change)



Note: Since April 2021, the changes refer to the corresponding month of 2019

Sources: Civil Aviation Authority, Athens International Airport

Therefore, macroeconomic scenarios should take into account, in the form of relevant assumptions, possible developments in the above factors. As 2021 is over and developments in the vast majority of these are a given, a scenario of developments has been formed for the previous year. In 2022, various developments in the main parameters are possible, which, because they are correlated with each other, will not be independent of each other. Given this, two scenarios of developments were formulated.

Under this approach to macroeconomic forecasting, the factors whose changes are expected to affect the macroeconomic aggregates of the Greek economy are the following:

## Box 3.1

## Factors whose changes will affect the macroeconomic forecasts

- The trend of the COVID-19 pandemic domestically and in the Eurozone, taking into account the impact of the "Omicron" variant and the progress in vaccination
- Amount of policy interventions in Greece and the Eurozone to address the effects of the crisis, including those on energy costs
- Price volatility of energy goods that determines inflationary pressures
- Implementation of the (national) Recovery and Resilience Plan (Greece 2.0)
- Activity in the tourism sector

Analytically in terms of recent and expected developments regarding the pandemic domestically, the spread of the new coronavirus mutation has led, as in most countries where it has entered, to an unprecedented, sharp increase in the number of cases. However, as already mentioned, the rapid spread of the new mutation has not brought about a deterioration for the time being of most other epidemiological data, such as hospitalizations in ICU and deaths. However, hospital admissions have increased significantly, a trend that may also have a negative effect on other epidemiological data.

The fact that important indicators related to the pandemic have not worsened is probably due to the milder pathogenetic characteristics of Omicron, which affects the upper respiratory tract and the lungs more than the Delta. Progress in the vaccination process is also considered to have contributed to relative stability, as by mid-January about 70% of the country's population over 5 years of age had been fully vaccinated and almost 49% of the population aged 18 and over had had a booster dose, which has generally strengthened the population's immune system against the virus. Given these data, it is considered more likely that there will be no significant deterioration of the set of epidemiological indicators in the next period but also in the medium term. Subsequently, there will be no need for extensive health protection measures, such as those implemented during the lockdowns. It is not excluded, however, that what has been taken so far will be extended, e.g. to more activities, in areas of the country with severe epidemiological characteristics, to sections of the population more vulnerable to the virus.

The rapid outbreak has led to an increase in public health protection measures. Their characteristic that differentiates them from corresponding cycles of policy interventions in the past, is the non-imposition of suspension of operation on some activity as well as restrictions on the movement of citizens. Specifically, from 27/12 the entertainment / dining areas are open until midnight and up to six people are allowed at the tables, while standing is not allowed. Temporarily, music was allowed until 30/12, which was banned from that date. It is mandatory to use an increased protection mask (FFP2/KN95) or a double mask in supermarkets, public transport, for catering workers. In the stadiums, the capacity was limited to 10% of it, with a maximum of 1,000 people. The maximum rate of teleworking in the public and private sectors was 50%, while there is also the possibility of rolling hours.

Previously in the fourth quarter, access restrictions to the unvaccinated were escalated in mid-November. They were denied access to nightclubs, indoor dining areas, theatres, cinemas, museums, exhibitions, conferences, gyms and stadiums, where since then only vaccinated or hospitalized patients within the last three months have been able to access. Until then and from 13/9, unvaccinated people had access to theatres, cinemas, museums, exhibitions, conferences, gyms and stadiums, with a rapid antigen laboratory test up to 48 hours before. Now, unvaccinated adults can enter with a PCR diagnostic test or rapid test in retail stores, in open (outdoor) restaurants, hairdressers, beauty service areas and other areas with related activities or services. The imposition of more restrictions will to some extent negatively affect the activity of the activities concerned.

Since mid-August, employment restrictions have been placed on certain activities related to whether the employee has been vaccinated or not. Specifically, as of August 16, those working in aged care units must be vaccinated. Otherwise, they shall be placed on a suspension of work. The same applies from 1 September to health workers in the public and private sectors. In the other sectors, on September 13, workers who had been vaccinated had to show their vaccination certificate. Those who were not vaccinated on that date and for as long as they remain unvaccinated, should perform a laboratory rapid test weekly, at their own expense. Especially unvaccinated teachers and academics, employees in Tourism, Catering, television, film, theatre, music and dance productions, should perform two laboratory rapid tests a week. The latter obligation also applies to unvaccinated pupils and students, for their entry into educational premises. From 8 November, all employees working in the private sector, with an employment relationship or with an internship, those studying in public or private educational structures, must do two rapid tests a week.



With regard to the measures for international passenger movements in Greece, the ban on entry by air into the country of third-country nationals other than the States of the European Union and the Schengen Agreement continued. At the end of October, the number of countries whose passengers travelling for essential reasons (essential reasons) and residents are exempted from this ban increased compared to the previous month in 41 out of 36. These are: Australia, North Macedonia, United Arab Emirates, United States of America, United Kingdom, Israel, Canada, Belarus, Bahrain, New Zealand, South Korea, Qatar, China, Kuwait, Ukraine, Russia, Saudi Arabia, Serbia, Singapore, Bosnia and Herzegovina, Montenegro, Albania, Japan, Lebanon, Azerbaijan, Armenia, Jordan, Moldova, Brunei, San Marino, Andorra, Vatican, Monaco, Turkey, Argentina, India, Uruguay, Sultanate of Oman, Chile, Kosovo and Chinese Taipei. Mexico has been added to them since mid-December. The number of excluded countries is clearly more than there were a year ago, which was only 9. Also, from the same period, all travellers, regardless of their nationality and vaccination status, must have been diagnosed negatively in a PCR test within the last 72 hours or alternatively have been diagnosed negative in a rapid test within 24 hours prior to their arrival in Greece. Previously, vaccinated people and those who had been ill in the previous six months did not need to take a test.

With the emergence of the new mutation in South African countries, restrictions were placed and the conditions for entry into Greece were strengthened for nine countries. As of November 27, Greek nationals and travellers travelling from South Africa, Botswana, Namibia, Lesotho, Zimbabwe, Mozambique, Eswatini, Zambia and Malawi for essential reasons, can enter the country subject to three negative tests, a 10-day quarantine and a special permit to enter Greek territory by the competent consular authorities of the Ministry of Foreign Affairs, regardless of their vaccination status. Apart from the specific restrictive measures for the protection of public health, overall the far fewer restrictions compared to the same period of 2020, were prerequisites for a much higher tourist traffic at the end of last year and then a strengthening of revenues from it. These effects can continue or even be reinforced in the first half of this year, as long as restrictions are not increased or if they are reduced further, since in these cases they will remain clearly fewer than a year earlier. Counterbalance to these positive effects will work the cautiousness of travel due to the rapid spread of Omicron. Internally in the country, as of August 7, it was established that returning from islands requires a vaccination certificate or a certificate of disease or a negative test (PCR / RAPID / self-test).

As for the land travel, from the 1st of July all the border stations of the country are open (Evzones, Exochi, Kipi, Nymfaia, Ormenio, Promachonas, Kakavia). Admission requires a negative COVID-19 molecular test (PCR) up to 72 hours prior to arrival or a negative test using rapid coronavirus antigen detection COVID-19 (rapid test) within 24 hours prior to arrival. In addition, the maximum allowable entry limit for people per day has been abolished. As these arrangements did not stop in the autumn, as happened the year before last, it is considered that they mainly stimulated tourism in Northern Greece (winter tourism, city break). As long as they are maintained, their effects will continue, possibly weakened by caution due to the new mutation. An additional source of income for Tourism compared to the year before last was the income from the cruise, an activity which has been allowed since May 14. It is reported that during the nine months of January-September, travellers reached 366 thousand, up from just 23.3 thousand in 2020. However, they fall well short of their corresponding number in 2019 (1.84 million).

Although the vast majority of business and household support interventions have been completed, as mentioned above, they are considered to be and are a particularly important source of support, through the very large volume of relevant transfers. Those related to households, contained the weakening of consumer demand and the reduction of business

activity and their employment. As of the second quarter of 2021, they are thought to have partially fuelled the strong recovery and job creation domestically, through the expansion of private consumption. A significant part of the liquidity from the beginning of the pandemic that companies needed in order to maintain their jobs and meet their current obligations has come from emergency financing tools. A part of the interventions to support businesses and the self-employed has affected fixed capital formation since 2020. The most characteristic examples of these interventions in 2021 are the following: a) special purpose compensation for employees whose employment contracts were temporarily suspended, with the relevant expenditure for the previous year estimated at €2.1 billion, b) compensation of property owners who receive reduced rent due to the pandemic, with €728 million. in 2021, c) the financial instrument of the "repayable advance", with 359.7 thousand and 286.2 thousand beneficiaries in its 5th and 6th cycle and total aid last year €3.6 billion, d) the "GEFYRA" program, for the subsidy of mortgage instalments, in the second cycle of which 42 thousand people applied. businesses, e) the COVID-19 guarantee program of the Hellenic Development Bank, during the third cycle of which guarantees of €220 million were granted, f) the subsidy program of part of the fixed costs of 2020 and g) the suspension of payment of bank loan instalments, for applications submitted until 31/03/2021 and up to nine months.

The completion of the interventions or the fact that they are now quite targeted in terms of their beneficiaries (branches-professions), e.g. as has recently been the case for businesses in tourism, catering, entertainment and leisure, implies that the businesses and households that received support will have to adapt to conditions beyond the pandemic and beyond. This process will be one of the biggest challenges in the Greek economy this year and next. In this context, it is quite possible that strong pressures will appear when the majority of aid interventions and their repayment facilities are lifted, in particular on employment and private consumption.

Especially in terms of support interventions for businesses and the self-employed that may affect the level of fixed capital formation, the relevant transfers through the Public Investment Program reached in the eleven months of 2021 approximately €2.7 billion. Their amount is lower than the respective of the year before last (€4.26 billion), while providing a boost to the level of investments. In 2022, the availability of investment funds from the public sector to businesses will be stimulated compared to last year mainly by the resources of the European Recovery Fund (NextGenerationEU), primarily under the Resilience and Recovery Facility. At the beginning of August, €4 billion was disbursed. from the fund, which constitute the advance payment of the funds allocated to the country (13% of their total). During the same period, operational agreements were signed between the Ministry of Finance and six credit institutions for the use of part of the loan resources of the Recovery and Resilience Fund, amounting to €970 million. At the end of December, a request for payment of the first tranche from the Recovery and Resilience Fund was submitted to the European Commission, amounting to €3.56 billion. This amount is the expected revenue for the new year. In addition, 103 projects have been included in the Recovery Fund, with a budget of €6.11 billion. The provision of aid for these projects in 2022 reaches €3.2 billion.

As already mentioned, among the factors that have a significant impact on the world economy in the recent period are the rise in the prices of energy goods. Recent trends in their prices were previously recorded. Their significant increase was mainly due to the strong demand generated by the strong recovery worldwide. However, some other factors, different in each of the two main energy resources (oil, gas), also helped to increase prices. In particular, the prolonged winter of 2021 in the northern hemisphere has reduced gas reserves in the countries of Central and Northern Europe. Gaz-flow from Norway was





limited due to projects to improve the country's infrastructure. In addition, a fire at a gas processing plant in Siberia exhausted the reserves there, and the low rate of their replenishment after a heavy winter in Russia absorbed a significant part of the country's production. In the U.S., last year's particularly hot summer, especially in the northwest, led to unprecedented demand for air conditioning and gas consumption, limiting its reserves for the upcoming winter. In addition, more than 90% of gas production in the Gulf of Mexico was offline in late August after Hurricane Ida. Moreover, while the world economy was in rapid recovery in the second and third quarters, the OPEC+ member countries continued to increase their output slightly, a development that continued for most of the fourth quarter of last year. The production limit, which was initially imposed in April 2020, fell further last July, by about 440 thousand barrels per day, to 6.334 million barrels per day. The monthly production growth target (+400 thousand) was not achieved in the following months, with the exception of September (210 thousand in August, +420 thousand in September, +190 thousand in October, +220 thousand in November). Therefore, the adjustment of OPEC+ production lags behind the increased energy needs due to the sharp escalation of production activity worldwide.

Regarding the recent and expected developments in the price of oil, they will be shaped by various, different directions of effects. On the demand side, the emergence of the Omicron mutation in late November triggered a sharp sell-off of oil. The initial strong pessimism was followed by more moderate evaluations of its effects. The new restrictive measures implemented to curb the spread of the virus are now considered more likely to have a significantly milder impact on economic activity internationally than previous outbreaks of the COVID-19 pandemic, mainly due to widespread vaccination campaigns. Subsequently, a temporary slowdown in the rise in oil demand is expected, but not a reversal of the. In any case, the pace of recovery of the world economy in 2022 will be strong again, but milder than in the previous year, as fiscal measures to support economies have already been curtailed and central banks are moderating their financing interventions, in an environment of high inflation.

On the supply side, the most important developments in the new year are expected from producer countries other than OPEC+ members. In the two months of October-November the largest increase in daily production came from the U.S., as the effects of Hurricane Ida were surpassed. In addition, in late November, the US announced the release of up to 50 million barrels of oil from its strategic reserves. Similar actions are being taken by China, India, South Korea, Japan and the United Kingdom. Furthermore, the US, Canada and Brazil are expected to expand their production to higher levels this year. As far as the OPEC+ countries are concerned, as long as there are no sharp fluctuations in the global economy due to the pandemic, the policy of gradual, mild easing of the restrictions that follow will not change, which aims to restore its production to pre-pandemic levels within the second half of 2022.

If less positive developments take place, e.g. due to an upsurge in mutations, oil demand will recover more slightly, and possibly even decline. In this case, an adjustment of the OPEC+ policy is quite possible, e.g. by stabilising its production for some time. Taking into account the above, the price of oil is estimated to rise again mildly, by 7-11%. Under adverse developments regarding the pandemic, the price trend will reverse to a downward trend, at a rate that will depend on the events. Overall in the previous year the price of oil was on average 68.8% higher. The relevant forecast in the previous report was for an increase in the range of 67-68%.

Taking into account the new strong outbreak of the pandemic, with clearly milder symptoms and without significantly worsening the relevant indicators beyond the cases,

the steadily increasing vaccination levels of the population and its high rate for the booster dose, the continuing strong inflationary and the expected trends in energy prices, which are mostly due to them, the data on fiscal interventions in 2021 and their planning for the new year, the most recent forecasts for the recovery last year and 2022 in the Eurozone (European Commission), the assumptions of the forecast scenarios for 2021 and 2022 were formulated. As 2021 is complete and the evolution of many of the forecast parameters is well known, a scenario has been formulated for this year. According to this, thanks to the progress in vaccination and the extensive use of diagnostic tests (rapid tests, self-tests), the rather upward dynamics of the pandemic until the end of 2021 did not worsen the epidemiological data, as in the past. Subsequently, no generalised restrictive measures were imposed, while the support interventions were either stopped or their scope was limited. International tourism continued for most of the fourth quarter to show a strong escalation compared to 2020, significantly expanding the tourist season. Subsequently, revenues from international tourism services were boosted from the previous year, in the region of 57-60% of their level in 2019, compared to 24% in 2020, clearly higher than expected in previous IOBE reports on the Greek economy. This increase corresponds to an increase from €6.0 billion to €6.6 billion. Significant support, more than budgeted and generally expected at the beginning of last year, has been received by businesses and households from policy. On the other hand, the inflow of funds from the European Recovery Fund was lagging behind the target in the 2021 Budget (€4.0 vs. €5.5 billion), while the amount of projects included in it was lower. As far as the GDP trend in the eurozone is concerned, it is supposed to be formed in the area of the recent forecasts (European Commission: 5.0%).<sup>16</sup> The growth of energy commodity prices slowed slightly in the last quarter, while remaining very strong and affecting inflation accordingly.

The baseline scenario for 2022 is also based on the assumption that generalised restrictive measures will not be imposed due to the pandemic as in outbreaks in the past. However, further targeted measures may be taken or escalated, e.g. suspension of a small number of activities (entertainment, theatres, cinemas), escalation of restrictions on vulnerable groups of the population. Therefore, interventions to support businesses and households will be much fewer than last year, with a smaller scope. Under these circumstances, there will be a further extension of the tourist season, mainly towards spring, while international tourist traffic will be significantly stimulated in the June-August quarter. Given this, revenues from international tourism services will strengthen against 2021, reaching the region of 80-90% of their level in 2019, an increase corresponding to an expansion compared to 2021 by €3.9 billion. up to €5.7 billion. The best health data internationally will allow a significant recovery to continue in the eurozone. This will be mitigated by the new rise in prices, which will be much milder than this year (Brent oil rise 2022: 7-11%). The result of these effects will be a growth rate for the euro area in the area of the current forecast, perhaps even slightly higher (European Commission: 4.3%). In terms of ERF utilization, it is assumed that the target of budget incomes for 2022 will be achieved (grants of €3.4 billion, loans of €1.85 billion) and all the projects that have already been included in the budget will be implemented to a high degree. Recovery Fund, as well as others, leading to the achievement or even exceeding of the relevant spending targets (€3.2 billion). and lending (€586 million).

The main difference of the alternative scenario for 2022 from the baseline lies in the projected health developments and their impact. In particular, the reintroduction of generalized restrictive measures is expected, due to new escalations of the pandemic, e.g. from the emergence of new mutations of the virus. However, their intensity will be milder than in the past, e.g. the one in the third lockdown in February-March last year, thanks

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<sup>16</sup> European Economic Forecast, European Commission, November 2021





mainly to the vaccination of most of the population, the extensive use of diagnostic tests. Indicatively, protection measures within the country, some of which may be different for vaccinated and non-vaccinated people, may include restricting traffic for a few hours at night, reducing people in-stores, click inside, restrictions on tourism for unvaccinated people, without expecting the sector to be suspended. Externally, the restrictions are expected not to be "horizontal" for vaccinated and non-vaccinated and to be imposed depending on the health data of each country. This set of measures will be phased out in the spring as the summer season approaches. However, the reintroduction of restrictive arrangements will have additional containment effects in relation to the baseline scenario in the activities mentioned. Given this, international tourism receipts will expand compared to 2021, but milder than in the baseline scenario, reaching 70-75% of their level the year before, i.e. around €2.1 to €3.0 billion more than this year. Of course, the imposition of restrictions will be accompanied by interventions to support the affected businesses and their employees. The new fluctuations of the health crisis will also mitigate the recovery momentum in the eurozone. On the other hand, they will greatly weaken inflationary pressures later this year. Against this background, growth in the euro area will be lower than the recent forecasts (4.3%). No impact is expected from possible new escalations on RRF inflows and the implementation of the projects concerned, as these processes are generally independent of health developments, so this assumption is not differentiated between the baseline and alternative scenarios for 2022.

Moving on to present developments in funding sizes that can have a key role in halting the impact of the pandemic, in particular on investments, banks in Greece continue to broaden the use of the ECB's liquidity-raising potential that has emerged in response to the extraordinary circumstances. The most important financial instrument of these is the Pandemic Emergency Purchase Programme, with a "file" of interventions in the markets of a total amount of €1.85 trillion. By the end of last November last year, the ECB had made net purchases of €1.50 billion worth of securities from all countries. Other liquidity facilities by the ECB to contain the effects of the pandemic are untargeted longer-term refinancing operations (PELTROs). In addition, the terms of the targeted longer-term refinancing operations (TLTRO III) were gradually relaxed, resulting in the eligible loans of Greek banks from the programme reaching €92 billion, while their lending limit gradually rose from 30% to 55% of them. Since the previous IOBE bulletin, no new interventions to support liquidity have been adopted by the ECB, nor have the characteristics, conditions and terms of the existing ones been modified. However, as already mentioned, at its board meeting on December 16, it was decided that the pace of net purchases in the initial quarter of 2022 would be significantly lower than in the previous quarter, which had already slowed compared to the first and second quarters of 2021. In addition, it was announced that at the end of March this year the net purchases will be completed. The reinvestment of funds from the redemption of securities under the PEPP at maturity was extended at least until the end of 2024, instead of the end of 2023 previously foreseen.

In this context of financing possibilities, the liquidity raising of Greek banks by the Eurosystem, excluding the PEPP, reached €34.5 billion in the period April 2020 – November 2021 and totalled €46.83 billion. at the end of the. In the recent period since the previous IOBE bulletin on the Greek economy (September-November), capital raising was marginally reduced, by €50 million. Regarding the use of the Pandemic Securities Purchase Programme, the ECB has made net purchases of securities from Greece by the end of November amounting to €34.9 billion, of which €5.5 billion. in the four months of August-November. Therefore, the availability by the banking system of funds from the ECB in order, among other objectives, to provide financing to businesses, is high and has continued to grow, taking into account recent developments.

Lending is also favoured by the continued growth of private sector deposits (households and non-financial corporations) since the beginning of 2019, at a high rate. Following their strong expansion in 2020 by 13.6% or by €19.3 billion, private deposits reached the eight months of January-August 2021 compared to the corresponding period with an average annual rate of 13.7% or €19.9 billion. In the recent quarter of September-November, deposit expansion slowed slightly, to 11.7% or €18.2 billion. The new rise in this period came mainly from most household deposits, by €10.8 billion. (+8.8% compared to a year ago), while business deposits expanded by €7.4 billion (+24,0%).

While ample liquidity from the ECB, the strong upward trend in private deposits, as well as the activation of the loan arm of the Recovery Fund favour credit growth by banks at the end of last year and in the new year, there are also a number of factors that mitigate this momentum. The suspension of the payment of bank loan instalments until the end of 2021 at the most is considered to be the most important and the continued subsidy of a percentage of the loan instalment in the initial quarter of the new year (Bridge II programme), does not allow the real dynamics in non-performing loans (NPLs) to be displayed. Also, the new gradual escalation of uncertainty as to the evolution of the health crisis, due to the significant outbreak during the fourth quarter of last year, especially at the end of December, while the course in the coming months is not a given. The results of the four systemic banks for 2020 included balances of "red" loans, from loans that were found in payment moratoriums, amounting to €3.1 billion. However, banks had formed much higher provisions for both loan moratoria and loans from them that may turn into non-performing ones in 2021. According to the Bank of Greece's Interim Monetary Policy Report 2020-2021, the balance of non-performing loans under legal protection in September 2021 was €3.3 billion, well below €12.9 billion. a year earlier.<sup>17</sup> In the same report, the BoG takes the view that "Part also of the loans under support (e.g. through programmes such as the Bridge/GEFYRA programme) is likely to be recorded as NPLs when the facilitation period is over".

The current recovery of uncertainty about the evolution of the pandemic is also among the causes that will weaken the demand for capital from businesses and households at least temporarily, at the beginning of 2022. On the other hand, the continuous, strong recovery in some sectors will stimulate the demand for bank credit. For example, in Industry, the output index rose sharply in the period January-November 2021, on average by 10.0%, after a lot of decline last year (-2.6%). This trend is related to the strong increase in exports of products, with the increase in them outside petroleum products - ships in the same period reaching 20.2%, highlighting the high competitiveness of some industrial sectors and facilitating their financing. The recovery of a significant part of the pre-past losses in Tourism in some areas will also contribute to the greater demand for liquidity from the banking system.

Regarding the evolution of non-performing loans (NPLs), the most recent data refer to the third quarter of 2021. Based on these, their strong decline compared to the previous quarter continued during this period, by €8.4 billion or 28.8%, to €20.9 billion. or 15.0% of total loans. A year earlier it reached €60.0 billion. or 36.3% of loans. The sharpest contraction in NPLs was recorded in business (-€4.2 billion or -21.9%) and housing loans (-€3.2 billion or -45.8%). Overall, it was achieved primarily through portfolio transfers and securitisations, mainly by using the Hercules programme to provide state guarantees on securitisations of loans of credit institutions, known as "Hercules") and less on receipts through active management (restructurings/loan arrangements, debt collections, etc.). The sales of loans under this program reached €26.2 billion in the nine months of the

<sup>17</sup> Interim Monetary Policy Report 2021, Bank of Greece, December 2021



previous year. Following these developments, the level of NPLs is around €86.3 billion or 80.5% below its peak in March 2016.

Following the new extended reduction of NPLs in the July-September quarter, they stood as a percentage of total loans well below the revised target for the end of 2021 (below 20% of loans). On the other hand, in addition to the results of NPL management, their reduction from the second quarter the year before last year has come from interventions to support borrowers. As these will be completed, according to the data so far, at the beginning of 2022, it is quite possible that there will be an increase in non-performing loans within the year, when many businesses and households will be in a transitional phase, to return to operating/living conditions without the relief measures. The possibility of broadening NPLs highlights the need to immediately exploit all the possibilities to reduce them.

Regarding the actions in the current period and in the near future for the further reduction of NPLs, Piraeus Bank entered into a binding agreement with Davidson Kempner for the Dory portfolio, which includes non-performing exposures to the shipping industry, with a gross book value of €420 million. Two more small-scale securitisations are expected as well as sales of individual corporate loans, which will reduce the stock of NPEs by approximately €1.45 billion. In particular, the Sunrise III securitisation, which includes non-performing exposures with a gross book value of approximately €820m, is expected to be completed in the second quarter of the current financial year. Towards the end of 2022, the Solar joint securitisation with Alpha Bank and Eurobank, which includes non-performing exposures from syndicated loans, is expected to be completed. Piraeus bank has loans with a gross book value of €472 million. Finally, sales of individual corporate loans of €150 million are foreseen. NBG is underway the securitization process of the Frontier II portfolio, a perimeter of €1.3 billion in loans, which is expected to be completed within the first half of this year. As far as Alpha Bank is concerned, a binding agreement was signed for the monetization of Cosmos, concerning non-performing loans with a gross book value of more than €3.5 billion. In early December, the same bank launched a tendering procedure for the sale of NPLs with a gross book value of approximately €2.2 billion (project Sky). The portfolio for sale consists of two sub-sections. One concerns large corporate loans with a gross book value of approximately €0.9 billion. The second includes loans with a gross book value of approximately €1.3 billion. The largest current NPLs sale process is the "Ariadne" project. It is carried out by the special liquidator of credit institutions PQH and concerns loans of gross book value of €5.2 billion. It will take place outside the Hercules programme and the indicative timetable foresees the submission of non-binding offers on 18 January and binding ones in May 2022.

Despite the significant difficulties in the smooth functioning of the economy from the successive strong outbreaks of the pandemic in the first four months of 2021 and its last two months, the banking system continued to provide more bank credit to non-financial corporations. On the other hand, the relevant pace has de-escalated sharply in the period January-September and since then, until November it has been much lower than those at the beginning of last year and the period March-December 2020. Specifically, it stood at 5.3% in the eleven months of 2021, as much as a year earlier (5.2%). But while in January last year it stood at 10.3%, eight months later it had slowed to 2.0%, a level close to at least last November (2.4%). Over the same period, the average rate of credit contraction to households was stable, both within the year and compared to the year before, at 2.7% versus 2.5%. The private sector as a whole saw an average credit growth of 1.6% between January and November, compared with a rate of 1.0% in 2020. While last year the rate was slightly higher, in the five months of July-November it ranged between 0.3-0.6%.

It is again noted that the de-escalation towards non-financial corporations is not related to a similar trend in the overall financing of the economy by banks, the expansion of which this year was much higher in 2021 compared to 2020 (average eleven months 14.8% versus 5.7%). The smaller increase in loans to the business sector is mainly related to the sharp escalation of lending to the General Government, with the relative average rate reaching 60.8% in the last four months and 63.5% in the previous one, from 30.8% a year before, both the highest over time. Therefore, the interconnection of the banking system with the government has increased significantly<sup>18</sup>. This trend raises uncertainty about banks' financing priorities and, more broadly, whether significant additional liquidity is utilized for productive purposes, while raising questions about the degree of interconnection of the banking and public sectors. The de-escalation of loans in the business sector is also due to the smaller scope of liquidity programs to deal with the effects of the pandemic in 2021.

The provision of liquidity to businesses continues to take place on particularly favourable terms: the average interest rate on new fixed-maturity loans to non-financial corporations stood at 2.64% in the September-November quarter, lower than in the previous four months (3.11%), with the recent average level being a new historically minimal level, at least since 2010. The average interest rate of the same category of new loans, but to freelancers, was slightly higher in the recent period compared to the previous one, at 4.88% from 4.66%, but the previous one was also the minimum since at least 2010. For new consumer loans to households, the corresponding average interest rate stood at 10.33%, higher than earlier this year (May-July average: 10.07%). In contrast to interest rates on loans to non-financial corporations and self-employed persons, current levels for households are the highest since the second quarter of 2011, i.e. the last decade.

Lower bank lending rates for businesses and freelancers in 2021 are also related to the sharp de-escalation of Greek government lending rates. As has been mentioned in previous IOBE bulletins, this trend is due on the one hand to the evolution of Greece's credit rating and, on the other hand, to the ECB's monetary policy measures mentioned above. Under these favourable conditions and following the confirmation of Greece's credit rating at investment grade BB by Fitch, the Greek government proceeded at the end of last January to issue a 10-year bond. With this he raised €3.5 billion, with a yield of 0.807%. Demand was particularly strong, with offers exceeding the issue by 9 times. In mid-March, the 30-year bond issue raised bids of €26 billion and finally raised €2.5 billion, at an interest rate of 1.95%. In early May, the Greek government issued a 5-year bond, with bids exceeding €20 billion, while €3 billion was raised at an interest rate of 0.17%. A month later, it continued with a 10-year bond, with which it raised 2.5 billion, at a yield of 0.888%, in conditions of particularly high demand (€29 billion). In the June-August quarter, the average interest rate on the 10-year bond declined, reaching its long-term minimum level in August (0.59%). Taking advantage of this trend, the Greek State proceeded at the beginning of September to a 5-year and 30-year bond reissue. Bids reached €9.3 billion. for the first bond and €9.6 billion. for the second. €1.5 billion was raised. and €1.0 billion. respectively, with an interest rate of 0.02% and 1.675%. Following these issues, €14.0 billion had been raised in 2021. from the capital markets, exceeding the relevant target in the budget (€12.0 billion). The National Treasury Management Agency (NTMA) did not carry out another bond issue until the end of the year. At the end of September, Moody's did not change Greece's credit rating (Ba3). The rating agency estimated in the report that the country's return to significant primary surpluses will significantly reduce the debt burden, although even after normalization its level will remain high. In addition, it did not issue, as planned, a report on the Greek debt in November. Recently, Fitch maintained last

<sup>18</sup> Page 13, Financial Stability Report, Bank of Greece, December 2021



year's BB rating, upgrading the country's outlook to positive from stable. This paves the way for an upgrade to BB+, i.e. one tier below the investment category.

However, the continuous rise in the interest rate on the 10-year Greek government bond in the period September-December is noted, which cumulatively has reached 70 basis points, reaching 1.29%, which is the highest level in the recent 1.5 years. At the same time, the corresponding yield on German bonds stood by 16 basis points, at -0.38%. As a result, the spread with the Greek bond widened by 54 points. The upward trend for four months of the performance of the Greek 10-year bond and the increase of the spread with the German at the moment cannot be interpreted. In any case, the high primary fiscal deficit estimated in the 2022 Budget in Greece in 2021 as well, will not allow for a significant de-escalation of public debt, as a percentage of GDP, despite a fairly strong recovery, thus remaining at high levels. These trends in public finances, not only domestically, but also in some other countries (e.g. France, Spain, Italy) may make it disproportionately difficult to refinance for some period. Moreover, there is the potential for financing conditions internationally to change and deteriorate, especially when the emergency liquidity assistance interventions by the world's largest central banks are greatly reduced or completed.

Despite the extensive slowdown in credit growth to businesses, the financial facilities provided by the ECB, the prolonged rapid expansion of deposits, as well as the start of the allocation of the Recovery Fund's loan resources, are projected to contribute to its continuation this year, albeit at a low rate. Regarding the last factor, an operational agreement has been concluded with the European Investment Bank (EIB) to use an amount of up to €5 billion. from a total of €12.7 billion, as well as a corresponding agreement with the European Bank for Reconstruction and Development (EBRD) to co-finance private investments. €600 million will soon be disbursed. to the institutions concerned. Previously, the operational agreements between the Ministry of Finance and six credit institutions for the use of loan resources amounting to €970 million were mentioned. Based on the procedure provided for by the Recovery Fund, within 30 working days, credit institutions will publish calls for expressions of interest to investors wishing to receive a loan from "Greece 2.0" for the implementation of their plans. According to the 2022 Budget, a venture capital fund will also be created under the Hellenic Development Investment Bank (ATE). The extensive reduction of NPLs provides significant degrees of freedom for banks to provide credit this year and in the coming years. It should be noted that the loan resources allocated so far are those raised last year. An additional €1.85 billion is scheduled to be raised for the current year, which will be allocated to the above categories of credit institutions.

While these positive developments are taking place, which create corresponding prospects for the provision of credit, on the part of businesses and households, financing barriers remain. These relate to their existing loan obligations, especially overdue ones. The most important case is the fact that the condition for the inclusion of SMEs in the pan-European Recovery Fund programs is that they have access to bank financing, i.e. that they can be evaluated positively by the banks. This financing clause excludes from new resources the many heavily indebted enterprises domestically. As part of efforts to address this issue, incentives are being planned for mergers and takeovers, as such corporate transformations between SMEs are included in the five eligibility criteria for access to Recovery Fund loans.

Especially for the largest non-financial corporations, the possibilities of access to financing outside the banking system, i.e. from the capital markets, and more broadly their prospects, seem to be improving in the recent period, based on the evolution of the General Index (DG) of the Athens Stock Exchange. From mid-April to the end of June the index



hovered around the level of 900 points, approaching at times the region of 920 points, in which it was located before the pandemic. In July, the General Index recorded a small, temporary correction, up to 833.2 points (19/7). Thereafter and until the end of 2021, it returned to its fluctuation range in the period April-June. There were two short correction periods, one at the end of September (up to 865.3 points) and the second at the end of November (up to 858.9 points). The relative stability of around 900 points over a nine-month period shows that the stock market has assimilated these levels. Since the beginning of 2022, the general index (GI) has been consistently above nine points and at 17/1 it reached 956.3 points, which is the maximum of the last seven years. The turnover on this particular day (€128.5 billion), as well as the rest around it, is quite high, reflecting a corresponding investment interest. If the rise continues, even milder, the fluctuation around these levels follows, it augurs positive developments for the Greek economy and its gradual exit from the current crisis. One of the reasons for such investment expectations may be the start of recovery fund projects.

Investor confidence in the prospects of larger companies domestically in the medium term is reflected in corporate bond issuance activity, which escalated towards the end of 2021. In mid-July, PPC proceeded to the issuance of seven-year bonds with a Sustainability Clause, amounting to €500 million, at an interest rate of 3.375%. The initial target of the issue was €350 million. and was oversubscribed by the offers 6.5 times. In September, Eurobank issued a 6.5-year bond worth €500m. and a return of 2.375%, with bids reaching €825 million. In the middle of the same month, Alpha Bank proceeded with the issuance of a senior preferred bond, amounting to €500 million. The final interest rate stood at 2.625%, with bids exceeding €1 billion. This was the first issue of such a security made by the systemic bank since June 2014 to cover the minimum requirements for own funds and eligible liabilities (MREL). In mid-November, ELVAL-HALCOR proceeded with a bond issue of €250m, with a final yield of 2.45%, which was oversubscribed 2.94 times. In early December, Noval Property's green bond began trading, raising €120m. with an interest rate of 2.65%, while the issue was oversubscribed 2.8 times. During the same period, Alpha Bank issued a new senior preferred bond, amounting to €300m, with a two-year maturity with a non-call for the first year and a 3% issue rate. At the same time, the same amount was raised by GEK-TERNA, with a seven-year yield of 2.3% and an oversubscription of 2.3 times.

As regards the possibilities for financing businesses by the public sector, the data on the European Recovery Fund, which will be the most important additional source of investment capital this year and in the coming years, were cited earlier in the current subsection. Given that the rate at which ERF funds are available is one of the factors influencing the assumptions of the alternative macroeconomic scenarios, if it comes close to the above forecasts, it will contribute to the realization of the baseline scenario for 2022.

Regarding the regular state financing of investments by the Greek State, through the Public Investment Programme, the relevant target set in the draft of 2021 is €6.75 billion. excluding COVID-19 transfers. In the period January-November, the aid of the PIP reached €7.8 billion, far exceeding the relevant target in the Budget of 2021 (€5.7 billion), but lagging behind the corresponding disbursements of funds last year (€8.4 billion). However, a significant part of spending in the eleven-month period, about €2.7 billion. or 34.6%, related to aid due to the pandemic, mainly in the form of a repayable advance (€1.1 billion) and aid to SMEs affected by COVID-19 (€741 million). Excluding these, the expenditure of the PIP amounted to €5.1 billion in the eleven-month period. They therefore fell short of the target in last year's budget. Taking into account the dynamics of the provision of funds through the PIP until November, its particularly high payments in the last month of each year, as well as the fact that the Programming Period 2014-2020 is nearing its completion,



it is estimated that the support of investment projects through PIP was formed in the whole of last year close to its level in 2020 (€6.37 billion).

For 2022, the Preliminary Draft State Budget foresees a allocation of resources amounting to €7.8 billion. through the PIP. These do not include the costs under the Recovery and Sustainability Plan, as well as emergency interventions due to the health crisis. Subsequently, a stronger contribution of regular public investment to investment activity is expected.

As estimated in previous IOBE bulletins on the Greek economy, the implementation of the privatization program lagged behind the target for another year, due to the unfavourable investment environment. In the Explanatory Report of the State Budget for 2021, the target revenue from privatizations was €1.79 billion, of which €1.47 billion they were expected to come from tenders which will be completed this year and €321 million either from tenders for which binding offers have been submitted and the expected first disbursement will take place in the current year, or from payments of instalments of completed transactions of previous years. The largest part of the second amount was, for another year, the expected first instalment of the price from the sale of Hellinikon S.A. (€300 million). The level of the revenue target, which does not significantly exceed their maximum level in 2017 (€1.37 billion), in combination with the fact that last year many competitive procedures were launched (DEPA Infrastructure, DEPA Commerce, ports of Alexandroupolis, Igoumenitsa and Kavala , Egnatia Odos etc.), had been considered by previous IOBE bulletins as making it possible to achieve or approach it, since the domestic economic climate showed a tendency for continuous improvement, a perspective closely linked to the evolution of COVID-19. However, if the uncertainty about the dynamics of the pandemic remained intense, it was considered that it would have a negative impact on the activity of TAIPED (HRDF) and mainly on the investment interest.

The economic environment during most of the first half of 2021 was more relevant to the second of the above scenarios of developments in the field of privatizations, a fact that was reflected in the relevant actions. At the end of January, the tendering process for the concession of the Kalamaria marina began. At the end of March, investors were preselected for the ports of Alexandroupolis and Kavala, as well as for the "South Kavala" natural gas field. At the beginning of April, two binding offers were submitted for the concession of Egnatia Odos and the tendering process for the development of the Heraklion Port Authority began, while towards the end of the same month seven investment schemes qualified for the phase of submitting binding offers for the development of the Igoumenitsa Port Authority. Towards the end of June, the first privatization process of this year, concerning the sale and transfer of Hellinikon S.A., was completed, with HRADF collecting the first part of the relevant price of €915 million, amounting to €300 million. In August, TAIPED (HRADF) accepted the binding offer of GEK TERNA S.A. – EGIS PROJECTS S.A., for the concession of Egnatia Odos and three vertical road axes, with a one-off payment of €1.5 billion. The tender dossier was submitted to the Court of Auditors for a pre-contractual audit. The Greek State estimates that it will receive more than €850 million from the operation of the motorway during its concession. In September, the improved binding offer of ITALGAS SpA for 100% of DEPA Infrastructure, amounting to €733 million, was accepted. and made it a preferred investor. The tender dossier will be submitted to the Court of Auditors for pre-contractual control. It is not known when any part of the price will be collected. Six investment schemes were pre-selected for the phase of submitting binding offers for the Kalamaria marina and nine investment schemes submitted an expression of interest for the Heraklion Port Authority. Finally, at the beginning of October, the transfer of an additional 16% of PPA S.A. to COSCO SHIPPING was completed, for a price of €88 million, plus accrued interest of €11.87 million. In early December, the



tendering process for the concession of the marina of Pylos for 40 years began and the agreement for the transfer of the Golf property in the north Afandou area of Rhodes was completed. The relevant one-off price was €26.9 million. Finally, HRADF was given the auction that was due to it from the procedure for the granting of rights to use radio frequencies for the development of 5th generation networks, amounting to €195 million.

Therefore, although several tendering procedures are ongoing and two particularly important ones were completed (Egnatia Odos, DEPA Infrastructure), however, the proceeds from privatizations that took place last year are those from Hellinikon SA, Golf-North Afandou and the granting of rights to use radio frequencies. In total, it is estimated in the Budget of 2022 that they reached €625.7 million, corresponding to 42.6% of the relevant target. Subsequently, their low impact on investment activity intensifies.

As the procedures required for the formal completion of the tenders for Egnatia Odos and DEPA Infrastructure will be completed this year, the respective prices will be collected. These are the most important components of the privatization revenue target in 2022 of €2,151 million. (91.7% of the target). Another €178.7 million of these will come from revenues and payments of instalments of completed transactions of previous years, with the second part of the price from the sale and transfer of Hellinikon S.A. (€167 million) constituting the largest part of them. As the expected revenues come almost exclusively from integrated actions, it is considered quite likely that the target for the current year will be achieved. However, given the number of ongoing actions since last year, combined with some new ones planned this year, it is considered that the target should include some of them and be higher.

In the external sector of the economy, the lifting in the second quarter of 2021 of restrictions or bans on cross-border passenger travel due to the pandemic, reversed the intense pressures on exports of services and then on GDP. More broadly, the opening up of economies further escalated the demand for exports of goods that continued in the nine months of last year their strong upward momentum the year before last year. On the other hand, the same developments have led to a strong increase in imports of products, due on the one hand to the sharp escalation of consumer demand, but also to the high import content of exports of products. Previously in the current subsection were presented the available data on international tourist traffic in the fourth quarter last year, from which emerged signs of strong strengthening compared to 2020. In addition, they mean an extension of the tourist season, as well as a mild lag of international tourism compared to 2019. The continuation of the recovery of the global economy and the escalation of global trade in 2022, at a milder pace than last year, are expected to maintain these upward trends, at a milder pace.

In detail, regarding the recent developments in export and import flows of key product and service categories, according to the most recent available balance of payments data of the Bank of Greece, exports of products, at current prices, continued to expand strongly in the quarter of August-October, by 44.8% (+€3.1 billion), following an increase of 40.9% in the previous quarter. The increase came mainly (56.9%) from non-fuel-ship exports, which strengthened by 30.7% (+€1.68 billion), slightly faster than in the May-July quarter (+28.7%). The rest of the increase in exports of products came from much higher fuel exports (+101.1% or +€1.43 billion), due to the large increase in their international prices, as previously analysed. Ship exports, which account for a very small share of total product exports, fell by €2.7 million or 10.4%, in contrast to their 25.5% increase a quarter earlier. Therefore, the particularly significant boost in exports of goods did not come mainly from higher prices of energy goods. Despite the sharp increase in exports of products, the strongest increase in imports in the quarter August-October (+48.2% or +€5.53 billion),



which came primarily (53.3%) from most imports of non-fuel goods -Boats (+30.7% or +€2.95 billion), and secondarily from fuel imports (+139.8% or +€2.59 billion), led to a widening of the goods deficit from last year by 53 , 3% or €2.43 billion, to €6.99 billion.

The widening of the goods deficit during the period July-October was offset by the widening of the services surplus. Exports of services were 90.8% more than a year ago (+€6.54 billion), following a similar rise of 80.4% in the previous quarter of May-July. Their rise came mainly (59.7%) from the provision of travel services (+€3.9 billion or +139.4%), following their sharp rise a quarter earlier (310.7%). Transport services contributed 36.4% of the increase as they expanded by €2.38 billion. (+73.4%), much faster than in the previous quarter (+35.9%). The smallest share in the increase of exports of services was the other services, which amounted to €255.3 million. (+21.9%), continuing their increase by 48.6% a quarter earlier.

Demand for imported services also increased in the July-October quarter, of a lower relative and absolute intensity than that for exports of services (+73.5% or +€2.67 billion) and faster than in the previous quarter (+56.6%). The increase came mainly (79.5%) from the enhanced domestic demand for transport (+90.2% or +€2.12 billion), with the contribution of other services (10.7%) to the increase to be followed (+25.9% or +€284.7 million). Domestic demand for tourism services strengthened particularly strongly, but from its very low level the year before last year (+€261.1 million or +146.6%), as well as a quarter earlier (+120.0%). As a result of the changes in the two main components of the balance of services in the July-October quarter, it was the strong expansion of its surplus, by 108.3% or by €3.87 billion. As a consequence of this positive development, the deficit of the total balance of goods and services in 2020 (-€984.3 million) turned into a surplus (+€456.9 million).

With regard to the most recent trends in parts of economic activity domestically, as well as in short-term economic indicators, at the end of the third quarter and at the beginning of the fourth quarter, it appears that the significant upward trends on both the production and the demand side continue, either slightly milder or stronger than previously last year. In detail, on the supply side of the economy, the growth of industrial production remained particularly strong in the September-November quarter (+11.3%), compared to an increase of 8.9% in the previous quarter and a marginal rise a year earlier (+0.96%). At the level of key industrial sectors, the strong escalation came mainly from Manufacturing, where production expanded by 11.9%, compared with an increase of 6.1% in the previous quarter. The contribution of Power Generation to the strong growth was also significant, with the growth rate at 12.7%, milder than a quarter earlier (21.7%). The Mining-Quarrying sector showed a slight increase (0.7%), similar to its decline in the previous quarter. Water Supply saw a marginal increase in the product, by 0.2% following a small increase in the June-August quarter (+1.8%). Building activity continued to expand significantly in the two months of August-September, but milder than in the previous quarter. Specifically, it increased by 58.2% in terms of surface area and by 64.5% in terms of volume, with the increase in permits being milder (+10.2%). In the previous quarter this year the corresponding changes were 58.2%, 59.5% and 10.2% respectively.

In terms of measures that reflect the climate and demand side of the domestic economy, the volume index in Retail Trade (seasonally adjusted) showed an increase of 9.2% in October, following the same increase in the third quarter (+9.1%). Taking into account for the realization of macroeconomic forecasts mainly the recent and possible developments regarding the COVID-19 pandemic, e.g. the recent rapid spread of the new mutation and its impact on epidemiological data, the rate of increase in vaccination coverage of the population, the faster recovery of the world economy, the greater expected growth of

international tourism, the clearly higher than originally planned support measures. It is estimated that the particularly strong recovery of household consumption expenditures in the second and third quarters of last year will continue at a high but slower pace in the last quarter of 2021. The expansion of private consumption will be supported by the sharp de-escalation of unemployment. The large accumulation of savings by households, amounting to almost €15.6 billion since the onset of the health crisis, could fuel the increase in their consumption in the final quarter of last year. Income tax reductions (social security contributions, social solidarity contribution) were an additional factor in stimulating the consumption potential of the private sector. Under these effects, it is predicted that the strengthening of private consumption will be in the range of 5.5-6.0%.

In 2022, it is now considered likely that, despite the outbreaks that the pandemic will present, generalised and strong restrictive measures will not be imposed, as in the past (baseline forecast scenario). Subsequently, the economy is expected to operate with the existing, relatively few restrictions, possibly some additional at times. This development will stimulate private consumption in two ways, so directly, with the continuous, living operation of sectors in which the previous years had been suspended and in which a significant part of private consumption takes place (Retail, Tourism, Catering, Arts - Entertainment, Transport, etc.), as well as indirectly, from the expansion of employment and the creation of income in them, as over time their contribution to employment is high. Jobs will be created by most investments, e.g. in industries with high export performance, in Tourism, as well as the largest contribution of the public sector to investment activity (expansion of PDE, Recovery Fund). Household consumption expenditure will continue to be supported by their fairly increased savings during the pandemic. On the other hand, the increase in private consumption will be halted by the rise in energy prices, especially in the first half of this year, which will gradually weaken. Inflationary pressures on consumption will be mitigated by interventions to support households (electricity and gas consumption subsidy, increased heating allowance). The boost from the emergency support measures due to the pandemic will be much smaller, but the positive effect of the suspension of the special solidarity levy will continue. However, the real disposable income of a section of the population is likely to be boosted by the middle of the year by the increase in the minimum wage. Depending on these effects on disposable real income and consumer mood, a further expansion in household consumption is expected to be, by 3.0% to 4.0%.

The alternative scenario is different from the baseline scenario in terms of the impact of health developments, which in this case will be worse. However, as no re-lockdown or suspension of a significant part of the economy is expected, no entry ban will be imposed, but some targeted restrictions will not pose significant barriers to private consumption, nor will consumer sentiment significantly change. However, due in part to the warnings of potential adverse developments, companies will make fewer recruitments. The strengthening of the investment activity will be milder than the basic scenario, as well as the expansion of the international tourism, mitigating the creation of jobs and income from these factors. The rise in prices will also be smaller, which may turn into a slight drop towards the end of the year. In addition, some of the measures to support businesses and households will be reinstated, maintaining a larger part of this year's fiscal stimulus. Subsequently, household consumption expenditure is expected to remain on an upward trajectory, at a slower pace than the baseline scenario (+1.5 - +2.5%).

On the consumption side by the public sector, the expansion of emergency spending due to COVID-19, mainly for staff, ICT infrastructure and equipment, for the supply of drugs, vaccines and tests, etc., is considered to have continued to stimulate consumer demand in the last quarter of 2021. In addition, emergencies arose to deal with the disasters caused by the great fires of the summer, in Evia and Attica. On the other hand, the technical result



of its clearly higher level a year earlier, compared to that in the first half of 2020 (base result), acted as a brake on the expansion of public consumption expenditure at the end of 2021. Also, they were not re-paid in 2021 retroactively to retirees, as in the fourth quarter the year before last. Taking into account the effects of the above factors that affect public consumption, it is estimated that its average expansion last year reached 5.5-6.0%.

The expected continuation of the pandemic in 2022 with some outbreaks, will maintain a large part of the needs it creates in logistical equipment. However, next year an expansion of employment in the public sector is planned, with 20.6 thousand recruitment and appointments. According to the Explanatory Report of the 2022 Budget, due to the large number of departures in the period 2020-2022 from the Ministry of Health, the total recruitment this year will correspond to 29% of the total number of recruitments. This is followed by admissions to productive schools of uniformed personnel (12%), other central administration bodies (10%) and professional soldiers (8%). Especially in the first semester, staff costs will be boosted by those due to the recruitment of 11.7 thousand. primary and secondary school teachers in the third quarter last year. The strengthening of employment will mitigate the reduction of public consumption expenditure, with the result that its decline will be in the range of 2.5-3.5%. Given that there is a strong recovery of the pandemic, which will lead to some strong restrictive measures, which also entail corresponding support interventions, the relative needs will be higher than the baseline scenario, and therefore the reduction of consumer revenues will be smaller (-1.0 to -2.0%).

As far as investments are concerned, the high bank lending of businesses from 2020, which is expected to continue this year at a much lower rate, has already created last year the possibility of investments by a large number of companies, as has been highlighted in previous bulletins of the IOBE on the Greek economy. As long as public health protection measures remain around current levels, possibly with temporary small fluctuations, pandemic reticence will not recover significantly, favouring the implementation of many of these investment plans. Companies from manufacturing activities, the demand of which is either related to the health crisis, or has shown resilience to it (e.g. Pharmaceuticals, pc manufacturing, plastics), are considered the most likely to expand their investment activity. The strong recovery of international tourism in 2021, which under the assumptions of the baseline macroeconomic scenario will continue and escalate this year, will revive investment activity in this sector. This will also be about renovating properties for Airbnb. The industry will make more investments in the case of the alternative macroeconomic scenario, however these will be less and will be realized in areas of the country with strong tourism recovery last year and signs of its continuation this year.

The implementation of "Hercules II" will substantially contribute to the coverage of any negative developments in the assets of banks from the pandemic, such as an expansion of NPLs, but also more broadly, to their extensive reduction, as already seen by the relevant actions of banking institutions and their results in the second and quarter of the previous year. Subsequently, credit growth will be favoured in 2022. In terms of deposits, their upward trend is considered to have continued at the end of 2021, but milder while the same is expected at least for the beginning of this year, providing additional resources to banking institutions for lending. The trend towards a significant escalation of consumption will act as a brake on their expansion. The loan arm of the European Recovery Fund will be an additional source of capital for banks from this year.

As has been pointed out in IOBE reports, the aid from the exceptional actions to address the impact of the pandemic on businesses and the self-employed (e.g. repayable advance, business guarantee fund, interest subsidy on loans and working capital), although not related to investments, are partly reflected in investment expenditure on GDP, as they are

available under the Public Investment Program. In the eleven months of last year, this type of expenditure reached €2.7 billion, compared to €4.25 billion a year earlier, so it is possible that the boost from this factor to fixed capital formation was lower in 2020. On the other hand, the programming of actions of this kind in the 2022 Budget for this year is minimal, so for the time being no continuation of the positive effects is expected this year. Understandably, in the event of the reintroduction of strong restrictive measures on the operation of enterprises, in a smaller range of sectors and activities than in the last two years (alternative forecasting scenario), the application of some of these financial interventions will be reinstated.

The completion or significant weakening in 2022 of the positive effects of the emergency support interventions due to the pandemic will be overcompensated by the resources available under the Recovery and Resilience Plan (Greece 2.0), together with the domestic resources that will be leveraged for the investment projects that will be considered eligible for support. As mentioned above, 109 projects with a budget of €6.11 billion have already been included in the Recovery and Resilience Fund (RRF) for implementation. €4 billion has been disbursed from the Fund, as an advance payment of the funds allocated to Greece and at the end of December a request for payment was submitted to the European Commission for their first instalment, amounting to €3.56 billion. These funds are the expected revenues for the new year. On the aid side, the relevant provision in the budget reaches €3.2 billion. As pointed out in the macroeconomic scenario assumptions, the implementation of the Recovery Plan is considered to a large extent independent of health developments, because the relevant processes, internally and at the level of the European Commission, are not affected by them. Therefore, support for investments through them will depend on the effectiveness of the actors involved, domestically and at the level of the European Commission.

Following the small lag in the implementation of the EDP in the eleven months of last year, it is estimated that its total expenditures in 2021 were close to their level in 2020 (€6.37 billion) and lower than the target (€6.75 billion). Taking into account the higher than for 2021 aid target of the PDE for this year (€7.8 versus €6.75 billion), the fact that the NSRF 2021-2027 starts, but also the experience of implementation of the program in the past, it is estimated that Expenditures are likely to increase slightly in 2022, to around €7 billion, providing correspondingly greater support to investment activity.

The large-scale implementation of the privatization-privatization program in 2020, which continued more leniently last year due to the effects of the pandemic, will result in a small contribution to investment activity this year as well, given the long maturation period required for this investment of scale. However, the recent completion of the concession of Hellinikon, Egnatia Odos, DEPA Infrastructure, HEDNO, creates very important medium-term prospects for investment, economic activity in general, as well as employment.

As it emerged from the trends in relevant short-term indicators cited earlier, there has been significant strengthening in building projects since the beginning of 2021, especially in its second quarter, but also in the next quarter. This has already been reflected in the formation of fixed capital in GDP and is expected to continue in the coming quarters. Building activity will be significantly stimulated in the new year by investments in the tourism sector, as already mentioned, including the renovation of properties for Airbnb. In the event of a significant escalation of health measures and related uncertainty, investments in Tourism in 2022 will be mildly mitigated.

Taking into account these effects, mainly of the strong credit growth to businesses and the continuous upward momentum of exports of goods since 2020, which determines the





investment decisions in Industry, it is estimated that the recovery of investments last year stood in the range of 10-12%. This year, they will be added to these effects primarily those of the utilization of resources from the EDF and the much higher-than-expected growth of international tourism last year, which will escalate further. Thereafter, investment this year will expand to between 20-23% compared to 2021. A further escalation of restrictive measures will moderate to a small extent the rise in investment activity, in the region of 15-18%.

In the external sector of the economy, on the export side, it is the strong dynamics of exports of services, mainly due to the recovery of international tourism, that mainly determined the change in total exports last year and will probably have the same importance in 2022. The first data from the pre-bookings for 2022 are particularly positive, as in October they significantly surpassed those of 2019. This dynamic also favours the provision of international transport services. In the event of a significant escalation of protection measures, e.g. during winter or early spring, the increase in tourist traffic will be temporarily mitigated. As far as exports of goods are concerned, their significant strengthening will continue to be supported by the strong recovery in the Eurozone.

Table 3.2

Domestic Expenditure and Gross Domestic Product – European Commission estimates (at constant 2015 market prices)

	2019	2020	2021	2022
<i>Annual Percentage Change</i>				
Gross Domestic Product	1.8	-9.0	7.1	5.2
Private Consumption	1.8	-7.9	3.3	2.5
Public Consumption	1.7	2.6	4.4	-3.5
Gross Fixed Capital Formation	-3.3	-0.3	15.3	13.4
Exports of Goods and Services	4.9	-21.5	22.4	15.0
Imports of Goods and Services	3.1	-7.6	16.2	6.9
Employment	0.9	-1.2	1.1	1.1
Compensation of Employees per capita	0.6	-0.7	0.0	0.6
Real Unit Labour Cost	-0.5	8.7	-5.6	-4.2
Harmonised Index of Consumer Prices	0.5	-1.3	0.1	1.0
<i>Contribution to real GDP growth</i>				
Final Domestic Demand	1.2	-4.9	5.1	2.6
Net Exports	0.6	-5.5	2.0	2.6
Inventories	0.0	1.4	0.0	0.0
<i>As a percentage of GDP</i>				
General Government Balance	1.1	-10.1	-9.9	-3.9
Current Account Balance	-2.4	-7.9	-6.3	-4.0
General Government Gross Debt	180.7	206.3	202.9	196.9
<i>In percentage terms</i>				
Unemployment (% of labour force)	17.3	16.3	15.3	15.0

Source: European Economic Forecast, autumn 2021, European Commission, November 2021

The rise will be dampened by the sharp escalation in the prices of energy goods and other commodities, mainly in the last quarter of 2021 and the first of the new year. They are then expected to gradually weaken, which in the case of the alternative scenario for the new year, may lead to deflation in the fourth quarter. Taking into account the mostly positive trends in the factors presented and related to export demand, it is estimated that

in 2021 the increase in total exports amounted to 19-21 '%. Its continuation in the new year will take place at a slightly milder pace than this year in the baseline scenario, in the range of 12-14%. If there is a "resurgence" of the health issue and an expansion of the measures, the rise in the new year will be slightly smaller than in the baseline scenario, in the range of 8-10%.

The strengthening of domestic demand, as well as exports of products in 2021, had a strong growth footprint on goods imports. In addition to the imports of products, the imports of transport services are strongly strengthened. These trends are estimated to have continued until the end of 2021 and will largely persist in 2022. They may be affected on both these aspects of imports by the strong rise in international prices of energy products and commodities. Domestic demand for travel services seems to have strengthened particularly strongly last year, with the increase escalating in the fourth quarter, as predicted in the previous IOBE report on the Greek economy. This trend is projected to de-escalate at the beginning of this year, due to the reticence about the evolution of the new mutation and its effects on human health. More broadly, import growth is forecast to have been smaller last year than exports, leading to an improvement in the external balance. Taking into account the above factors, it is predicted that imports expanded last year by 14% to 16%, an increase which will show a slowdown this year, in the region of 11-13% under the baseline scenario. Their reinforcement will be smaller under the alternative development scenario (7.5-9%).

Table 3.3

Comparison of forecasts for selected economic indicators for the years 2021 – 2022 2021 (at constant market prices, annual % changes)

	MinFin		EU		IOBE			IMF		OECD	
	2021	2022	2021	2022	2021	2022*	2022**	2021	2022	2021	2022
GDP	6.9	4.5	7.1	5.2	9.0-9.5	4.5-5.0	2.5-3.0	6.5	4.6	6.7	4.8
Private Consumption	3.3	3.0	3.3	2.5	5.5-6.0	3.0-4.0	1.5-2.5	:	:	2.1	4.4
Public Consumption	4.1	-2.8	4.4	-3.5	5.5-6.0	-2.5 - -3.5	-1.0 - -2.0	:	:	4.6	-2.1
Gross Fixed Capital Formation	11.7	21.9	15.3	13.4	10-12	20 -23	15-18	:	:	14.0	17.3
Exports	14.1	11.1	16.2	15.0	19-21	12 – 14	8-10	:	:	4.1	13.0
Imports	6.6	8.9	8.1	6.9	14-16	11-13	7.5 – 9	:	:	1.7	8.1
Harmonised Index of Consumer Prices (%)	0.6	0.8	0.1	0.9	1.2	1.5-1.8	0.7 – 1.0	-0.1	0.4	0.4	3.1
Unemployment (% of labour force)	15.9	14.2	15.3	15.0	14.9	13.5	14.0	15.8	14.6	14.6	12.9
General Government Balance (% GDP)	-9.6	-4.0	-9.9	-3.9	:	:	:	-10.2	-4.3	-9.6	-4.0
Current Account Balance (% GDP)	:	:	-6.3	-4.0	:	:	:	-7.4	-5.1	-7.2	-6.7

\*IOBE baseline scenario, \*\*IOBE alternative scenario

Sources: Budget Report 2022, Ministry of Finance, November 2021 – European Economic Forecast, autumn 2021, European Commission, November 2021 - The Greek Economy 04/21, IOBE, January 2022 – World Economic Outlook, IMF, October 2021 - Fiscal Monitor, IMF, October 2021 - Economic Outlook 110, OECD, December 2021

From the process of estimating the trends in the components of GDP this year and next year, which for 2022 were based on different scenarios for the developments related to the COVID-19 pandemic in Greece and internationally, as well as other determinants of GDP (international tourism, inflation, etc.) corresponding forecasts emerged for the change of the domestic product. According to them, in 2021, in the last quarter of which no general restrictive measures were imposed, the growth of international tourism was higher than expected, but the escalation of inflation was much stronger, as well as the inflow of





Recovery Fund resources lower than the target in the Budget. of 2021, the Greek economy grew at a rate in the range of 9.0-9.5%. In 2022, under similar sanitary conditions, favouring a further significant tourism growth and the continuation of strong growth in the euro area, with a boost of investment from the Recovery and Resilience Fund, but also much fewer interventions to support businesses and households than in 2021, the strong recovery will continue, at a rate of 4.5-5.0%. In case of imposition of some important restrictive measures due to severe deterioration of all epidemiological data, slower recovery of the Eurozone and tourism, but also milder inflation, the GDP growth rate will slow down in the range of 2.5-3.0%.

In the field of trends in employment and unemployment, developments related to the health crisis were the most decisive ones last year. As long as this factor does not fluctuate again in 2022, it will be succeeded in terms of the importance of their impact on the labour market by the strengthening of consumer demand, the further strengthening of tourism and investments, while the impact of high inflation will be smaller.

In detail, the strong new outbreak of the pandemic at the end of last year led to the adoption of new measures for the protection of public health, which, at present, are targeted and involve significantly fewer activities than in similar circumstances in the past (Food Services, Entertainment). No restrictions have been imposed on travel within the borders and from abroad. Subsequently, most companies in the Retail, Tourism and Catering sectors, which were severely affected by the pandemic a year ago, continue to operate, with positive effects on their employment, and the normalization of socio-economic conditions as well as no lockdown has been imposed for more than nine months. These conditions are supposed to be maintained throughout the winter in the basic scenario. The strengthening of consumer demand will be mitigated at the end of 2021 and at least in the first months of 2022 by the strong inflation, which will gradually weaken. In the case of the alternative scenario, the restrictions will be extended to other sectors, with a high share of employment (e.g. Retail), as well as for vulnerable social groups. More broadly, mainly due to caution in the face of potential adverse developments, companies will make fewer recruitments. In addition, consumer demand will increase more slowly, as consumer sentiment will weaken. But inflation will also be milder, which will turn into deflation during the second half, so real income will be less limited.

The faster-than-expected recovery of the Eurozone last year boosted export demand more than expected, supporting employment in export sectors, mainly industry. The equally strong growth of the Eurozone projected for this year, provided that the evolution of the pandemic does not lead to strong constraints, will continue to provide a boost to exports and employment. Otherwise, GDP growth in the Eurozone is expected to slow down slightly, and correspondingly the rise in demand for Greek exports, hence the support for employment.

The increase of investments, in export sectors of industry and in Tourism, but mainly by utilizing the resources of the Recovery Fund, as well as by the start of investments in important privatizations, such as in Hellinikon, will significantly stimulate the creation of jobs next year, among others industries, in Construction.

The public sector will be stimulated in domestic employment in 2022. 20.6 thousand recruitments and appointments have been planned for this year, within the framework of the rule "one recruitment for each departure", based on the departures not only in the previous, but also in previous years.

An expected development, the impact of which on employment is premature to predict, is the change in the minimum wage, which is likely to be positive. Its effects will depend on the extent of its change. In anticipation of this development and as views are heard in the

public debate on a significant increase, a part of the enterprises will postpone part of its decisions on the number of its workforce, especially those in sectors with a high proportion of unskilled labour.

Taking into account the above effects on the labour market, the estimate for the unemployment rate in 2021 is revised for the better, in the range of 14.9%. As far as 2022 is concerned, in the baseline scenario the unemployment rate is expected to be in the region of 13.5%, while in the alternative scenario in the region of 14.0%.

With regard to the expected trends in the key components of the Consumer Price Index in 2022, starting with demand, unless strong restrictive measures return, this will allow pre-crisis activity in quarantined and offshore sectors. a significant part of domestic consumption (Retail, Catering, Tourism), as well as increasing their employment. Combined with job creation in extroverted industries, as well as more investment, domestic disposable income will increase, boosting consumer demand and then prices. But if there is a new recovery of the pandemic in the coming year, the increase in economic activity, employment and income will be milder. In any case, no strong impact on demand is expected, as protection measures are likely to be much more targeted, in terms of the sectors and social groups concerned, as mentioned above.

As mentioned above, for the time being it is premature to predict the impact of the upcoming increase in the minimum wage on employment and then on domestic disposable income, as the extent of the increase is not known.

On the energy impact side, the mild restriction of cuts in daily oil production by OPEC+ member countries (including Russia) is not sufficient to cover the rapid increase in its demand from the revival of the global economy. The most important developments in the new year are expected from producer countries other than OPEC+ members. After all, towards the end of 2021, the largest increase in daily production came from the US, which is successively allocating part of its strategic reserves, while similar actions are being taken by China, India, South Korea, Japan and the UK. On the oil demand side, the stabilising or temporarily declining effect on prices from the rapid spread of the new mutation is estimated to be temporary. After all, in 2022 overall, although the global economy will be slower than last year, it will remain strong. In this context, global oil consumption is expected to expand to 2019 levels. Therefore, no de-escalation of energy costs is expected and a new small increase this year is possible, as mentioned above.

As for the effect of indirect tax interventions, the VAT reduction that was in force since June last year for specific goods and services was extended until the first half of 2022. However, as a year has now elapsed since its implementation, no further substantial effect on prices is expected. The VAT deduction on some other goods and services (gyms, dance schools, etc.), will have a limited deterrent effect on price increases, as it concerns a small part of consumer spending. Slightly stronger is expected to be the result of the reduction in mobile subscriber fees.

Taking into account the above possible trends in the main components of the domestic Index of Consumer Prices, as well as its growth rate in 2021 (1.2%), under the baseline scenario of macroeconomic developments for 2022, it is projected that the General Index of Consumer Prices will show a mild strengthening in 2022, in the region of 1.5-1.8%, due to the new, milder than last year rise in energy prices and the further strengthening of demand. If the safeguards are escalated, but on a targeted basis, and without a lockdown (alternative macroeconomic forecast scenario), combined with the expected trends in the other factors affecting the domestic CPI, it is predicted that the average annual rate of change will be at 0.7% to 1.0%.



## 3.2 Developments and Prospects in Key Sectors of the Economy.

- Industrial production increased by 10.0% in the eleven months of January-November 2021, when in the corresponding period of 2020 it fell by 2.6%.
- Production increase in Construction by 4.7% in the nine months of 2021 instead of losses of 13.3% in 2020.
- 8.9% increase in retail volume in the ten months of 2021, compared to a fall of 2.8% a year ago.
- Increase in turnover in all subsectors of services in the first nine months of 2021 compared to a year earlier.

### Industry

In November 2021, the industrial production index strengthened by 8.0%, then increased by 8.9% in November 2020. In the eleven months of 2021, the index strengthened by an average of 10.0% instead of a decline of 2.6% in the same period of 2020.

Over the same period, the index of producer prices in industry increased by 12.3%, when it fell by 7.2% the year before last. The increase is due more to the increase in prices for exported products (+19.4%, instead of a decline of 15.6% last year) and less to the prices of products placed on the domestic market (+10.2% instead of a decrease of 4.5% in 2020). Similarly, the industry's turnover over the same period rebounded by 26.1%, instead of a loss of 13.1% in the eleven months of 2020.

In the Eurozone in the same period last year, industrial production increased at a rate of 8.4%, almost offsetting the losses of the same period in 2020 (-8.3%).

Much bigger than the recession the year before last was the rise in all key sectors of Greek industry in the period January – November 2021. In detail, the largest increase was recorded in the production of Electricity Supply (+16.3% instead of -6.0% in 2020), followed by Manufacturing (+9.0% instead of -1.7%) and Mines (+3.9% instead of -3.9%). Production in the Water Supply expanded at an unchanged rate compared to the year before last year (+0.9%).

In the Mining-Quarrying sectors, production in Other Mines and Quarries increased by 13.2% (instead of -9.3% in 2020), followed by Coal and Lignite Mining - Crude Oil and Natural Gas Pumping, which increased by 3.8% instead of a decline but by 64.5% a year ago. In contrast, production in Mining was reduced by 12.2%, instead of an increase of 21.6% a year earlier.

In Manufacturing, among its main sectors for the Greek economy, the production of Medicines increased by 13.5% followed by an increase of 16.0% in 2020. Food production followed an increase (3.6% instead of a decrease of 2.5% before last year) and the production of Basic Metals (increase of 1.2% instead of losses of 3.7% in 2020).

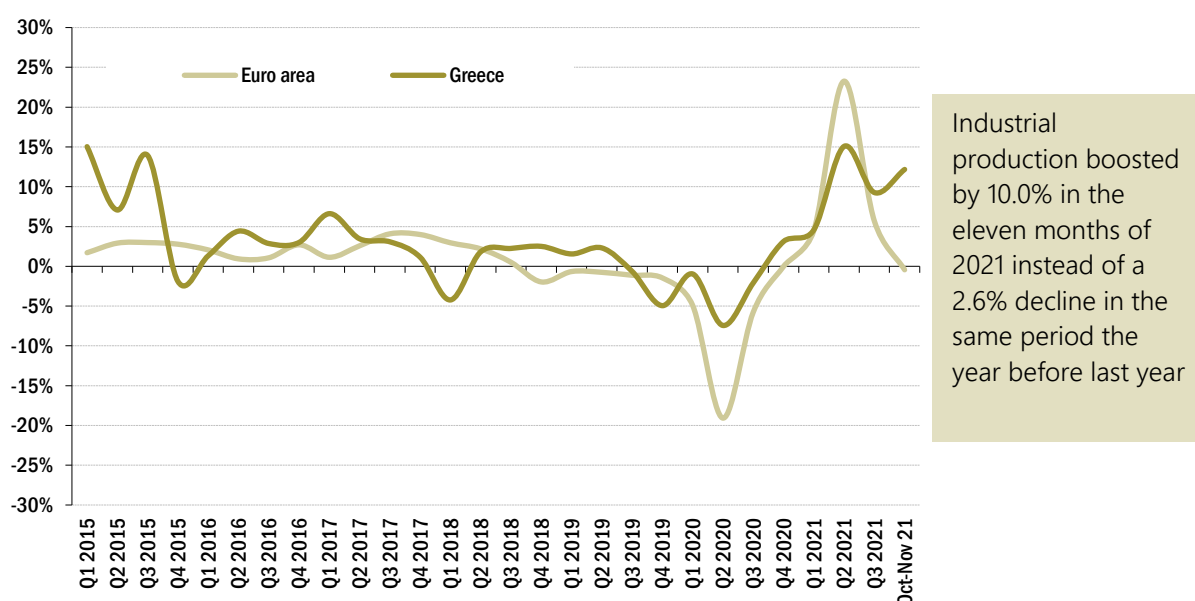
Production recorded an upward trend in the vast majority of the remaining sectors of Manufacturing, as it was limited to only two sectors compared to 2020. Indicatively, other manufacturing activities improved by 27.0%, followed by the manufacture of Clothing (an increase of 21.5% instead of a decrease of 30.3% in 2020), the production of Leather and

Leather Goods (21.3% instead of -40.0%) and the manufacture of Mechanical Equipment (21.3% instead of mild losses of 4.7% the year before last). Worse than in 2020 but at a milder pace moved the repair-installation of Equipment Machinery (-2.1%, then -4.4%) and the production of Wood and Cork (-0.2% instead of -11.7% in 2020).

The Output was strengthened in all five main industrial product groups. Analytically, the production increased mainly in Durable Consumer Goods (+15.8% instead of -9.7%), in Capital Goods (+13.0% following an increase of 0.8%) and in Energy (+12.4% instead of -5.7% in 2020). It was followed by Non-Durable Consumer Goods (8.4% instead of -0.5%) and Intermediate Goods (7.5% compared to losses of -1.4% in 2020).

Figure 3.2

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



Sources: ELSTAT, Eurostat

## Construction

In the third quarter of 2021, the manufacturing index in the Construction sector strengthened by 7.8%, instead of a loss of 3.0% in the same period of 2020. In the nine months of 2021, the index strengthened by 4.7% instead of a loss of 13.3% a year earlier. In the sub-indices over the same period, the production of building projects increased by 4.3% instead of losses of 11.2% the year before last year. The Civil Engineering index strengthened by 12.8%, down 9.5% in 2020.

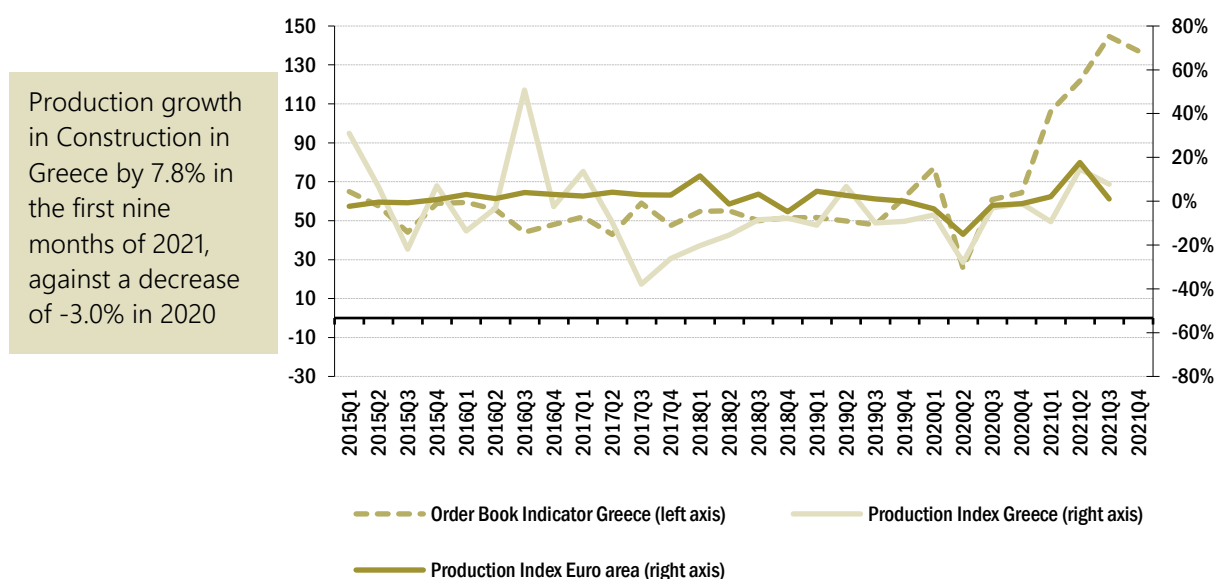
During the same period in the Eurozone, the production index in Construction increased by 6.5%, almost offsetting the losses of the first nine months of 2020 (-6.9%).

From the data of construction activity in the nine months of 2021 there is an increase of 27.0% in terms of the number of licenses, almost double the increase of the same period of 2020 (+15.5%). A stronger increase compared to the previous year was recorded both in surface terms (+53.1% instead of +14.5%), as well as in volume terms (+45.6% then +10.7%).



Figure 3.3

Production Index in Construction and Building Activity Index



Source: ELSTAT

## Retail Trade

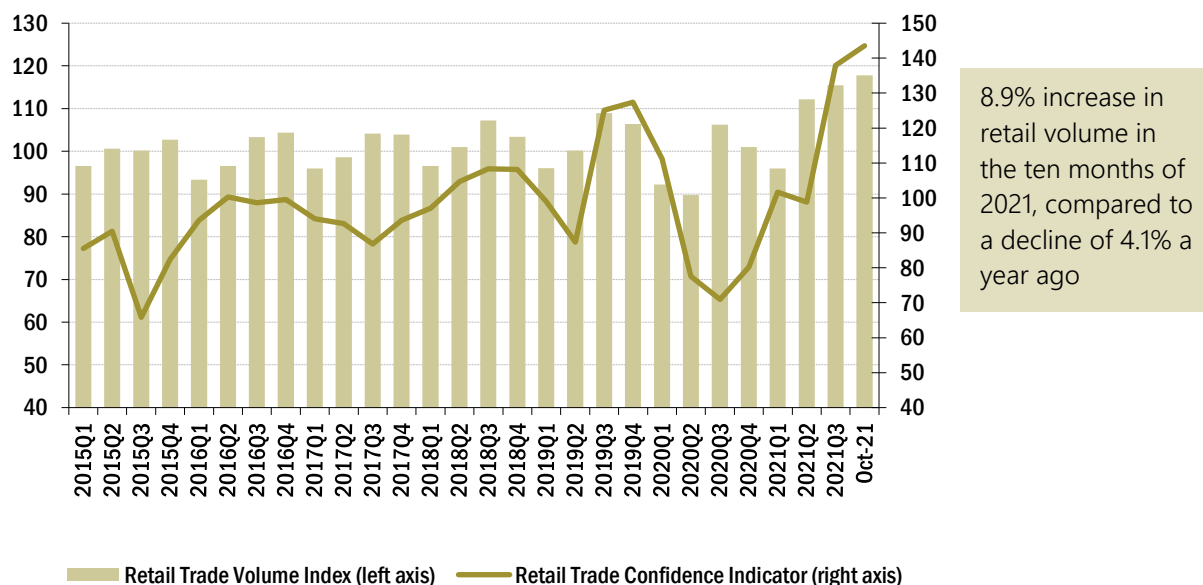
The volume index in the Retail sector in the ten months of 2021 increased by 8.9% instead of a decrease of 2.8% in 2020. The volume of work increased in 6 of its 8 sub-sectors. The largest increase was recorded in Clothing and Footwear (+21.5% instead of a decrease of 13.6% in 2020), followed by sales in Furniture and Electrical Items (19.5% instead of -0.5%) and in Books and Stationery Species (+14.5% compared to +0.2% in 2020). Next rank the sales of Food, Beverages and Tobacco (+10.9% instead of -9.3%) and in the Big Food Stores (+3.5% instead of +4.0%). On the contrary, there was a decrease in the sales of Fuels (-2.0% instead of -10.9%) and in the Department Stores (-0.2% instead of -6.6%). On the other hand, in both sub-sectors, the rate of decline slowed significantly.

Expectations in the Retail sector in the whole of 2021, as reflected in the leading indicators of the IOBE Economic Conjuncture Surveys, strengthened compared to the corresponding period a year earlier. The relative overall index increased by 11.8 points, instead of decreasing by 20.8 points in 2020.

On the contrary, expectations improved strongly in Textiles – Clothing – Footwear (+47.6 units instead of -25.5 units the previous year), Vehicles – Spare Parts (+31.3 units instead of -39.5 units the year before last year and Household Equipment (+30.1 units instead of 13.9 units in 2020).

Figure 3.4

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



Sources: ELSTAT, IOBE

Table 3.4

Volume Index in Retail Trade, annual changes

Category of Retail Trade Stores	Volume Index (2010=100)				
	Jan. - Oct. 2019	Jan. - Oct. 2020	Jan. - Oct. 2021	Change 2020/2019	Change 2021/2020
Overall Index	101.8	98.9	107.7	-2.8%	8.9%
Overall Index (excluding automotive fuels and lubricants)	102.7	102.3	112.3	-0.4%	9.7%
Store Categories					
Supermarkets	106.4	110.7	114.5	4.0%	3.5%
Department Stores	94.0	87.8	87.6	-6.6%	-0.2%
Automotive Fuels	94.6	84.3	82.6	-10.9%	-2.0%
Food – Drink – Tobacco	86.7	78.6	87.2	-9.3%	10.9%
Pharmaceuticals – Cosmetics	99.8	115.8	140.2	15.9%	21.1%
Clothing – Footwear	107.0	92.4	112.2	-13.6%	21.5%
Furniture – Electric Equipment – H. Appliances	112.5	112.0	133.8	-0.5%	19.5%
Books – Stationary	119.3	119.5	136.7	0.2%	14.5%

Source: ELSTAT

In particular, the Index of Business Expectations in Cars – Vehicles stood at 122.2 points in the whole of 2021, compared to 88.2 points in 2020, a short distance from the average level of 2019 (131.1 points). The balance of current sales returned from the negative levels of 2020 (-29 points) to marginally positive territory, with a simultaneous increase in the percentage of those who estimated increased sales, and a decline in the number of businesses reporting reduced sales. On the inventories side, the balance returned to



negative territory for the first time since 2016, with an increase in those who consider stocks to be reduced, while this development is influenced by developments in vehicle supply shortages worldwide. The balance of orders returned to a positive sign and stood at 18 points, compared to -12 in 2020, with a significant decrease in those who expect a decline in the coming period. In the balance sheet for sales expectations, the estimates also improved, with the index standing at 24 points, compared to -8 points in 2020, with a simultaneous increase in upward expectations and a decline in downward. On the employment side, strong signs of stabilization remain, while the issue of increased prices returns, with tripling of those who estimate that prices will increase in the next period, a development that is considered a direct result of broader relative developments (high energy costs, supply chain disruptions).

Table 3.5

Business Expectations Indices in Retail Trade (1996-2006=100)

	2019	2020	2021	Change 2020/2019	Change 2021/2020
Food-Drinks-Tobacco	103.1	107.0	74.6	3.9	-32.4
Textiles - Clothing – Footwear	81.4	55.9	103.5	-25.5	47.6
Household Appliances	78.2	64.3	94.4	-13.9	30.1
Vehicles-Spare Parts	121.0	81.5	112.8	-39.5	31.3
Department Stores	112.6	96.9	72.2	-15.7	-24.7
Total Retail Trade	105.8	85.0	96.8	-20.8	11.8

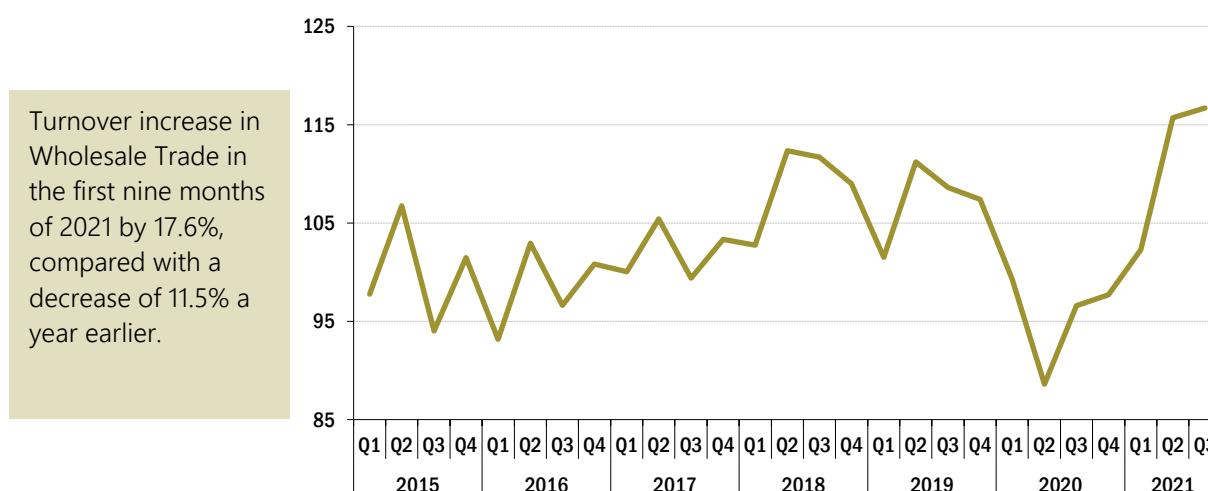
Source: IOBE

## Wholesale

In the nine months of 2021, the turnover index in Wholesale Trade increased at a rate of 17.6% compared to a decrease of 11.5% in the corresponding period of 2020.

Figure 3.5

Turnover Index in Wholesale Trade



Source: ELSTAT



## Services

In the nine months of 2021, turnover improved in all 13 service sectors without exception compared to the same period the year before last year.

The largest increase was recorded in the Data Processing and Information Services (+32.5% after a milder increase +7.2% in 2020), in the services of Architects and Engineers (+30.1% compared to +0.6% the year before) and the services of Office Administrative Activities (+23.5% versus -9.0%). Advertising services are on the rise (+19.7% instead of -12.7%), Publishing Activities (+19.2% versus -9.7% in 2020), IT services (18.6%, from - 2.5%), Legal and Accounting services (+17.1% versus -3.9%), Courier activities (+11.2% versus -0.2%) and Telecommunications (+7.5%) versus - 2.6%).

Table 3.6  
Turnover Indexes in Services (2010=100)

Service sector	% Change Jan-Sept. 2020	% Change Jan-Sept 2021
Publishing activities	-9.7%	19.2%
Architects and Engineers	0.6%	30.1%
Data and Information service activities	7.2%	32.5%
Security and investigation activities	-7.7%	9.3%
Telecommunications	-2.6%	7.5%
Advertising and market research	-12.7%	19.7%
Postal and courier activities	-0.2%	11.2%
Computer programming, consultancy and related activities	-2.5%	18.6%
Other professional, scientific and technical activities	-14.9%	9.9%
Legal, accounting and management consultancy activities	-3.9%	17.1%
Office administrative, office support and other business support activities	-9.0%	23.5%
Employment activities	3.0%	17.1%

Source: ELSTAT

According to the trends in the precursor activity indicators from the IOBE's economic situation surveys, in the whole of 2021 expectations improved significantly in all four sectors of Services examined, while the general index of the sector strengthened by 28.8 points, instead of a decline of 21.7 points in 2020.

Table 3.7  
Sector Indices of Business Sentiment in Services (1998-2006=100)

	2019	2020	2021	Change % 20-'19	Change % 21-'20
Hotels – Restaurants – Travel Agencies	98.8	62.9	102.9	-36.3%	63.59%
Financial Intermediation	121.3	104.9	122.4	-13.5%	16.68%
Other Business Services	97.9	72	108.4	-26.5%	50.56%
Information Services	91.4	82.4	92.7	-9.8%	12.50%
Total Services	97.7	76	104.8	-22.2%	37.89%

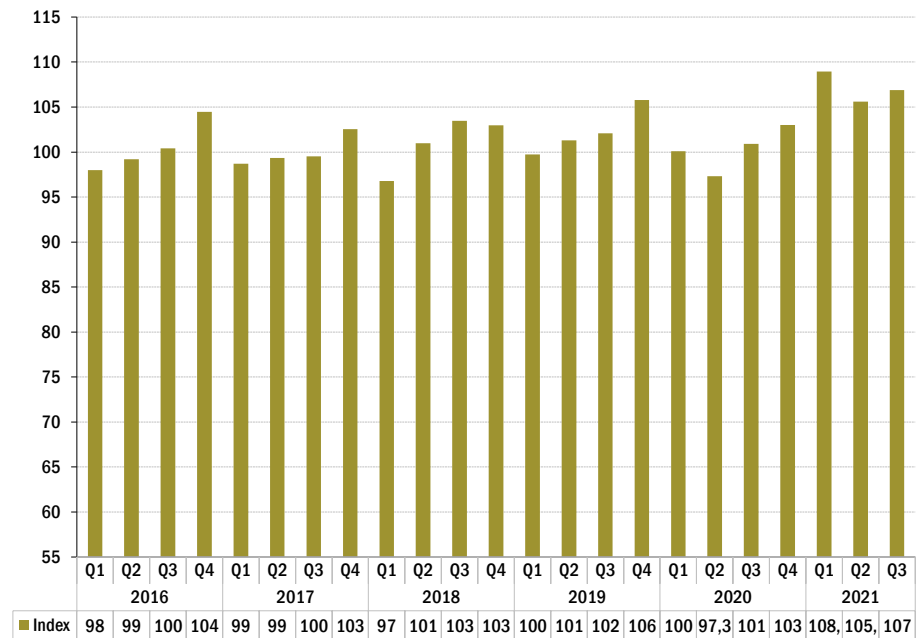
The relevant sectoral index improved mainly in Hotels – Restaurants (+40.0 points instead of -35.9 points in 2020) and services to Businesses (+36.4 points instead of -25.9). This



was followed by the services of Financial Institutions (+17.5 points instead of -16.4 points the year before last year) and IT services (+10.3 instead of -9.0 in 2020).

Figure 3.6

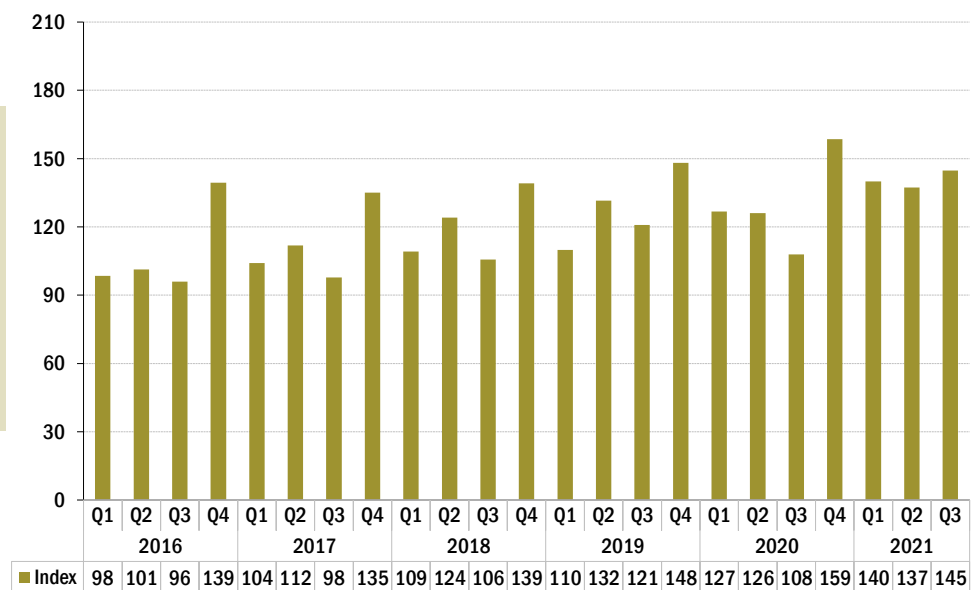
Turnover Index in Telecommunications (branch 61)



Telecommunications strengthened by 7.8% in the first nine months of 2021, against a 1.6% reduction in 2020

Figure 3.7

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

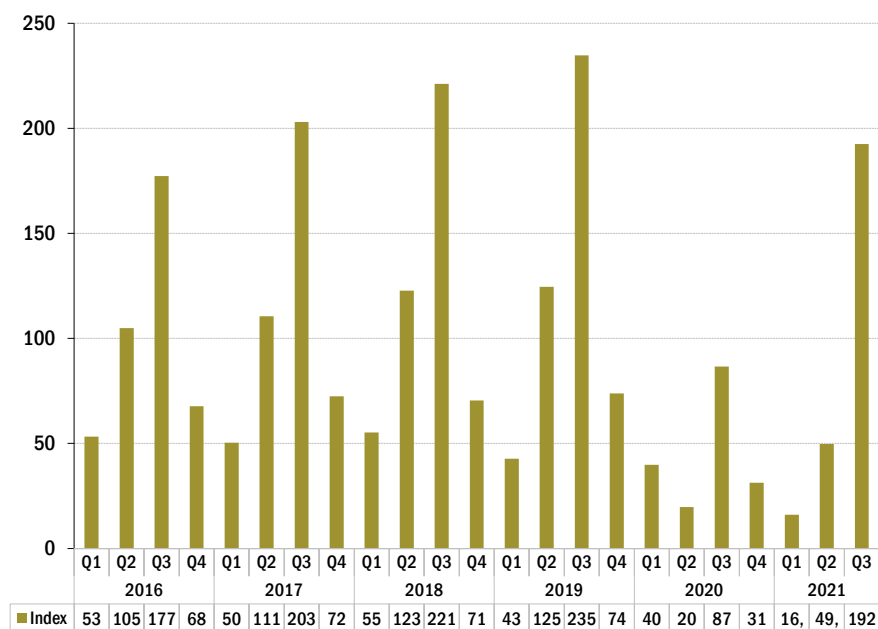


Turnover increase of 17.0% in IT services in the first nine months of 2021 against a decrease of 0.4% in 2020

Source: ELSTAT

Figure 3.8

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



Sharp growth in tourism. The third quarter was close to the 2017 level. 76.6% increase in the first nine months of 2021 over 2020.

Source: ELSTAT

### 3.3 Export Performance of the Greek Economy

- Increase of exports of goods in the first ten months of 2021, at a rate of 29.0%. Milder increase in exports excluding petroleum products (+18.6%)
- Higher trade deficit by 24.1% compared to 2020, at €18.9 billion.
- Among the product categories, the largest increase was recorded in fuel exports and raw materials.
- Increase in demand mainly from the countries of the Eurozone (+21.0% or +€2.3 billion), the Middle East & North Africa (+64.5% or €1.7 billion) and Asia (+32.3% or €557.8 million).
- 

Exports of goods stood at €32.4 billion in the ten months of 2021, compared to €25.1 billion in 2020, marking an increase of 29.0%. Excluding exports of petroleum products and ships, the remaining exports increased by 18.6%, to €23.3 billion, from €19.7 billion the year before. Imports showed an increase of 27.2% in the period January-October 2021 and stood at €51.3 billion, from €40.3 billion a year earlier. As a result of the above trends in the main components of the external balance, the trade deficit stood at €3.7 billion higher than the year before (+24.1%), to €18.9 billion, from €15.2 billion. Subsequently, the value of exports of products of the Greek economy in the ten months of 2021 represented 63.2% of its imports, while a year earlier it reached 62.3%.

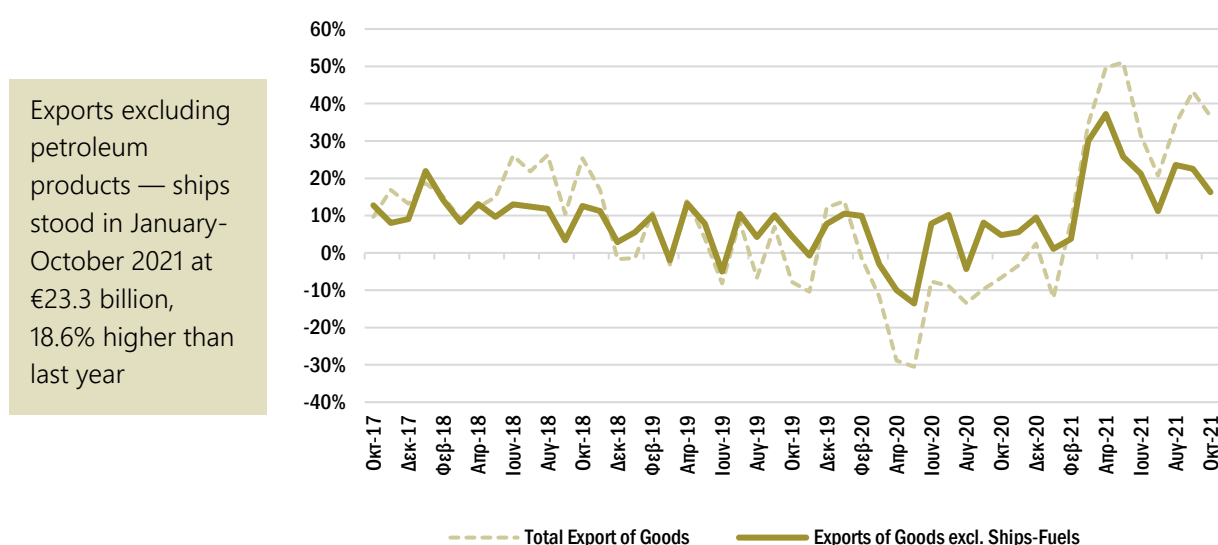
Analytically, exports of Agricultural Products increased by 12.4% in the ten months of January-October 2021, to €6.2 billion, from €5.5 billion in 2020, while Fuel exports increased the most, by 67.3%, resulting in €9.0 billion, from €5.4 billion in 2020. Exports of these two categories correspond in 2021 to 47.0% of domestic exports of products, up from 43.5% a year earlier. The increase in Agricultural Products came mainly from the



37.0% increase in demand for Oils or Fats of Animal or Plant Origin, the value of which amounted to €606.9 million, from €443.1 million in 2020, with resulting in an increase in their share of total exports from 1.8% in 2020 to 1.9% in 2021. In the Food-Livestock category, which represents approximately 77.7% of Agricultural Goods exports, exports increased by 9.7%, to €4.8 billion from €4.4 billion. In Beverages and tobacco products, which represent 12.5% of the exports of Agricultural Products, the demand in the ten months of 2021 amounted to €772.9 million, 14.4% higher than in 2020 (€675.4 million).

Figure 3.9

Total export activity and exports of goods except for fuels and ships (current prices, % change)



Source: ELSTAT. Data processing: IOBE

Exports of Industrial Products were enhanced in the ten months of January-October 2021 (+19.2%), with their value reaching €15.3 billion, from €12.9 billion. in 2020. This development was mainly due to the increase in exports for chemicals and related products, by 14.0%, resulting from €4.2 billion. to reach €4.7 billion. There was also an increase in international demand for Miscellaneous Industrial Items by 19.7%, with their value reaching €2.4 billion. Transport Machinery and Equipment also increased exports by 18.2% (to €3.1 billion from €2.6 billion), while at the same time, exports to Industrial Items Classified by Raw Material increased (+25.1%, to €5.1 billion).

Finally, exports of Raw Materials were boosted by 45.9%, to €1.4 billion, from €976.1 million. a year earlier, while exports of items and transactions not classified by categories also increased by 13.6%, from €278.0 million. in the ten months of 2020 at €429.5 million a year later.

In terms of product export trends by geographical area, they increased to the Eurozone countries by 21.0%, approaching €13.2 billion in the period January-October 2021, from €14.5 billion in the same period of 2020, as a result of which 54.3% of the exports of Greek products were directed to them last year. Towards the EU-27 there was an increase of 21.3% or €3.0 billion, with exports to this region reaching €17.6 billion, from €14.5 billion a year earlier. Among the Eurozone countries that absorb the largest share of Greek exports, there was a significant expansion to Germany, by 22.3%, from €2.0 billion to €2.4 billion, and then to France, by 12.6%, from €1.4 billion to €1.6 billion. Exports of goods to their most important destination, Italy, increased significantly by 20.3%, resulting in €3.2

million in the first ten months of 2021 from €2.7 billion in the corresponding period of 2020.

Among the rest of the European Union, to which total exports increased by 22.0% or €793.5 million, reaching €4.4 billion, Bulgaria continued to be the main export destination, with an increase in output to it in relation to 2020 by 18.1% or €234.0 million. Positive developments occurred in two other countries from this group, which absorb a significant share of Greek exports, Romania and Poland, where exports strengthened by 22.8% or €210.7 million (€1.1 billion), and by 26.3% or €126.9 million (€609.7 million) respectively.

Table 3.8

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

Product	Value		% Change	% Share	
	2021	2020	21/20	2021	2020
AGRICULTURAL PRODUCTS	6,200.7	5,514.6	12.4%	19.1%	22.0%
Food and Live Animals	4,820.9	4,396.1	9.7%	14.9%	17.5%
Beverages and Tobacco	772.9	675.4	14.4%	2.4%	2.7%
Animal and vegetable oils and fats	606.9	443.1	37.0%	1.9%	1.8%
RAW MATERIALS	1,423.7	976.1	45.9%	4.4%	3.9%
Non-edible Raw Materials excluding Fuels	1,423.7	976.1	45.9%	4.4%	3.9%
FUELS	9,036.9	5,402.1	67.3%	27.9%	21.5%
Mineral fuels, lubricants, etc	9,036.9	5,402.1	67.3%	27.9%	21.5%
INDUSTRIAL PRODUCTS	15,308.1	12,838.5	19.2%	47.2%	51.1%
Chemicals and Related Products	4,734.2	4,153.7	14.0%	14.6%	16.5%
Manufactured goods classified chiefly by raw material	5,083.3	4,065.0	25.1%	15.7%	16.2%
Machinery and transport equipment	3,098.1	2,621.3	18.2%	9.6%	10.4%
Miscellaneous manufactured articles	2,392.5	1,998.5	19.7%	7.4%	8.0%
Other and transactions not classified by category	429.5	378.2	13.6%	1.3%	1.5%
TOTAL EXPORTS	32,398.8	25,109.4	29.0%	100.0%	100.0%

\* Provisional Data

Source: Eurostat

The rest of Europe recorded an increase in demand for Greek exports by 29.6%, from €4.2 billion in 2020 to €5.5 billion in 2021. This was manifested primarily to Turkey, by 44.7%, from €1.1 billion. to €1.58 billion, and secondarily to the United Kingdom, by 6.2%, resulting in exports increasing from €975.4 million. in the period January – October 2020 at €1.0 billion in the same period of 2021.

Exports to North American countries rose sharply, by 36.1%, from €1.2 billion in 2020 to €1.6 billion a year later, mainly due to an increase in exports to the US by 43, 4%, from €934.6 million the year before to €1.3 billion in 2021, and to Canada by 25.0% or 25.0 million. On the contrary, exports to Mexico declined (-2, 9%).

Exports to the Middle East and North Africa rose sharply, by 64.5%, to €4.3 billion from €2.6 billion, mainly due to increased exports to Libya (+75.2% ), where exports in the first ten months of 2021 amounted to €816.6 million, compared to €466.0 million a year earlier, but also to Lebanon (+78.7%), where they increased by €425.4 million in 2021 compared to 2020. Also, to a major export destination in the Middle East, Tunisia, exports increased by 188.6% to €415.5 million, while to the United Arab Emirates increased by 38.9% to €253.6 million. Exports to Saudi Arabia increased by 111.6% to €507.0 million.

The flow of Greek exports to Oceania increased by 9.9%, with their value in the period January-October 2021 reaching €199.5 million from €181.4 million a year earlier. The rise was due to a similar trend towards Australia, to which exports increased at a rate of 6.4%



and amounted to €175.3 million last year. Similarly, there was an increase towards New Zealand (+44.4%).

In the first ten months of 2021, exports to the markets of the Central-Latin American countries showed a strong increase of 49.0%, with their value amounting to €253.4 million from €170.1 million in corresponding period in 2020. The increase in exports to the countries of this region is mainly due to the vertical increase in demand for Greek products from Brazil, by 207.9%, which set their value at €64.3 million from €20.9 million a year earlier. Exports to Panama also increased (+29.7% or 25.1 million).

Table 3.9

Exports by destination, January -December 2021 (million €)\*

ECONOMIC UNIONS – GEOGRAPHIC REGION	EXPORTS		% CHANGE 21/20
	2021	2020	
EU (27)	17,584.5	14,498.4	21.3%
Euro Area	13,186.6	10,893.9	21.0%
North America	1,611.0	1,183.6	36.1%
BRICS	1,002.3	934.1	7.3%
Middle East & North Africa	4,310.8	2,620.6	64.5%
Oceania	199.5	181.4	9.9%
Central-Latin America	253.4	170.1	49.0%
Asia	2,282.3	1,724.5	32.3%

\* Provisional Data

Source: Eurostat

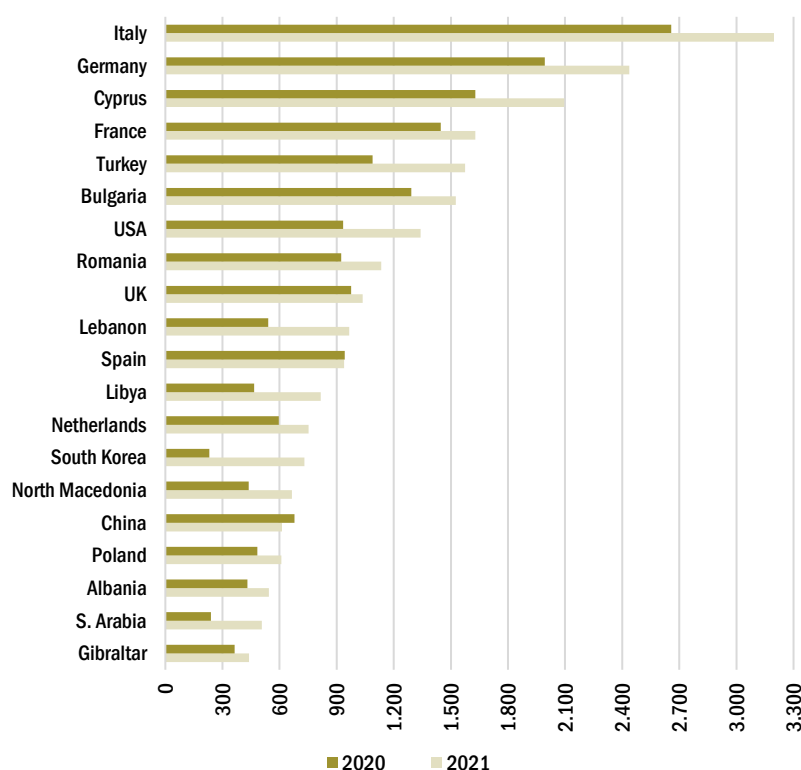
International demand for Greek goods also increased in the Asian countries, to which exports increased by 32.3% in 2021, to €2.3 billion from €1.7 billion in 2020. This development is mainly due to the vertical increase, by 215.8%, towards South Korea, from €231.5 million in the first ten months of 2020 to €731.0 million in the corresponding period of 2021, as well as by 207, 8% to Singapore, from €81.1 million the year before to €249.6 million a year later. On the contrary, there was a decline in demand from China (-9.6%, to €612.9 million from €677.9 million in 2020) and Japan (-36.2%, to €198.8 million from €311.8 million in 2020).

To sum up, Greece's exports of products recorded a significant increase in the ten months of 2021 by 29.0% compared to the same period in 2020. This increase is mainly due to the exports of petroleum products, which recorded an increase of 67.3%, due to the strong rise in their prices in this period. But it also came from the increased demand for products from all other categories of goods. Excluding petroleum products, exports expanded by 18.5%. At the same time as Greek exports increased, there was a fairly strong increase in imports, resulting in a further widening of the trade deficit to €18.9 billion (+24,1%). Regardless of the problems posed to the global economy by the strong rise in the prices of energy goods, its continuation will be the main cause of the large expansion of exports of goods in the last months of 2021, but also at the beginning of this year.



Figure 3.10

Countries with the largest share in the exports of Greek goods, January - October 2021 (million €)



The highest increase in exports of products in the ten months of 2021 in absolute terms to Italy (+€539.2 million). The largest fall towards Japan (-€112.9 million). Italy's share of exports remains the largest.

Source: Eurostat. Data processing: IOBE

## 3.4 Employment – Unemployment

- Reduction of the unemployment rate to 13.0% in the third quarter of 2021 from 16.2% in the third quarter of 2020, as a result of the strong rise in employment (+191.5 thousand people), which significantly reduced the inactive population (-65,600 people).
- Employees exceeded the 4.0 million mark for the first time since the third quarter of 2011.
- The non-seasonally adjusted unemployment rate was reduced in October 2021 to 13.2% from 15.8% in October 2020.
- Highest increase in employment in Tourism (+49.1 thousand people), in the Primary sector (+39.1 thousand), Public Administration (+37.5 thousand), Manufacturing (+31.3 thousand) and Professional, scientific, technical activities (+25.1 thousand people).
- Largest decrease in employment in Education (-12.2 thousand people), Financial and insurance activities (-7.5 thousand people) and Wholesale-Retail trade (-6.0 thousand people).
- Rise of seasonally adjusted wage cost index in the third quarter of 2021 by 1.2% compared to the third quarter 2020.

According to the Labour Force Survey of ELSTAT, the unemployment rate in the third quarter of 2021 fell to 13.0% from 16.2% in the corresponding quarter of 2020, showing a decrease of 3.2 percentage points. Respectively, the number of unemployed decreased by 18.6% or 141.0 thousand people, to 615.4 thousand from 756.4 thousand a year



earlier, while the number of employed increased to 4,118.3 thousand. from 3,926.8 thousand, showing an increase of 4.9%. It is noted that the number of employees exceeded the limit of 4.0 million for the first time since the third quarter of 2011. The decrease in the unemployment rate came from the strong rise in employment (+191.5 thousand people), which significantly reduced the inactive population (-65.6 thousand people). According to the latest data, in October 2021 the non-seasonally adjusted unemployment rate was reduced compared to October 2020 by 2.6 percentage points and stood at 13.2%.

Regarding the evolution of unemployment in the Eurozone in the third quarter. 2021, in all countries - except Belgium which remains unchanged (6.5%) - shows a decrease compared to the third quarter of 2020. The highest unemployment rate is in Spain where it stood at 14.6% from 16.3% a year earlier. It is noted that Spain surpasses Greece in the unemployment rate for the first time since the second quarter of 2012. The strongest reduction in unemployment in the third quarter. of 2021 is located in Greece where it reached 3.2 percentage points, followed by a decrease (by 2.6 percentage points) in the unemployment rate in Lithuania, which was reduced to 6.7% and in Luxembourg (by 2.4 percentage points) where dropped to 5.5%. The lowest unemployment rate was recorded in the third quarter. 2021 in Germany, where it stood at 3.2%, from 4.1% a year earlier, followed by similar percentages in Malta with 3.6% (from 4.9%) and the Netherlands with 3.7% (from 4.3%). In the other major eurozone economies France and Italy, the unemployment rate fell to 7.9% (from 8.9%) and 8.9% (from 10.0%), respectively. In the Eurozone as a whole, unemployment fell by 1.1 percentage points, to 7.4% in the third quarter 2021 from 8.5% in the third quarter of 2020.

Regarding the evolution of gender-based unemployment in Greece, it showed a decrease in both men and women, with the rate of the former being much lower compared to the unemployment rate of the latter. Analytically, the unemployment rate for men was reduced by 3.5 percentage points to 9.6% in the third quarter 2021 from 13.1% in the third quarter 2020, while the unemployment rate for women fell to 17.2% from 20.5%. As a result, the difference in the unemployment rate between men and women widened from 7.4 percentage points in the third quarter. of 2020 at 7.6 percentage points in the third quarter of 2021. At euro area level, both men and women have fallen, while that of men has fallen below that of women. In the former the unemployment rate fell from 8.1% to 6.9% and in the latter from 9.0% to 7.9%.

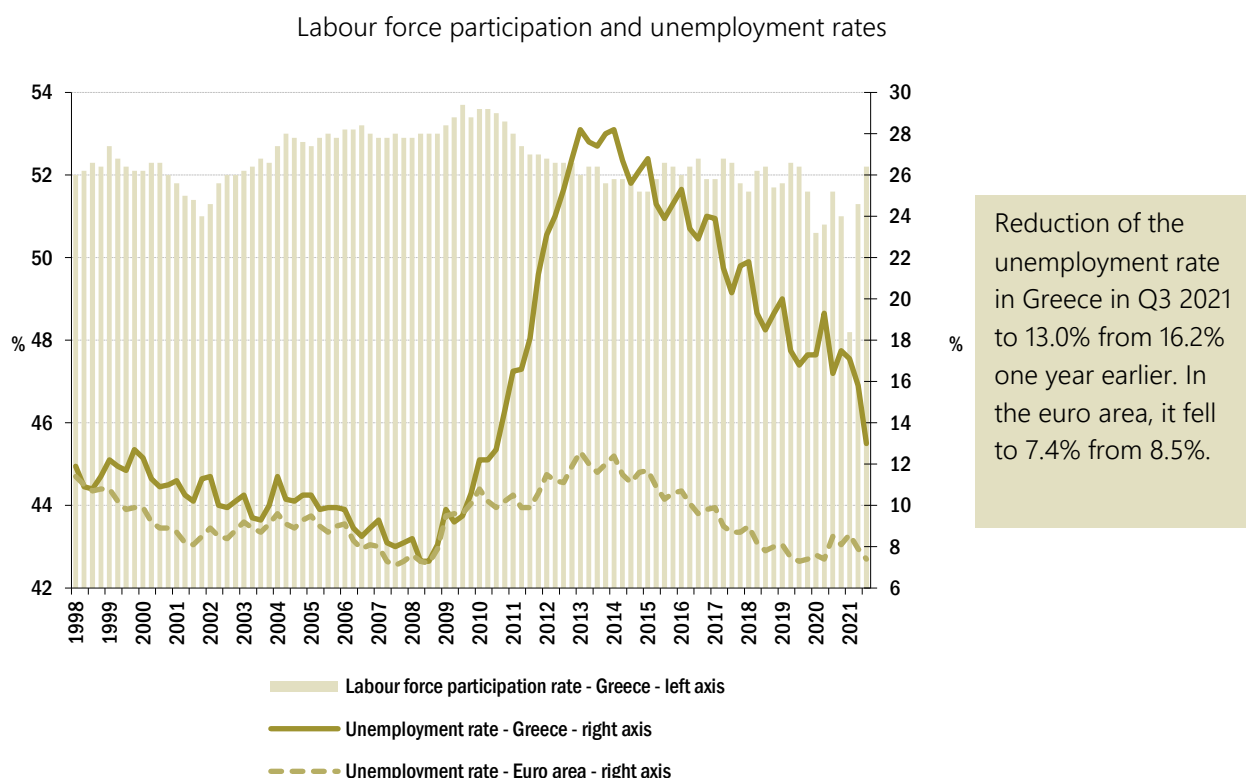
As for the evolution of the unemployment rate based on age, it is smaller as age increases. The third quarter of 2021 in all age categories there was a decline in the unemployment rate, with the highest being among people aged 20-24 years where it stood at 4.9 percentage points, as it was limited to 28.5% from 33.4% in the third quarter of 2020. Next are the unemployment rate for people aged 25-29, with 4.4 percentage points (from 26.7% to 22.3%) and the unemployment rate for people aged 15-19 (3.5 percentage points). The last age group has the highest percentage in the third quarter 2021, as this stood at 36.5% from 40.0% a year earlier. On the other hand, the lowest unemployment rate and its milder decline occurred in the over-65 age group, where it fell to 5.8% from 8.6%. The same decline occurs in the unemployment rate of people aged 30-44 years where it was 13.2% in the third quarter 2021 from 16.0% in the third quarter last year. Finally, during the same period in the 45-64 age group, the unemployment rate fell to 9.5% from 12.4%.

In terms of the duration of unemployment, the percentage of the long-term unemployed increased by 3.4 percentage points, to 66.4% in the third quarter 2021 from 63.0% in the third quarter of 2020. During the same period, the number of long-term unemployed

decreased by 12.8% or 61.0 thousand people and amounted to 415.4 thousand out of 476.4 thousand.

As for the trend of unemployment based on the level of education, the higher the level of education decreases over time. The lowest unemployment rate in the third quarter. 2021 was found again in people with a master's or doctoral degree, where it dropped to 7.9% from 10.2% a year earlier. At the same time, those with a degree in higher technical vocational education showed the largest drop in the unemployment rate, by 4.5 percentage points, as it dropped to 11.9%, while those with a degree in higher education was reduced to 12.7% from 13, 5%. The decrease of the unemployment rate (4.0 percentage points) in the people with a primary school diploma was strong as it was 13.3% from 17.3%. On the other hand, the highest unemployment rate, but also the only category of education where it is on the rise, are found in people who attended some elementary school or did not go to school at all, as it increased by 5.0 percentage points to 37.6% in the third quarter of 2021 from 32.6% in the third quarter of 2020. The unemployment rate fell similarly for people with a high school diploma (-3.5 percentage points, from 17.8% to 14.3%) and for people with a high school diploma (-3.4 percentage points, from 17, 7% to 14.3%).

Figure 3.11



Sources: ELSTAT – Labour Force Survey, Eurostat

In relation to the regional dimension of unemployment, in all regions except the South Aegean region, it has decreased. In the third quarter 2021, the highest unemployment rate was spotted in the region of Western Macedonia, where it fell to 19.8% from 20.7%, while the strongest decrease, by 7.2 percentage points, in the region of North Aegean, where it fell to 9.2% . The unemployment rate in the regions of Eastern Macedonia-Thrace and Western Greece was similar. In the first, the unemployment rate was reduced to 17.5%



from 18.7% and in the second to 17.4% from 22.2%. The Ionian Islands region has the lowest unemployment rate in the third quarter 2021 and its second strongest decline, as it fell by 6.9 percentage points, to 7.6%. The reduction of the unemployment rate in the regions of Central Greece and Crete was slightly smaller. In the first, the unemployment rate was reduced by 5.9 percentage points, falling to the third quarter of 2021 at 13.1%, and in the second by 5.7 percentage points, at 10.3%. In the country's most populous region, Attica, the unemployment rate fell from 14.1% to 11.2%, while in the South Aegean, unemployment rose slightly from 9.1% to 10.1%.

As for the development of employment based on the position in the profession, in all categories there is an increase. In absolute numbers, the largest increase in employment in the third quarter 2021 is located among the employees, where it increased by 135.9 thousand people or by 5.0%, while it is followed by the increase of employment among the self-employed, by 48.0 thousand people or by 4.3%. In the category of assistants in the family business, employment increased by 6.4% or by 7.6 thousand people (from 118.9 thousand to 126.5 thousand).

Regarding the evolution of employment in the various professional categories, the third quarter 2021, the largest increase in absolute size is found in Persons practicing scientific, artistic and related professions, where the number of employees increased by 50.1 thousand people or by 6.5%, reaching 820.0 thousand out of 769,9 thousand, followed by the Specialized farmers, stockbreeders, foresters and fishermen (+42.3 thousand or 11.5%, at 410.5 thousand) and the Specialized craftsmen and practicing related technical professions (+30.7 thousand or +8.7%, at 384.5 thousand). On the other hand, the only occupational category that shows a decrease in employment is Technologists, technical assistants and practicing related professions where employment was reduced by 15.1 thousand people or by 4.5% to 323.8 thousand.

Regarding the employment status, the number of part-time employees increased in the third quarter of 2021 compared to the same period of 2020 by 4.7% or by 15.1 thousand people, at 335.3 thousand. Similarly, the number of full-time employees increased by 4.9% or by 176.4 thousand people, reaching 3,783.0 thousand from 3,606.6 thousand a year earlier. It is noted that the percentage of fully employed from 91.8% in the third quarter of 2020 amounted to marginally 91.9% in the third quarter of 2021, with a corresponding reduction in the percentage of part-time employees from 8.2% to 8.1%.

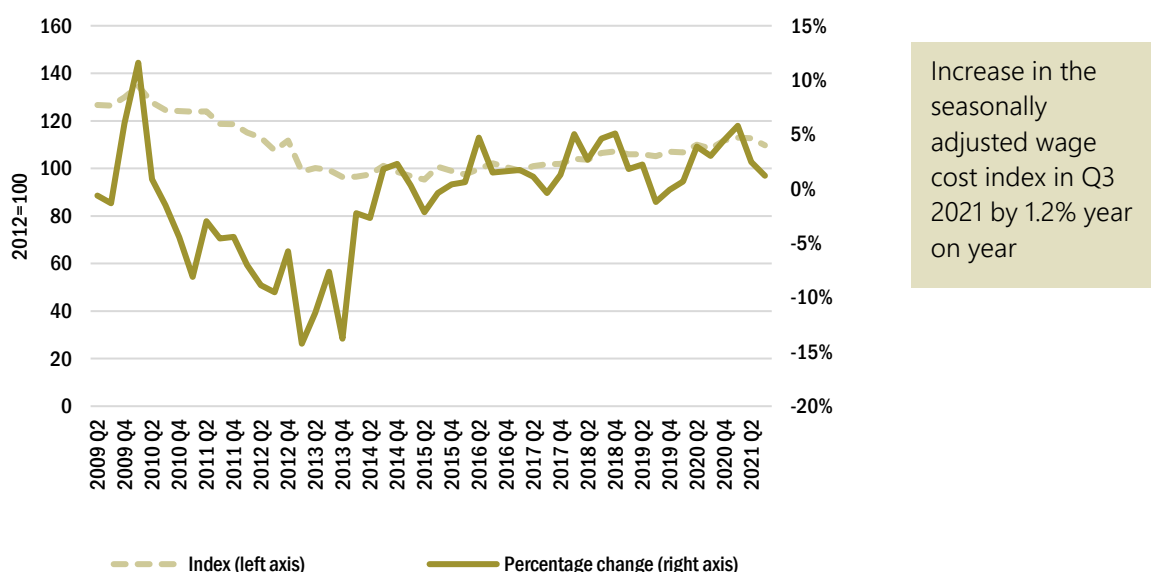
In terms of the employment trend at the level of key sectors, it is on the rise for everyone. The largest is located in the tertiary sector where the third trimester was strengthened. of 2021 compared to the same period of 2020 by 111.0 thousand people or by 3.8%, reaching 3,050.5 thousand. In the other two sectors the increase in employment was similar to each other, as in the primary it was 39.1 thousand (from 402.9 thousand to 442.0 thousand employees) and in the secondary to 39.7 thousand (from 584.5 thousand to 624.2 thousand employees).

In terms of sectors of economic activity, 13 recorded an increase in employment in the third quarter of 2021 and an eight-downfall. The strongest increase was in the accommodation and catering services sector, where the number of employees increased by 49.1 thousand people or by 12.4% (from 396.0 thousand employees in the third quarter of 2020 to 445,1 thousand in the third quarter of 2021). Next is the increase of employment in the Primary sector by 39.1 thousand people or by 9.7% (from 402.9 thousand to 442.0 thousand) and in the sector of Public Administration and Defence by 37.5 thousand employees or by 10.5% (from 358.0 thousand to 395.5 thousand). There was a strong increase in employment in manufacturing and in the professional, scientific and technical activities sector. In the first, employment was boosted by 8.4% or 31.3 thousand employed (at 404.4 thousand from 373.1 thousand) while in the second by

10.8% or by 25.1 thousand people (at 256.6 thousand from 231.5 thousand). On the other hand, the strongest decrease in employment is found in the Education sector where it was reduced by 12.2 thousand employees or by 4.0% (from 304.3 thousand in the third quarter of 2020 to 292.1 thousand in third quarter of 2021) and is followed by the fall of employment in the Financial and insurance activities sector where it was formed at 7.5 thousand employees (or 8.5%, from 87.8 thousand to 80.3 thousand) and its reduction in the most populous sector of the Greek economy, the Wholesale-Retail trade where employment was reduced by 6.0 thousand people or by 0.8% (to 715.2 thousand from 721.2 thousand).

Figure 3.12

Seasonally adjusted wage cost index and percentage point change



In conclusion, from the employment data at sectoral level, it appears that its rise in the third quarter of 2021 compared to the same period last year came mainly from its rise in the following sectors:

- Tourism (+49.1 thousand employees), in relation to the more than doubling of international tourist arrivals at the main airports of the country in the third quarter. of 2021 compared to the third quarter. 2020 (from 3.88 million to 8.2 million) and the increase in tourism revenues in the same period from €2.93 billion to €7.56 billion (+€4.63 billion or +158.3%)
- Primary sector (+39.1 thousand employed)),
- Public administration (+37.5 thousand employees), reflecting emergencies due to the pandemic
- Manufacturing (+31.3 thousand employees), in relation to the rise of the seasonally adjusted index of industrial production in the third quarter of 2021 by 9.2% (from 106.3 points to 116.0 points),
- Professional, scientific, technical activities (+25.1 employees), despite its decline in Education (-12.2 thousand employees).

Regarding the trend of the seasonally adjusted wage cost index for the Greek economy as a whole, it showed an increase for the seventh consecutive quarter, since the third quarter.



2021 was up 1.2% compared to the same quarter the year before last year, from 108.4 points to 109.7 points.

Table 3.10

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

Source: ELSTAT, Labour Force Survey

### Medium-term outlook

The last quarter of 2021 was marked by a major new outbreak of the pandemic. This was particularly pronounced towards the end of the year, due to the rapid spread of a new mutation of the SARS-CoV-2 virus ("Omicron"). Despite the unprecedented number of cases due to it, the rest of the epidemiological data have not deteriorated significantly, at least so far. These tendencies are related to the milder pathogenetic characteristics of this particular mutation. But also with the steady progress in the vaccination process, as by mid-January about 70% of the country's population over 5 years of age had been fully vaccinated. For these reasons, it is considered that, for the time being, strong and "horizontal" measures have not been taken to protect public health (e.g. restriction of movements, suspension of retail trade, catering, tourism, etc.). However, restrictions on unvaccinated people have been stepped up since mid-November (e.g. demonstration of a molecular or rapid test for more activities, a ban on entering entertainment, entertainment, culture venues), as well as at the end of the year, following the "wave" of the new mutation (mandatory use of masks in all indoor and outdoor areas, restrictions on dining and entertainment; demonstration of molecular or rapid test for all incoming visitors to Greece, etc.). Consequently, the smooth operation of the economy during the summer season continued to a very large extent during the last quarter of the year, with targeted restrictions, which mainly concern social groups vulnerable to the coronavirus. In any case, the evolution of the pandemic is expected to be among the most decisive factors of employment and unemployment in 2022 as well.

As has been mentioned in the previous bulletins of the IOBE, the trend in unemployment in the medium term will depend on the effects of the health crisis beyond the borders, especially in the Eurozone, a region that is the most important export destination for Greek products. According to the latest forecasts of the IMF and the European Commission, growth in the euro area in 2021 will reach the level of 5.0%, while for all European Union countries a similar pace is expected.



Over time, the trend of unemployment is significantly related to the activity in the tourism sector. With data for the nine months of 2021, international tourist arrivals showed an increase of 94.2% (from 6.17 million to 11.98 million tourists) and the corresponding revenues by 139.1% (to €8.75 billion from €3.66 billion). On the other hand, these figures lag significantly behind 2019, by 16.8 million tourists or by 58.4% and by €7.36 billion or by 45.7% respectively. However, these lags are smaller than previously expected in 2021. As far as 2022 is concerned, the dynamics of the pandemic will also be a decisive factor for the activity in the tourism sector, as will be analysed later in this subsection.

In the second half of 2021, the gradual rise in inflation began, rising from 1% in June to 5.1% in December, largely as a result of the strong rise in energy prices. At least in the ten months of 2021 there do not appear to have been any effects on household consumption, as the seasonally adjusted turnover index in Retail Trade was increased by 9.2% compared to the corresponding period the year before last year and the seasonally adjusted turnover in Wholesale Trade was significantly increased in the nine-month period compared to the corresponding period of 2020 by 16.6%. The rise remained strong in the most recent period for which there is data, with the turnover in Retail Trade amounting to the third quarter by 11.1% and in Wholesale Trade by 22.0%, compared to the third quarter, 2020). The strong growth has already been reflected in the employment of the sectors, a trend that is likely to continue in the last months of 2021. The effects of the sharp escalation of inflation in the two months November-December on the employment of the two sectors, as well as the agri-food sector, which also shows a strong rise in prices, are expected to manifest after the end of the festive period of Christmas, in the new year.

The increase of productive investments in 2021, mainly in export sectors of industry, tourism and housing construction, a trend that is expected to continue and escalate at least in the initial half of 2022, combined with investments in integrated significant privatizations (Hellinikon) and recovery fund projects, significantly stimulate job creation, especially this year. These developments are considered to be largely independent of pandemic fluctuations, so the majority of the jobs they create will not be affected by them. Regarding the resources of the Recovery Fund and their impact on employment through investment activity, although €4.0 billion was disbursed in August 2021, and 109 projects with a total budget of €6.11 billion had been included in it by the end of the year, no support disbursements had been made. On the other hand, there is room to support a large number of investment assets this year.

As regards the individual employment trends in 2022, the baseline macroeconomic developments scenario foresees that no generalised restrictive measures will be imposed, but that other targeted measures may be taken or the current ones will be further escalated. Under these circumstances, most businesses in the Retail and Tourism sectors are expected to operate without significant obstacles. Existing as well as possible more additional restrictions on Dining and Entertainment-Entertainment will put pressure on their jobs, but smaller than those of most restrictions a year earlier. In the alternative scenario of macroeconomic developments, some important restrictive measures are likely to be imposed, with a clear objective rather than a general one, due to a strong deterioration of all epidemiological data. For example, these may concern retail, vulnerable groups, certain areas. However, a new, general lockdown will be avoided, thanks to vaccination, the use of rapid tests.

Consumer demand, which in turn affects employment in the relevant sectors, is expected in the baseline forecast scenario this year to be affected by the new, but not strong, rise in prices. The negative effects on consumption will be mitigated by the measures taken to contain inflationary pressures (e.g. discounts on electricity and gas bills), as well as the gradual weakening of the rise in energy product prices internationally this year, without however expecting them to return to pre-crisis levels. The expected increase of the



minimum wage will also contribute to the maintenance of part of the purchasing demand for sections of the population, depending on the change of the minimum wage. The alternative scenario is expected to weaken inflationary pressures faster, notably from a slowdown in the global recovery.

The effect of the change in the minimum wage will not only be indirect on employment, through consumer demand, but also a direct. However, it is too early to predict and its effects will depend on the extent of its change. In anticipation of this development and as opinions are heard in the public debate on a significant increase, some companies will postpone part of their decisions regarding the number of their workforce, especially those belonging to sectors with a high proportion of unskilled labour force.

Regarding the developments in tourism for 2022, the basic scenario envisages a further significant expansion of revenues, in the area of 80-90% of 2019, with a corresponding, strong positive impact on employment. It is noted that in the two months September-October 2021 the reservations for the summer of 2022 were at higher levels from 2018 and 2019. In November there was a waiting period in the reservations, due to the negative climate created by the spread and prevalence of the "Omicron" mutation, however no cancellations were made. Enhancement of international tourism and employment in the sector is also foreseen in the case of the alternative scenario, since it is not expected to be suspended, nor to travel from abroad, but travel restrictions will probably be imposed based on the epidemiological data of each country. As a result, in any case, the tourist season is expected to be extended compared to 2021, because it will start earlier than May. In the alternative scenario, tourist receipts will reach milder, to 70-75% of their level in 2019.

With regard to the trend of economic activity in the euro area in 2022, the baseline macroeconomic scenario assumes that its recovery will continue at a pace close to recent forecasts (4.3%-4.4% according to the European Commission's forecasts<sup>19</sup> and the IMF<sup>20</sup>), however slower pace than in 2021. Therefore, the significant boost from exports to employment will continue. In the alternative scenario, GDP growth in the Eurozone is expected to slow down slightly, in the region of 3.0-3.5%, mainly due to the effects of the pandemic and, respectively, the increase in demand for Greek exports.

In addition to the above, the public sector will act as a stimulus to domestic employment in 2022, primarily through OAED's temporary employment programs. Regarding these, the applications of those interested for inclusion in the new community service program, which concerns 25,000 positions in municipalities, regions and other public bodies, are expected to be submitted within February of this year. In addition, there are plans for 12.2 thousand recruitments to fill regular staff positions in the State, while about 3.8 thousand additional recruitments of regular staff will be made in the Ministries of National Defence, Environment and Energy, Climate Crisis and Civil Protection, in the National School of Public Administration and Local Government in both OSY and STASY.

On the other hand, interventions to support employment in sectors affected by the pandemic (e.g. special purpose compensation, suspension of payment of social security contributions) are expected to be much more targeted in terms of the activities they will concern, thus having a much smaller impact on the preservation of jobs. However, the SYN-ERGASIA program was extended until March of the new year, while the program to cover 100% of social security contributions for six months was expanded by 50,000 places at the beginning of 2022.

Taking into account the above effects on the labour market, the estimate for the unemployment rate in 2021 is revised for the better in the range of 14.9%. As far as 2022

<sup>19</sup> European Commission "Economic Forecast – Autumn 2021"

<sup>20</sup> IMF "World Economic Outlook – October 2021"

is concerned, in the baseline scenario the unemployment rate is expected to be in the region of 13.5%, while in the alternative scenario in the range of 14%.

According to the latest data of the IOBE Consumer and Business Surveys, in the quarter October-December 2021 in relation to the third quarter of the year, there is an improvement in the forecasts for the short-term employment prospects in all sectors except Construction, while in Retail trade forecasts strengthened significantly. Compared to the same period of 2020, there was a significant increase in Construction and Services, while the improvement in Industry and Retail was milder. Analytically:

In Industry, the average balance of the previous quarter from +9 points in the third quarter of 2021, strengthened slightly and stood at +11 points. Compared to the corresponding performance last year, the average quarterly index is about 11 points higher. In the current quarter, the percentage of industrial enterprises that predicts a fall in their employment in the coming period strengthened to 8%, from 4% in the previous quarter, while at the same time the percentage of those who expect an increase in the number of their jobs improves to 19% (from 13%). However, the vast majority of companies in the sector (72%) predict stability in terms of employment.

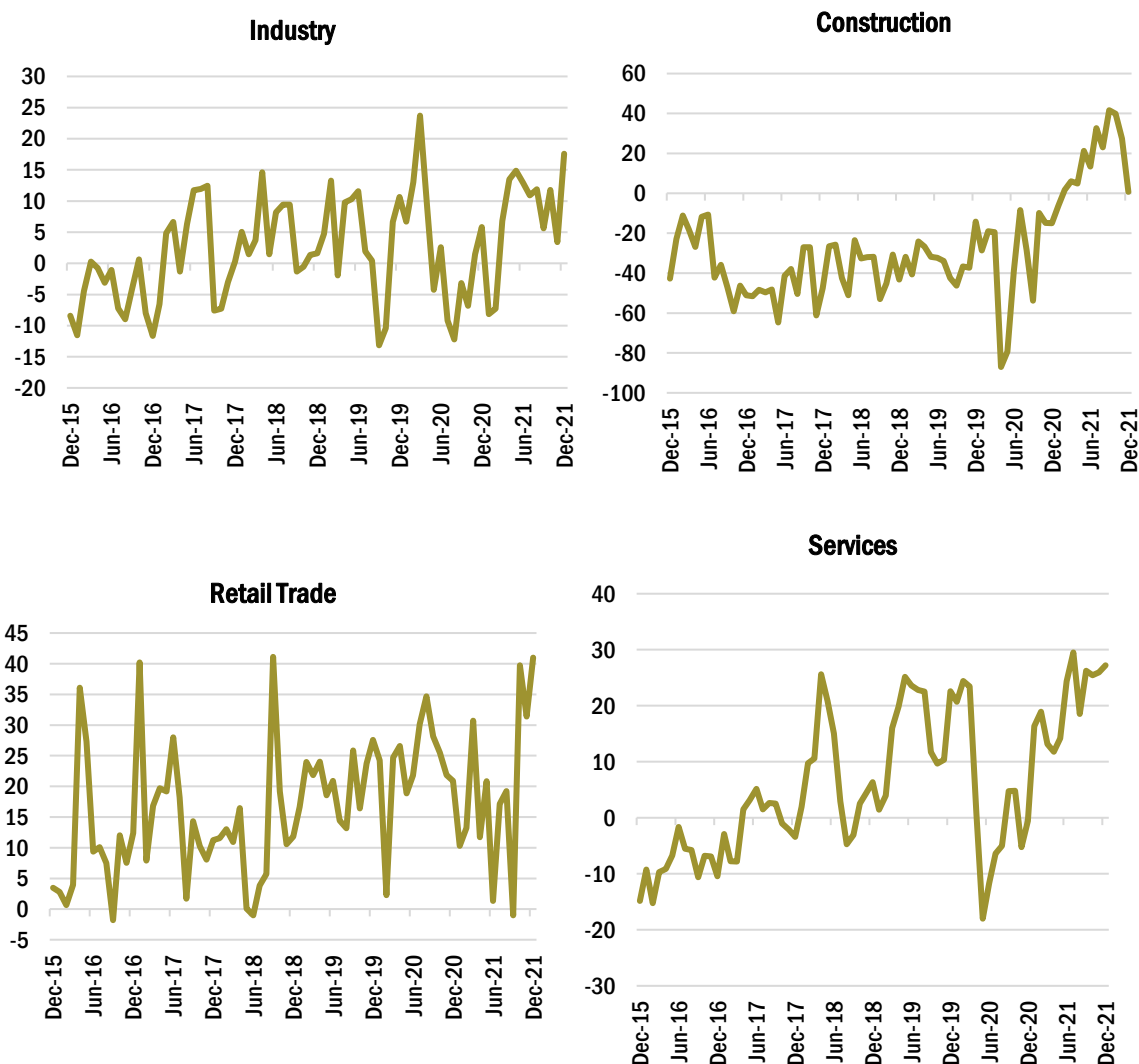
In Construction, the relevant forecasts suggest a slight decline in the balance of employment of the sector, which weakened mildly and from +32 points stood at +23 points, at a much higher level however compared to the same period of 2020 (+36 points). In the quarter under review, 19% (out of only 8%) of companies in the sector predict fewer jobs, while 42% (from 41%) of respondents expect employment growth are maintained at 42% (from 41%). At the level of individual sectors, the marked improvement of the relative index in public works (+34 from +16 units) contrasts with the sharp decline of the index in Private Construction (+5 from +47 points).

The index of the forecasts for employment in retail trade strengthened significantly in the fourth quarter of this year compared to the previous quarter, at +37 points (from +12), a performance significantly higher than the corresponding last year (+15 points). Only 2% of businesses in the sector expect jobs to fall, while 39% (from 14%) predict employment growth, with those expecting stability at 59% (from 83%) of the total. In the individual sectors examined, there is a significant increase in the relative balance in the Food - Beverage sector and department stores, while the improvement in the other sectors is milder.

In services, the relevant forecasts in the quarter under review indicate a marginal improvement compared to the previous quarter, and much larger than in the corresponding period of last year. Thus, the relative balance of the fourth quarter of 2021, strengthened by 1 point to +26 points in the examined quarter, while compared to the corresponding period of 2020 it improved by 27 points. Of the sector's businesses, 9% (up from 4% in the previous quarter) expect employment to decline, with the percentage of those forecasting an increase of 35% (from 29% in the previous quarter). At the sectoral level, the trend is strongly upwards in the IT sector, milder in hotels-restaurants and financial intermediaries, while it is mildly declining in various business activities and land transport.

Figure 3.13

Employment expectations (difference between positive and negative responses)



Source: IOBE

During the quarter of October-December 2021, compared to the previous quarter, an improvement was recorded in the forecasts for the short-term prospects of employment in all sectors except Construction, while in Retail the forecasts were significantly strengthened.

## Box 3.2:

## Employment trends during the pandemic

The health crisis caused by the emergence and spread of the SARS-CoV-2 virus continued last year for the second year. Following the suspension of industries and activities in the first quarter of 2021, which were phased out in the following year, health developments were mostly characterized by the evolution of the vaccination process, the spread of the use of diagnostic tests (self-tests and rapid-tests), the appearance of the "Delta" mutation at the beginning of the third quarter and, since last December, the "Omicron" mutation. The second has a higher transmissibility compared to Delta, but milder pathogenetic characteristics, which result in a corresponding disease, on average. This is why the number of hospitalizations and deaths is slightly different between the two mutations, however it remains high in both. The growth rate of vaccinations, especially in the first half of last year and the widespread use of diagnostic tests have allowed the imposition of strong, "horizontal" measures to protect public health in businesses and households for a much shorter period of time than in 2020. Subsequently, it became possible for the Greek economy to operate with mild or no restrictions, for much longer than the year before. As a result of the above, there was a very strong recovery in the second (16.6%) and third quarters (13.4%), with the average GDP growth rate in the nine months of 2021 standing at 8.9%.

The purpose of the following analysis is to highlight the individual effects of the pandemic on employment domestically. This is a continuation of a similar analysis presented in a previous quarterly report (03/20), but covers a different period of time, longer (nine months 2021) compared to the previous time. The analysis will be carried out at the level of single-digit branches according to STAKOD-08. Qualitative changes in employment will also be investigated, e.g. in terms of its structure in part and in full, in terms of the position of those employed in the profession (self-employed with or without staff, employees, assistants in the family business).

Specifically, in the nine months of 2021, employment in the entire Greek economy increased marginally compared to the same period last year, by 0.3% or by 11.8 thousand employees, to 3,886.2 thousand. During the same period, the growth of the domestic turnover was much stronger, as it amounted to 16.8%, resulting in €233.4 billion (Figure 3.3.1). Compared to the corresponding period of 2019, employment in the nine months of 2021 was reduced by 0.7% or by 27.9 thousand people and the turnover was lower by 0.9% or by €2.15 billion. Therefore, while economic activity fluctuated sharply the year before and in 2021, changes in employment were small. The relative stability of employment is due to the measures to support it (suspension of employment contracts, special purpose compensation, coverage of social security contributions, SYN-ERGASIA program, etc.).

At the level of sectors, the largest absolute decline in employment in the nine months was recorded in the tourism sector, by 30.3 thousand employees (-8.7%), resulting in their number falling to 318.4 thousand, despite the strongest interval of the Greek economy increased its turnover by 54.6% to €8.12 billion.

The second largest absolute decrease in employment in the period under review occurred in Wholesale and Retail Trade, by 21.3 thousand people or 3.0%, with the number of employees being limited to 689.5 thousand. However, as in the Tourism sector, turnover increased significantly in the same period by 13.9% (+€11.8 billion), to €96.9 billion. There was a significant decrease in employment in Education, where the number of employees was reduced by 16.5 thousand (-5.1%) to 307.1 thousand, in contrast to its turnover increased by 14.2%, in €299.0 million. Next rank the Administrative-Support activities, with -9.5 thousand people (or -11.2%), to 76.0 thousand, although the turnover of the sector presented in the nine months of last year the second highest increase among the sectors of the economy, by 27.3%.

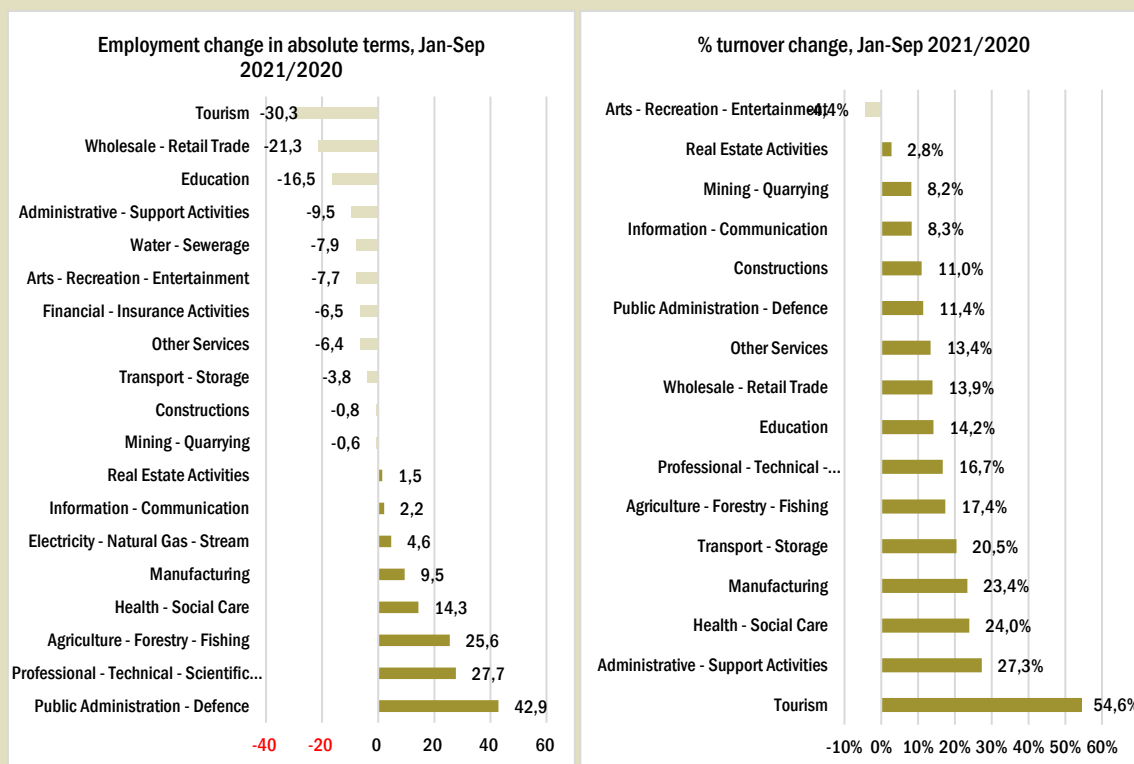
On the other hand, the sector with the largest increase in employment in the nine months last year was the Public Administration-Defense, by 42.9 thousand people (+12.5%), with the result that its employees amounted to 385.2 mm, with a turnover of 11.4%, reaching €332.5 million. Understandably, this trend is related to the emergencies created by the pandemic.



Professional-Scientific-Technical activities are followed by an increase in employment with 27.7 thousand people (+12.4%, at 250.9 thousand) and the Primary sector, where it stood at 443.4 thousand people (+25.6 thousand or +6.1%). At the same time, the turnover of the first sector increased by 16.7%, to €7.55 billion, while the turnover of the second sector increased by 17.4% (+€784.0 million), reaching €5.28 billion.

Figure 3.14

## Development of sectoral employment and turnover



Source: ELSTAT

Note: In the sectors of Electricity-Natural Gas-Steam, Water-Sewage Treatment and Financial-Insurance activities, ELSTAT has not published turnover data for the second and third quarters 2021 because it includes informal transactions. Therefore the data of the specific sectors for the period under consideration are not comparable.

Finally, in the Health and Social Welfare sector, employment increased by 14.3 thousand people or by 5.4%, to 281.8 thousand employees, with the expansion of its turnover being the third highest among the sectors, of 24.0% (+€349.0 million), to €1.81 billion. This dynamic is probably due to the increase in the number of recruitments in the field of health to deal with the health crisis but also to the increased public spending and individuals for medical services.

It is noted that the only sector with a drop in turnover in the nine months of 2021 was the Arts-Entertainment sector, where it reached 4.4% or €133.6 million, falling to €2.91 billion. Shrinkage is considered to be the result of the suspension of relevant activities for a long time or their operation with restrictions.

Employment in it was reduced by 7.7 thousand employees (-13.9%) and stood at 47.8 thousand.

The analysis that preceded the trends in sectoral employment and activity in the nine-month period of 2021, in relation to the nine-month period of 2020, does not show a clear correlation between them. It turns out that, regardless of the employment trend, in all sectors - except the Arts-Entertainment-Entertainment sector - turnover shows an increase. This result is considered to reflect mainly the preservation of several jobs in many sectors, due



to employment support measures (suspension of work with special purpose compensation, coverage of social security contributions, SYN-ERGASIA program).

Moving on to the analysis of trends in qualitative characteristics of employment, from the data of salaried employment flows published by the "ERGANI" system (Table 3.3.1), in the nine months of 2021 recruitments were on average increased by 12.2% (+192.2 thousand) compared to the same period of 2020, resulting in 1.77 million. out of 1.58 million. The increase in departures was milder, by 4.3% (+61.6 thousand departures), reaching 1.48 million. Because of the higher absolute increase in recruitment compared to the increase in departures, their balance remains positive and increased from 154.2 thousand people in the first nine months of 2020 to 284.9 thousand a year later (+84.8% or +130.7 thousand people).

Compared to the nine months of 2019, before the crisis, both recruitment and departures last year were significantly less, by 18.6% or 404.0 thousand people and by 21.3% or 401.3 thousand. people respectively. As a result of the aforementioned changes, the positive balance of recruitments-departures in 2019 (+287.5 thousand people) was marginally reduced last year, by 0.9% or 2.7 thousand people (+284.9 thousand in the 9 months of 2021).

Most of the departures in the nine months of 2021 (52.3%) were related to redundancies, however it was reduced compared to both the nine months of 2020 (57.7%) and the same period of 2019 (58.2%) . Subsequently, the percentage of voluntary departures rose from 41.8% in the nine months of 2019 to 42.3% a year later and to 47.7% in the same period last year.

Table 3.11  
Employment flow balance in the private sector

	9M/2019	9M/2020	9M/2021	Absolute change (2021/2019)	Percentage change (2021/2019)	Absolute change (2021/2020)	Percentage change (2021/2020)
Recruitment	2,173.467	1,577.213	1,769.457	-404.410	-19.6%	192.244	12.2%
Departures	1,885.930	1,423.037	1,484.600	-401.330	-21.3%	61.563	4.3%
DISMISSALS	1,097.600	821.461	775.863	-321.737	-29.3%	-45.598	-5.6%
VOLUNTARILY	788.330	601.576	708.737	-79.593	-10.1%	107.161	17.8%
Balance	287.537	154.176	284.857	-2.680	-0.9%	130.681	84.8%

Source: ERGANI

Overall, the data of the "ERGANI" system show that, while the recruitment of employees recovered significantly in the nine months of last year compared to 2020, they remain at a significant distance from their level in 2019. Combined with the smaller fluctuations in departures, the recruitment-departure balance had not changed last year compared to two years ago. The significantly smaller absolute sizes of recruitments and departures, in combination with the smaller decline of the total employment, based on the data of EL.STAT. (-159.8 mm), are an indication of an increase in undeclared work.

Regarding the position of the employed (Table 3.3.2), it appears that the number of self-employed increased in the period Jan.-Sept. 2020-2021 by 1.6% or 17.4 thousand people, at 1,128.2 thousand. In contrast, in the other two categories of jobs, employment fell slightly. The number of employees was reduced by 3.5 thousand. or by 0.1%, to 2,639.2 thousand, while the number of people who are assistants in the family business decreased by 2.2 thousand or 1.8%, at 118.7 thousand. Compared to the nine months of 2019, the distribution has not changed substantially, as the number of the self-employed was marginally increased last year, by 0.2% (1,125.6 thousand in the 9 months of 2019), while the number of employees and assistants in the family company was reduced by 0.9% (2,664.5 thousand) and 4.2% (124.0 thousand), respectively.

Table 3.12  
Employment trends by occupational position.



	9M/2019	9M/2020	9M/2021	Absolute change (2021/2019)	Percentage change (2021/2019)	Absolute change (2021/2020)	Percentage change (2021/2020)
Self employed	1,125.6	1,110.8	1,128.2	2.6	0.2%	17.4	1.6%
Employee	2,664.5	2,642.8	2,639.2	-25.2	-0.9%	-3.5	-0.1%
Assistant in the family business	124.0	120.9	118.7	-5.2	-4.2%	-2.2	-1.8%
TOTAL EMPLOYMENT	3,914.1	3,874.5	3,886.2	-27.9	-0.7%	11.7	0.3%

Source: ELSTAT

It is interesting to explore the impact of the pandemic on the structure of work in terms of its daily duration (full/part-time, Table 3.3.3). In the first nine months of 2021, the number of people with part-time work was down by 10.0% or 34,700 compared to the same period last year, to 312,400. By contrast, full-time employees increased by 1.3% or 46,400 people and their number stood at 3,573,700. Compared to the first nine months of 2019, the changes are similar as part-time employment was reduced by 12.7% or 45,500 people and full-time employment increased by 17,500 people or 0.5%. Between the three years, the share of part-time employment in total employment declined from 9.1% in 2019 to 8.0% last year, with a corresponding increase in the share of full-time employment from 90.9% to 92.0%.

Table 3.13

Evolution of full-time and part-time employment

	9M/2019	9M/2020	9M/2021	Absolute change (2021/2019)	Percentage change (2021/2019)	Absolute change (2021/2020)	Percentage change (2021/2020)
Part-time	357.9	347.1	312.4	-45.5	-12.7%	-34.7	-10.0%
Full-time	3,556.2	3,527.4	3,573.7	17.5	0.5%	46.4	1.3%
TOTAL EMPLOYMENT	3,914.2	3,874.5	3,886.2	-28.0	-0.7%	11.7	0.3%

Source: Eurostat

In conclusion, the analysis showed that domestic employment in the period January-September 2021 showed a slight strengthening compared to the same period of 2020, while for 2019 it declined marginally. Among the sectors, those with the largest decline in employment in the period January-September 2021/2020 were Tourism, Wholesale-Retail trade, Construction and Education. On the other hand, in public administration, professional-scientific-technical activities and the primary sector there was the greatest strengthening of employment during the same period. As turnover strengthened over the same period in almost all sectors, it appears that there is no correlation between turnover and employment. This result is considered to be due to the support measures for the protection of employment (suspension of work with special purpose compensation, coverage of social security contributions, SYN-ERGASIA program). After all, the sectors with the biggest decline in employment last year, without it being strong in all, include some with strong employment support from the protection measures, which had a shorter duration in 2021 than the year before (Tourism, Wholesale-Retail, Education).

In relation to the rest of the employment data, the data of the "ERGANI" system show that, while the recruitment of employees recovered significantly in the nine-month period last year compared to 2020, remaining at a significant distance from their level in 2019. Combined with the smaller fluctuations in departures, the balance of recruitments-departures had not changed last year compared to two years ago (284.9 thousand compared to 287.6 thousand in 2019). The significantly lower absolute figures for recruitment and departures, combined with the much smaller decline in overall employment, are a sign of an increase in undeclared work. The share of part-time work in the period 2019-2021 declined slightly, continuously, with a corresponding increase in the share of full-time employment.

As the vast majority of business support measures continue temporarily and to a much lesser extent than in the third quarter of last year, businesses will have to adapt their operation to conditions without or with significantly reduced State aid, which are mainly shaped by the real economy. Given this, the current period presents significant

challenges for them and the trends in employment and its structural characteristics in the next one to two years will be of great interest.

### 3.5 Consumer and Producer Prices

- CPI increased by 1.2% in 2021, against deflation of 1.2% the year before. In the first eleven months of 2021 HICP strengthened by 0.2% from -1.2% a year ago, mainly due to the inflationary effect of energy prices.
- HICP change rate with fixed taxes and excluding energy at -0.1% in the first eleven months of 2021, from 0.7% the year before last.
- For 2022, unless strong restrictive measures are imposed on parts of the economy and vulnerable social groups, inflation is forecast in the range of 1.5% to 1.8%, due to the strengthening of demand and the new, clearly milder than last year, rise in energy prices.
- In the event of new escalations of the pandemic in the winter, which will lead to strong restrictions, it is predicted that the change in the Consumer Price Index will be 0.7% to 1.0% this year, due to the milder increase in demand and prices for energy products.

#### Recent developments

Throughout 2021, there was an average significant increase in prices compared to a year earlier, with the average rate of change of the National Consumer Price Index (NCI) reaching 1.2%, from a decline of 1.2% the year before. The Harmonized Consumer Price Index (HPI) recorded an increase of 0.6% in 2021, from a weakening of 1.3% the year before. In December 2021, the domestic CPI strengthened significantly, to 5.1% from 4.8% in the previous month. However, in the same month last year it declined by 2.3%, a deflation that was the strongest almost in six years since February 2015. Therefore, the significant price rise in November and December 2021 is due to a 'baseline effect', due to the low level of the GICP a year earlier. In detail, regarding this result, the average change in the price index in the specific two-month period of 2020 averaged -2.2%, (-2.1% and -2.3% in November and December, respectively). As the average change of the HICP in the balances of this year was -1.1%, a positive base result emerges in its last two months for the same period a year later, of the order of -1.1 percentage points of the GSI. If this is taken into account in the change in the price index in November and December 2021, the inflation rate adjusts to 3.7% and 4.0%, respectively.

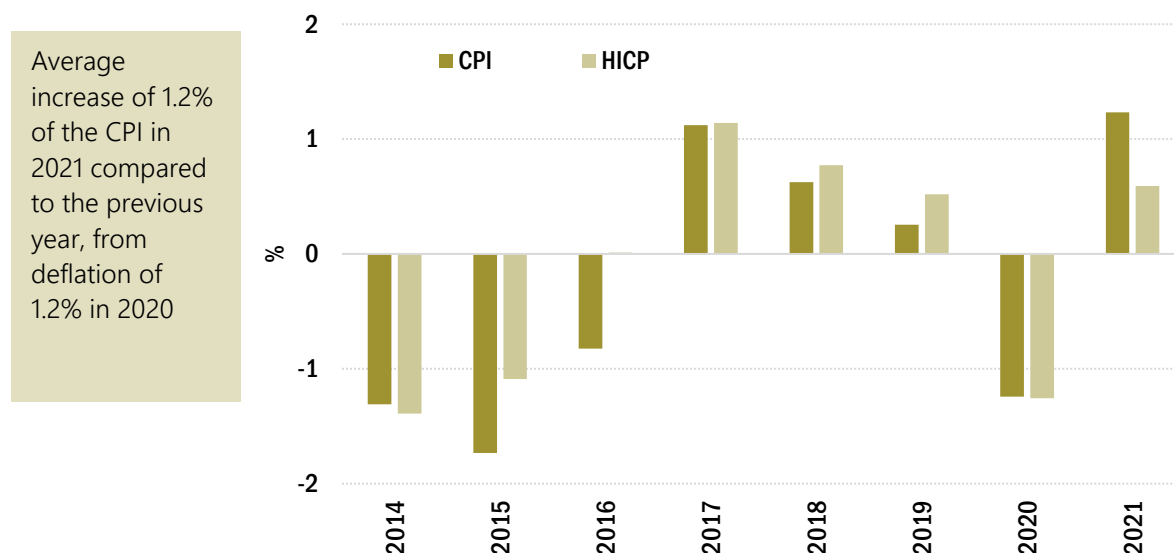
Regarding the effects of the HICP components on the trend in the period January-November last year, for which data are available, the marginal strengthening of the harmonized index, by 0.2%, from a decline of 1.2% in the corresponding period of 2020, is due to the positive effect of energy goods, as the change in the index with fixed taxes and without energy goods was negative, by 0.1%. Consequently, it appears that domestic demand also had a marginally negative impact on the price change. Negative and more



pronounced was the effect of taxation on prices in the period January-November of the previous year, by 0.4 percentage points of the HICP, up from 1.1 percentage points in the corresponding period of 2020.

Figure 3.15

Annual change in the domestic CPI and the HICP in Greece



Source: ELSTAT. Data processing IOBE

Figure 3.161

CPI in Greece (annual percentage change per month)



Source: ELSTAT. Data processing IOBE

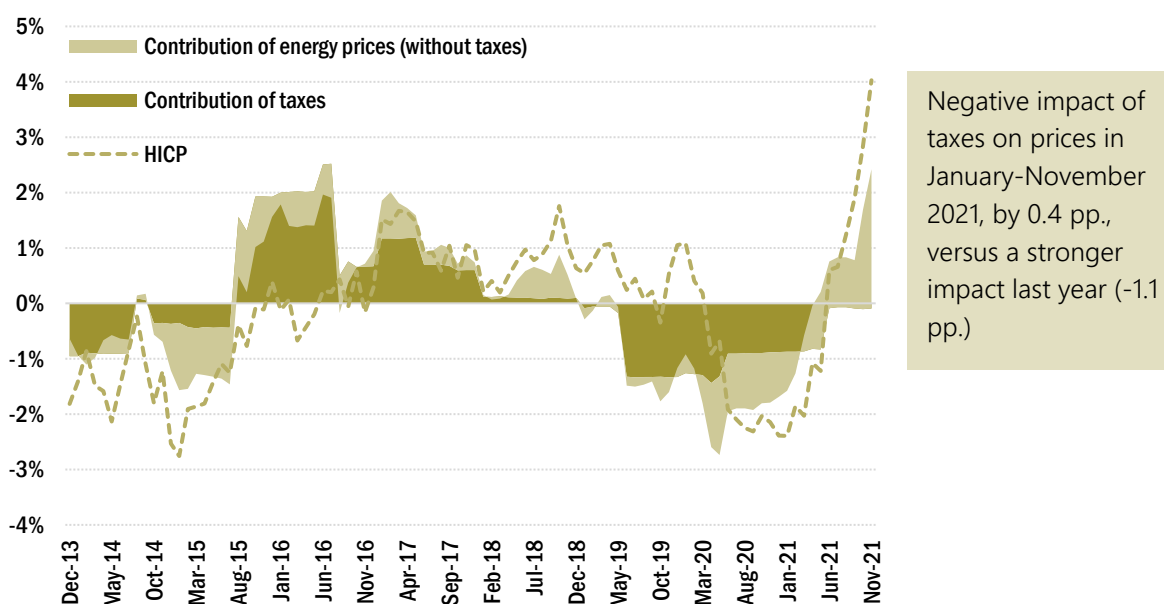
Examining the effects of the HICP components on its trend in November, the last month for which the relevant data are available, when the index recorded an increase of 4.0%

compared to a year ago, it again appears that there is a base result in some of the its individual components (demand, taxes and energy goods). Analytically, a strong upward effect on the HICP was recorded by the demand in November, by 1.6%, a development however due to a base result from the corresponding period of 2020. If this is taken into account, then the positive impact of domestic demand on the rate of change of the HICP is 0.4 percentage points.

Regarding the developments in the prices of energy goods and their impact on the HICP, the average international oil price in the period January - November of the previous year marked a strong increase compared to the same period in 2020. Specifically, the average price of Brent oil in the eleven months of 2021 stood at \$ 70.5 / barrel, from \$ 41.2 / barrel the year before, marking an increase of 71.0%<sup>21</sup>. The strengthening of the average exchange rate of the euro against the dollar over the same period, by 4.7%, to 1.19 versus 1.14, mitigated the rise in the price of oil in euro, with its average price reaching €59.3/barrel, 63.3% higher than in the corresponding period of 2020. The increase in the price of oil, which is a key component of energy costs, explains by 0.8 percentage points the increasing average effect of energy prices on the rate of change of prices domestically in the period January - November of the previous year, against a negative effect. 0.8% in 2020. The positive impact of energy goods in the eleven months of 2021 offset the negative impact of both indirect taxes and consumer demand.

Figure 3.17

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



Source: Eurostat. Data processing IOBE

The small average strengthening of the price level in Greece based on the HICP in the eleven months of last year, by 0.2%, ranks the country in the last place among the Eurozone countries. The average change in the HICP in the Eurozone stood at 2.4% from

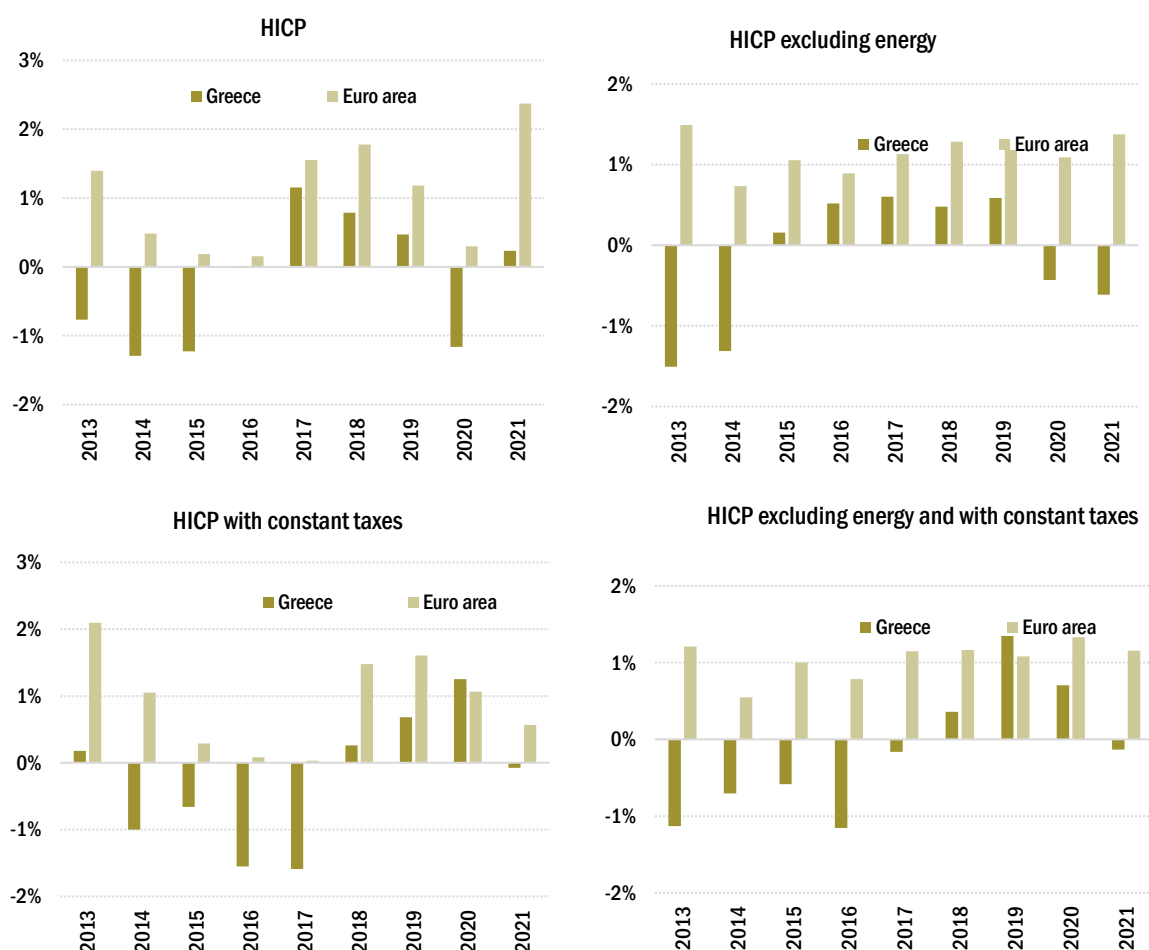
<sup>21</sup> Average season prices based on Europe Brent Spot Price. Source: EIA, US Energy Information Administration [https://www.eia.gov/dnav/pet/pet\\_pri\\_spt\\_s1\\_d.htm](https://www.eia.gov/dnav/pet/pet_pri_spt_s1_d.htm)



0.3% in the corresponding period of 2020. Malta (0.7%) and Portugal (0.8%) are located at a slightly higher level of change than Greece. Domestic demand seems to have been the main driver of prices in the Eurozone, as the price index with fixed taxes and excluding energy goods increased by 1.2% in the period January - November 2021 compared to the corresponding period of 2020, when it increased by 1.3%.

Figure 3.18

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



Source: Eurostat. Data processing IOBE

Marginal price increase domestically in the first eleven months of 2021, due to the positive effect of energy goods (0.8 percentage points).

Regarding the trends in the categories of products and services that are included in the domestic General Price Index, the largest increase in the previous year was recorded in Housing and Transport, reflecting the significant increase in the prices of energy goods. The rise in prices for the Housing category was 5.3% from a weakening of 3.8% the year before, while in the Transport category it reached 4.2%, from a decline of 5.3% in 2020. Noticeably milder was the change in Nutrition, where there was an increase of 1.4% as in 2020, followed by an increase in Education, with 0.3% from 0.4% the year before last year. As presented in a box in the previous bulletin on the Greek Economy (03/21), Food is the category of goods-services or is most affected by the prices of energy goods after



the categories of Housing and Transport. On the other hand, hotels and alcoholic beverages – Tobacco recorded mild downward trends, by 0.1% and 0.2%, respectively, after a decrease of 0.2% and a marginal increase of 0.1% in 2020. Slightly higher was the decline in prices in Durable Goods and Recreation, by 0.4% and 0.6% respectively, compared to a decrease of 1.3%, and 1.1%, the year before, as well as in Health (-0.7%) from a mild rise of 0.2% in 2020. Price decline was also recorded in the Other Goods and Clothing-Footwear categories, by 1.5% and 2.0% respectively, from a milder decline of 1.3% and a mild rise of 0.9% a year earlier. The sharpest price decline was recorded in the Communications category, by 2.1%, compared to a milder weakening of 1.8% the year before last year.

In terms of price trends on the production side, the period January - November 2021, for which data are available, the General Producer Price Index (GPPI), domestic and foreign market as a whole, increased by 12.3% compared to with the same period in 2020. In detail, the GPPI excluding energy strengthened in the eleven months of 2021 by 3.1%, compared to a marginal decline in the corresponding period of 2020 (-0.2%). Regarding the trends in the prices of industrial products, the biggest increase was recorded by Crude oil and natural gas and refined petroleum products, with 69.0% and 48.4%, following a decrease of 25.3% and 34.1%, respectively, the year before last year. A significant increase in producer prices was also recorded in Coal and Lignite, by 40.5%, following a strong rise of 23.6% in the eleven months of 2020. Electrical equipment followed at a much lower level of positive change, with 15.5%, compared to a decrease of 2.2% a year earlier. Milder trends in the rise of producer prices were recorded in base metals (+10.9% versus a decline of 1.2% in the eleven months of 2020), but also in electricity, natural gas, (+9.1%) versus a strengthening of 4.2% the year before last year). On the other hand, the trend in producer prices for computers was downward, by 3.3%, following a decrease of 3.7% the year before last year. Milder was the weakening in Tobacco Products, by 1.7%, following a marginal weakening in the eleven months of 2020 (-0.5%). There was also a decrease in producer prices for pharmaceutical products, by 1.0% compared to a decrease of 1.7% the year before last year.

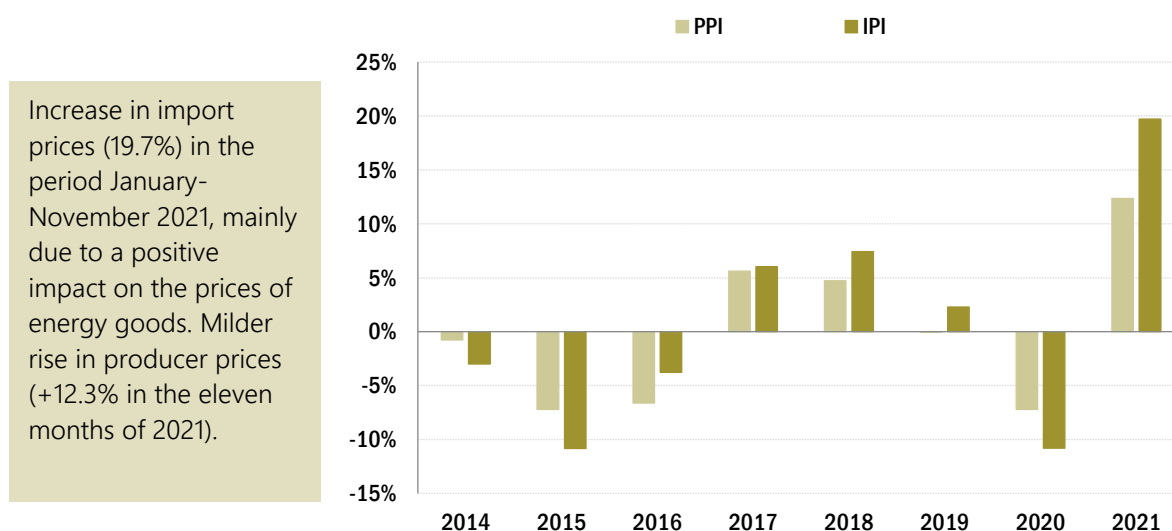
Regarding the development of the General Index of Import Prices (GIIP) in the period January-November of the previous year for which data are available, it showed a strong increase of 19.7%, compared to a decline of 10.8% the year before last year. At lower levels than the domestic one, the strengthening of the same index at the euro area level (+11.6%), compared to a weakening (-5.4%) in the respective period of 2020. The strong rise in import prices ranks Greece in the first place concerning their increase, among ten eurozone countries for which data are available in that period, with Estonia following by a rise of 15.3%. It should be noted that in all euro area countries for which data are available, there is a strengthening of import prices during the period considered compared to 2020, a trend which mainly reflects the increasing impact of the strong rise in the prices of energy goods.

Among the individual categories of imported products, the largest increase in the eleven months of 2021 was recorded in crude oil prices, by 63.9%, mainly due to the positive impact of energy commodity prices, compared to a decrease of 27.8% in the corresponding period of 2020. Slightly milder was the aid to refined petroleum products, 56.4%, from a decline of 33.9% in the same period of 2020. Upward trends are found in base metals, by 18.9% and in power supply, by 10.1%, from weakening 4.8% and 0.6%, respectively in the same period a year ago. On the contrary, a decrease in prices was recorded in the period January-November 2020 in Pharmaceutical products, by 2.4%, and in Tobacco Products, by 1.7%, following a weakening of 2.05% and a decline of 2.5% respectively in the eleven months of 2020.



Figure 3.192

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



Source: ELSTAT. Data processing IOBE

### Medium-term outlook

An examination of the trends in the key components of the domestic Consumer Price Index during the eleven months of January-November of the previous year, showed that its strengthening is a result of the increasing impact of energy goods. Despite the acceleration of vaccinations, adverse health developments, mainly due to the new mutation of the virus, have maintained some degree of uncertainty in households. The increase in cases due to the new mutation of the virus that spread at the end of 2021, brought about new containment measures to deal with the pandemic, clearly milder than those of the previous waves of COVID 19. Understandably, these are expected to have a smaller impact on the economy than in previous policy packages. The evolution of the health crisis in the new year will remain one of the most important factors that will shape the trend in prices, mainly through its effects on domestic demand.

In detail, as regards the expected impact of indirect tax interventions, the VAT reduction in force since June 2020 for specific goods and services was extended until the first half of this year. However, as a year has now elapsed since its implementation, no further substantial effect on prices is expected. The deduction of VAT on certain other goods and services (gyms, dance schools, etc.) from October 2021, will have a limited containment effect on the price increase in the period in which it will be applied, as it concerns a small part of household expenditure. The impact on prices of the reduction in the mobile subscribers' fee is expected to be negative. On the other hand, positively, the new objective values are expected to have an impact, as the increase in prices will also lead to an increase in taxes.

Regarding the expected effects of demand, the suspension of the solidarity contribution and the reduction of social security contributions were extended to 2022. However, they no longer bring about any additional change in disposable income and therefore in consumer demand, and therefore in prices, as they have been in place since last year. A small income support may come from the new design of ENFIA. The new ENFIA will include more brackets and rates, in order to prevent heavy burdens on households, while it will be paid in 10-12 instalments, with the first one at the end of March. From the middle of this year, the increase in the minimum wage will have an impact on income. The development

of consumer demand will depend mainly on the trend in employment. In turn, this will be affected for another year by the dynamics of the pandemic. In the baseline macroeconomic forecast scenario the economy is expected to work with the existing, relatively few constraints, possibly some additional at times. This development will create jobs and income in sectors where a significant part of private consumption takes place and were at times in previous years in suspension of operations (Retail Trade, Tourism, Catering, Transport, etc.). Neither in the alternative forecast scenario is expected to be re-imposed lockdown or suspension of a significant part of the economy, but more targeted restrictions. However, due mainly to reticence towards potential adverse developments, firms will make fewer hires, so domestic disposable income will strengthen less, hence consumer demand. Against this background, household consumption is projected to expand by 3.5-4.5% in the baseline macroeconomic scenario and by 1.5-2.5% in the alternative scenario. As an indication of the possible effects on the price index, a 3.5-4.5% increase in consumption had occurred in 2008 and had had a positive impact on the change in the GCPI of 0.6 percentage points of the index. Similarly, a 1.5-2.5% increase in consumption had occurred in 2018, and had had a positive impact on prices of 0.4 percentage points.

Regarding the expected developments in energy costs, which are mainly related to the trend in oil prices, OPEC+ (including Russia), following the agreement last September, which provided for an extension of the reduction of oil production cuts until December 2021 at a steady pace (+400 thousand barrels per day), decided in early January this year a new small extension of the cut cuts, for one month. However, the goal of increasing production was not achieved in the first two of the first three months of this period, as it expanded in September by 420 thousand barrels, in October by 190 thousand and in November by 220 thousand. Therefore, the adjustment of OPEC+ production lags behind the increased energy needs due to the sharp escalation of production activity worldwide. According to international analysts, daily oil production from OPEC member countries averaged 26.3 million barrels in 2021, from 25.6 million barrels in 2020, while for the current year the increase is expected to reach 2.5 million barrels / day, with daily production averaging 28.8 million barrels / day in 2022.

Despite the recent escalation of threats and the sanctions imposed by the United States on Tehran's oil exports, Iran plans to increase its oil production capacity to pre-sanctions levels by March 2022, as oil exports are Iran's main source of revenue. It is recalled that due to the US sanctions, Iranian oil exports have collapsed<sup>22</sup>.

An upward trend in oil production is also expected for 2022 from non-OPEC countries, as the US, Canada and Brazil are set to increase their production to their highest annual levels, surpassing non-OPEC+ countries in production by 1.8 million tonnes barrels per day in 2022 as a whole<sup>23</sup>. Also, Saudi Arabia and Russia could record daily production if OPEC+ stops its production cuts. In this case, global supply would increase by 6.4 million barrels per day in 2022 compared to an increase of 1.5 million barrels per day in 2021. The supply of oil is expected to be stimulated by the fact that the US announced at the end of last November the release of up to 50 million barrels of oil from its strategic reserves, with China, India, South Korea, Japan and The United Kingdom to follow similar moves, in an effort to reduce energy prices.

On the other hand, despite the increases in 2021, Venezuela's crude oil production is expected to decline, as a result of continuing operational difficulties and lack of plant maintenance. Similarly, while Libya's oil production increased by 0.8 million barrels per day on average in 2021 compared to 2020, no change in its production is expected in 2022,

<sup>22</sup> Drop from about 2.8 million. barrels per day (bpd) in 2018 at just 200,000 bpd. Exports are estimated at 600,000 barrels per day in June. Source Reuters.com:

<sup>23</sup> International Energy Agency, Oil Market Report, December 2021



with the country's political instability and operating problems in four oil wells at the end of December may lead to a slowdown in production in 2022.

Following these developments, the international price of Brent crude oil in December 2021 reached \$ 74.2 / barrel from \$ 81.1 / barrel last November. In the whole of the previous year, the international price of oil was at \$ 70.8 / barrel from \$ 64.3 / barrel the year before, recording an increase of 68.7%.

Regarding the expected developments on the oil demand side, the dynamics of the COVID-19 pandemic are expected to gradually weaken at the end of the second quarter in most countries, despite the outbreak of the "Omicron" mutation at the beginning of the year. Thus, global demand will be on the path of even a mild recovery. However, a decisive factor for the degree of strengthening of global demand this year will be the evolution of the health crisis. The progress made in vaccination, which has covered more than 60% of the population in many countries, as well as the extensive use of control methods (self-tests, rapid-tests), combined with the mild pathogenetic characteristics of the new mutation, have so far prevented the imposition of strict, generalized measures to protect public health, as in the past. Nevertheless, new outbreaks of the pandemic, new mutations of the virus, as well as the slowdown of vaccination or limited access to vaccines in developing countries, are not excluded.

The prospects for a recovery in global demand this year and next year are reflected in the recent macroeconomic forecasts of international organisations. According to OECD forecasts<sup>24</sup>, for 2022, global GDP growth is expected in the region of 4.5%, following an estimated strengthening of 5.6% for 2021, while a global recovery of 3.2% is expected for next year.<sup>25</sup> Analysts estimate that increased oil production by both OPEC+ member countries and other producing countries is expected to more than meet demand, even if the latter is particularly strong, due to the lack of restrictions on activities and transport. In this context of developments, global oil consumption is expected to expand in 2022, averaging to EUR 101 million barrels per day, returning to the same levels as in 2019<sup>26</sup>. This particularly high demand for energy products will prevent a substantial fall in prices from current levels despite the potentially large supply.

In these circumstances, taking into account the most recent forecasts of international organisations<sup>27</sup>, is estimated in the baseline scenario that the average price of oil in 2022 will be \$75/barrel from \$70.8/barrel in 2021, marking a strengthening of 5.8%. The euro/dollar exchange rate this year is expected to average 1.13, 4.5% lower than in 2021.<sup>28</sup> Subsequently, the average price of oil in euro will reach €66.3/barrel, recording an increase of 10.9% compared to last year. As an indication of the possible effects of an increase in inflation, a corresponding increase in the price of oil in the past had occurred in 2012 and had a positive impact on the change in the GCPI of 0.1 percentage points of the index. However, the positive impact is expected to be stronger, in the region of 0.6-0.9 percentage points, due to the marked rise in the price of oil in 2021 compared to 2020.

However, in the event of an escalation of pandemic protection measures, e.g. due to an increase in mutations, oil demand will recover more gently. In this case, an adjustment of the OPEC+ policy is quite possible, e.g. by stabilising its production for some time. Under these developments, the price trend is estimated to be slightly upward or slightly downward, at a pace that will depend on the events.

<sup>24</sup> Economic Outlook, OECD, December 2021

<sup>25</sup> Short-Term Energy Outlook, US Energy Information Administration, January 2022

<sup>26</sup> EIA, Short term Energy Outlook, January 2022

<sup>27</sup> Short-Term Energy Outlook, US Energy Information Administration, January 2022

<sup>28</sup> Macroeconomic projections, ECB, December 2021

Taking into account the expected trends in the key components of the domestic Consumer Price Index as long as the pandemic intensity and public health protection measures remain around current levels (baseline macroeconomic scenario), as well as 2021 inflation, will increase in 2022, in the region of 1.5% to 1.8%, due to the strengthening of demand and the new, clearly milder than last year rise in prices of energy goods.

Taking into account the expected trends in the key components of the domestic Consumer Price Index as long as the pandemic intensity and public health protection measures remain around current levels (baseline macroeconomic scenario), as well as 2021 inflation, will show a slight increase in 2022, of the order of 1.1% to 1.5%, due to the increase in demand and the new, clearly milder rise in energy prices than last year.

In case of escalation of targeted protection measures (eg in certain activities / vulnerable social groups / areas), but without imposing a lockdown, (alternative macroeconomic forecast scenario), in combination with the expected trends in other factors affecting the domestic Consumer Price Index mentioned above, it is predicted that the average annual rate of change will be 0.7% to 1.0% this year, due to the milder rise in demand and prices of energy products. Important information for the evolution of prices in the next period of time is also provided by the results of the monthly economic surveys of IOBE (consumer and business surveys), which constitute leading indicators for their evolution in the supply side.

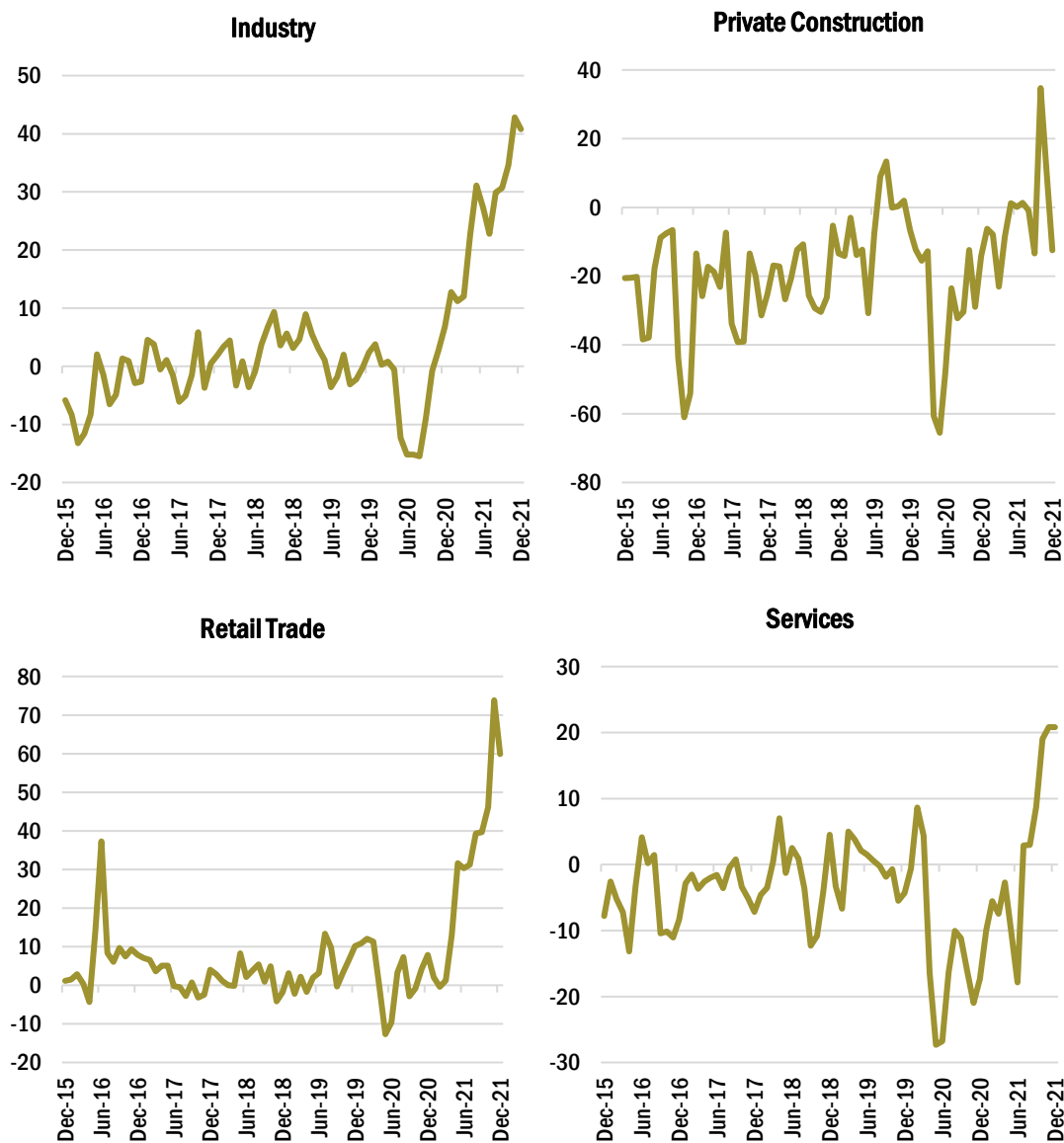
Trends in price forecast forecasts are only upward in the fourth quarter of 2021 compared to the third quarter of this year, with the relative balance growing significantly in Retail and more mildly in Industry, Private Construction and Services. With regard to the corresponding quarterly period last year, expectations for price developments recorded a strong positive change in all sectors, more pronounced in retail trade, and felt in the other three sectors. Analytically:

In Industry, the forecasts of the course of prices in the fourth quarter of the year stood at a significantly higher level than in the immediately preceding quarter. Specifically, the index strengthened by 12 points in the quarter under review to +39 points, while it moved 36 points higher than in the relevant quarter of 2020. Of the sector's businesses, 6% expect prices to fall in the short term, while the percentage of those predicting their rise is strengthened to 45% (from 30%), with the remaining 49% expecting stability.



Figure 3.203

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



Source: IOBE

Trends in price change forecasts are exclusively upwards in the fourth quarter of 2021 compared to the third quarter of this year, with the relative balance increasing significantly in Retail and milder in Industry, Services and Private Construction.

In Retail, the balance of +37 points in the prices of enterprises in the sector in the previous quarter strengthened by 23 points, while at the same time it was 56 points higher than in the corresponding period of 2020. Of the companies in the sector, no one (from only 5%) expects a price drop in the short term, while the percentage of those predicting their rise is significantly strengthened to 60% (from 42%), with the remaining 40% (from 53%) expecting stability. In the subsectors of Retail Trade, the changes in price forecasts in the fourth quarter of 2021 compared to the immediately preceding quarter were upwards in all the sub-sectors examined with the balance in Vehicles-Spare Parts and Department Stores moving strongly upwards.



The average index predicting the change in prices in Services in the current quarter improved significantly compared to the previous quarter and stood at +20 (from +5) points, while at the same time it moved to a much higher level compared to the corresponding average performance of the fourth trim. 2020 (+38 mon.). In the current quarter, only 1% (out of 4%) of the sector's businesses expect a price decline and 21% (from just 9%) a rise. In the individual sectors considered, the relative index strengthened strongly in most, with the exception of land transport where it improved mildly.

Finally, in the private construction sector, the negative balance of -4 points of the previous quarter declined significantly, to +11 points, having at the same time changed strongly upwards compared to the corresponding level of 2020 (+30 points). Moreover, 24% (out of 14%) of enterprises in the sector forecast a fall in the sector's prices, while the percentage of those expecting a rise is 35% (from just 9%), with 41% (from 77%) predicting price stability.

### 3.6 Balance of Payments

- Contraction of the current account deficit in the eleven months of January-November 2021, with a larger increase in exports against imports by €1.4 billion.
- Improvement in the balances of Services, Primary and Secondary Income, deterioration in the balance of Goods.

#### Current Account Balance

In the eleven months of January-November 2021, the Current Account Balance (CA) showed a deficit of €8.9 billion, compared to a deficit of €10.3 billion in the corresponding period of 2020. The reduction of the deficit is primarily due to the significant improvement of the Balance of Services, but also of the Primary and Secondary Revenues, offsetting the deterioration in the Balance of Goods.

Analytically, the Goods Balance deficit amounted to €22.8 billion in the first eleven months of 2021, increased by €5.8 billion compared to 2020, due to the larger increase in imports compared to exports. Exports increased to €35.6 billion, (€9.5 billion)<sup>29</sup>, boosted both by fuel exports, which were expanded by €3.8 billion, due to increased prices internationally, and -mainly- by other goods that were boosted by €5.7 billion. Imports increased to €58.4 billion (€15.3 billion), with almost 40% of the increase stemming from fuel. The deficit of the Goods Balance without fuel and ships amounted to €17.8 billion in the eleven months, widening by €3.8 billion, an increase corresponding to approximately 66% of the total widening of the Goods Balance deficit.

The Balance of Services recorded a significant surplus, as it expanded to €12.7 billion in the eleven months of the previous year, showing an increase of €5.6 billion compared to 2021, without, however, making up for the losses of 2020 which reached the €13.6 billion. The improvement in 2021 came from the strong recovery of receipts from Tourism and Transport. In detail, total receipts from Services stood at €32.6 billion, an increase of 53.6% compared to 2020. Receipts from Travel Services more than doubled in the eleven months of 2021 compared to the year before, with an increase of 144.6%. These came mainly from the strong growth in the period April-November, when travel receipts reached €10.5 billion, at almost 60% of the 2019 level. Transport Services recorded an increase of 32.2%, to €16.9 billion, while receipts from Other Services reached €5.1 billion, with an increase of 25.5%. Total service payments stood at €19.9 billion, up 40.4% from the year

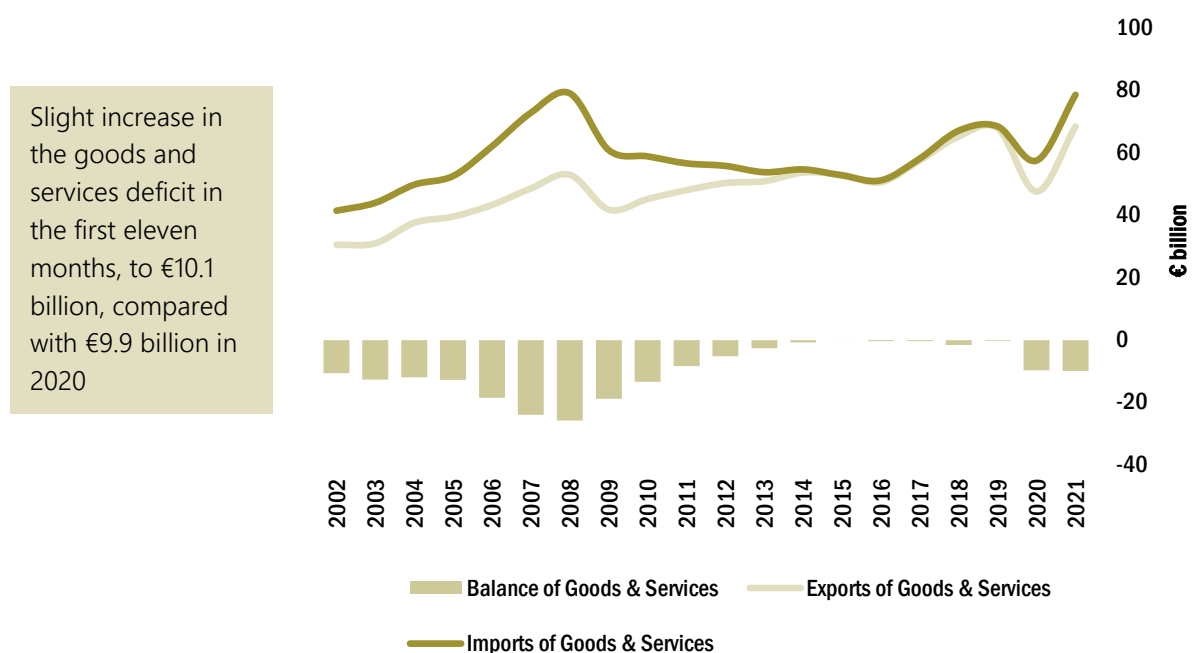
<sup>29</sup> The amounts in brackets represent the absolute change from the corresponding period of the previous year, unless otherwise stated.



before last. Payments for Travel Services increased by 32.4%, to €1.0 billion, payments for Transport Services by 48.4%, to €13.6 billion, while payments for Other Services reached €5.3 billion. , with an increase of 24.7%. At the end of this section of the report, the importance of Transport Services for the Greek economy, their structure in terms of individual categories of transport and the trend of Transport Services within the pandemic are analysed in context.

Figure 3.21

Imports-Exports of Goods and Services (January - November) 2002-2021



Source: Bank of Greece – Data processing IOBE

In the Primary Income Balance, there was a surplus in the eleven months of 2021 of €595 million, compared to a deficit of €388 million in 2020. Receipts increased to €6.4 billion, from €5.8 billion in 2020, while payments fell to €5.8 billion from €6.1 billion. Analytically, earnings from labour increased marginally, to €192 million, receipts from investments increased by 22.4%, to €3.1 billion, while from other primary incomes (subsidies and taxes on production) recorded an increase of 3 , 1%, at €3.1 billion. Payments from working income decreased to €1.2 billion (-4.5%), from investments decreased by 7.3% to €4.2 billion, while other primary incomes increased by 18.3% , at €467 million.

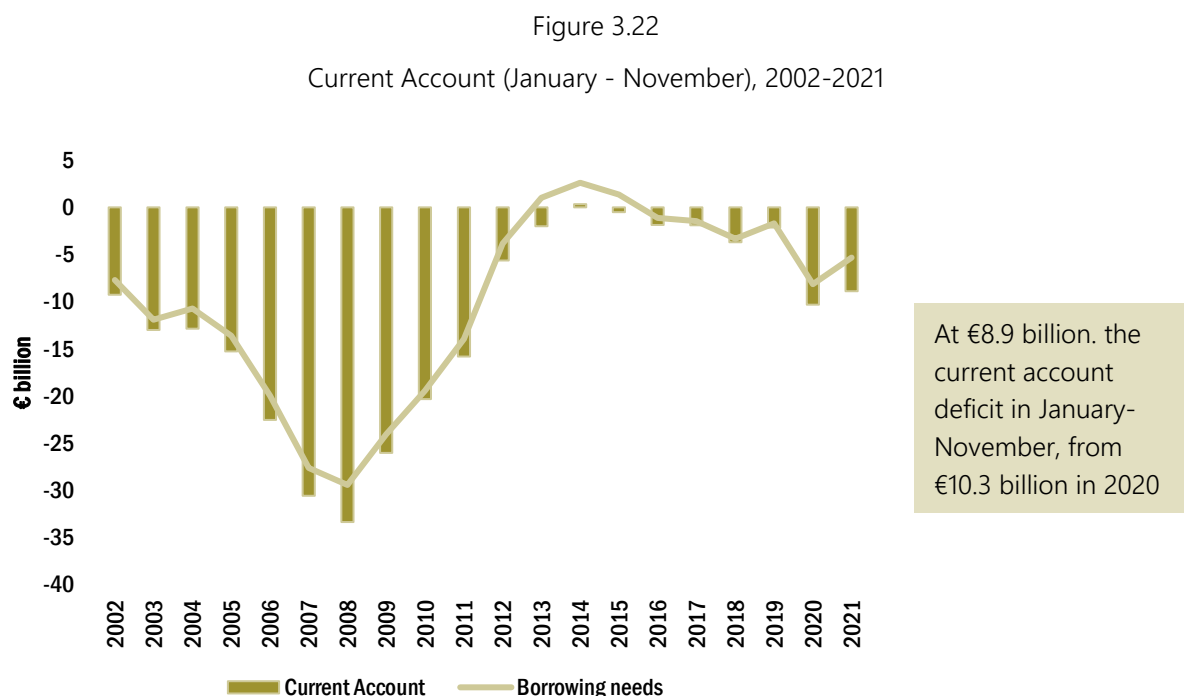
The Secondary Income Balance recorded a significant surplus of €640 million, compared to almost zero in 2020, with receipts increasing by 28% to €4.1 billion and payments by 8.2% to €3.4 billion.

### Capital Account

The capital balance surplus<sup>30</sup> increased to €3.6 billion, compared to €2.2 billion in 2020, with a significant increase in receipts of €1.9 million due to the disbursement of pre-financing under the Resilience and Recovery Fund (RRF), and payments by €490 million.

<sup>30</sup> The capital balance 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 – with the exception of the European Social Fund – and from the Cohesion Fund under the CSFs).

Finally, the Current Account and Capital Balance, which reflects the relationship between a lender or borrower of an economy and abroad, was in deficit, at €5.3 billion, compared to €8.1 billion. in 2020.



Source: Bank of Greece – Data processing IOBE

## Financial Account

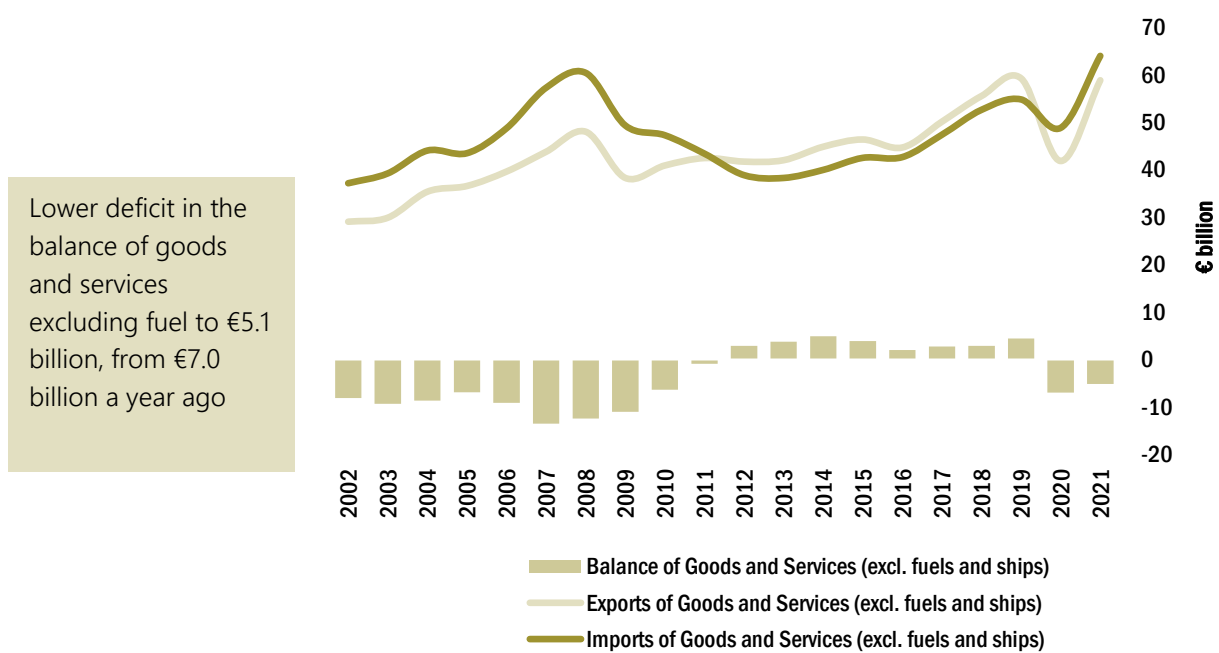
The Financial Account Balance was in deficit in the eleven months of 2021, at €4.5 billion, compared to €7.5 billion in 2020.

In the sub-accounts, residents' net claims on foreign direct investment increased by €885 million, while net liabilities to non-residents (non-resident investments in the country) increased by €4.7 billion.

In the category of portfolio investments, residents' receivables from abroad increased by €22.9 billion, and liabilities to non-residents increased by €4.3 billion. In the category of other investments, residents' receivables from abroad increased by €5.1 billion, and liabilities by €26.7 billion.

Finally, the country's foreign exchange reserves stood at the end of November 2021 at €12.5 billion, compared to €9.2 billion in 2020.

Figure 3.234  
Imports-Exports of Goods excluding fuel and ships (January - November), 2002-2021



Source: Bank of Greece. Data processing IOBE

### Box 3.3

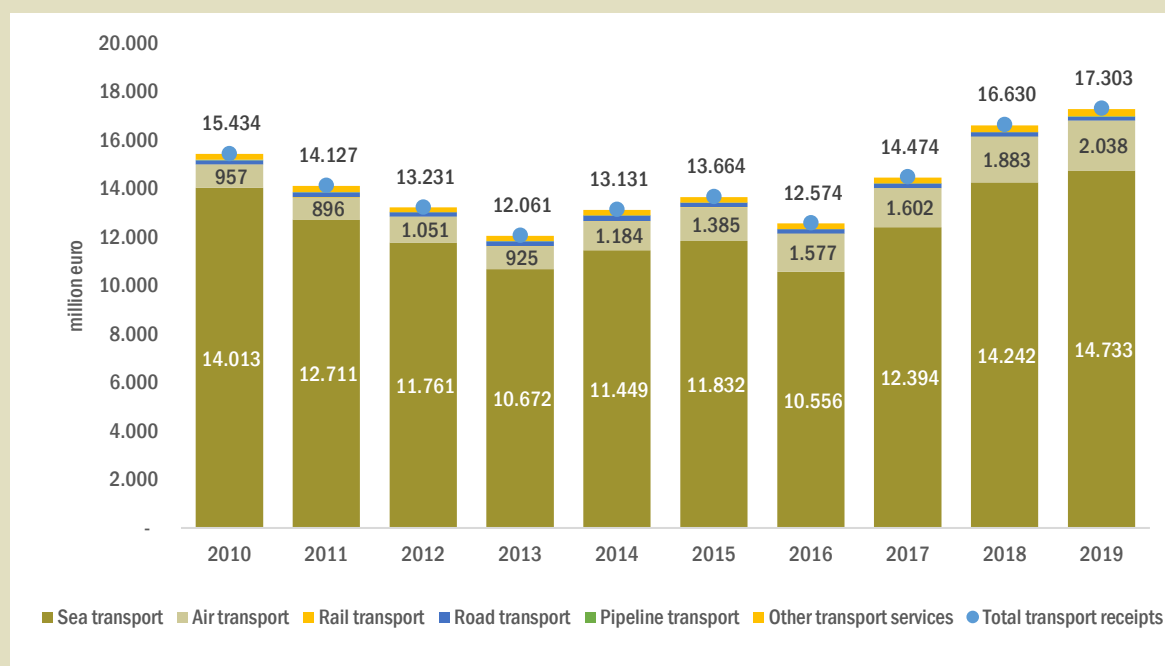
#### Developments in International Transport Services during the pandemic

Transport services have been an important part of economic activity over time and in particular of the revenues of the Greek economy, as they include activities such as road, rail, air and especially maritime transport. In particular, in the field of maritime transport, a large part of this is the receipts from seagoing shipping, a sector with a strong presence in the Greek economy historically. International receipts from transport services constitute about 50% (46.7%) of the total receipts of the Greek economy from services which are recorded in the Balance of Payments, at 9.4% of GDP for 2019, while together with the tourist receipts they correspond at 85% of total receipts. Revenues from transport amounted to €17.3 billion in 2019, with 85% of them (€14.7 billion) coming from maritime transport and in particular from cargo transport (€13.6 billion), while Revenues of coastal shipping from passenger transport reached €402 million. Next rank the air transport services, with receipts accounting for 12% of total receipts (€2.0 billion). The contribution of the other categories is much smaller with a share of 3%, which is divided into rail transport (0.1%), road transport (0.9%), pipeline transport (0.2%) and other and supporting transport services with a share of 1.7% for 2019.

The weight of maritime transport revenues is a direct result of the strength and dynamics of the Greek-owned fleet in this sector worldwide. The Greek-owned fleet is in third place in number of ships, with over 5.7 thousand ships of all categories (tankers, general cargo, bulk, etc.) after China and Japan. However, in terms of capacity, it has always been in the first place with 244 million tons of GT, at a distance from China (218) and Japan (178).

Figure 3.24

Receipts of transport services by transport category



Source: Eurostat

Receipts from transport services show a strong upward trend in the period 2017-2019, with an increase of €4.7 billion (+37.3%). The increase was mainly contributed by seagoing shipping, with an increase of €4.0 billion, air with an increase of €462 million and passenger shipping with €102 million. It is noted that in addition to the passenger transport services of the above categories, the transport services are recorded separately in the part of tourist receipts, as part of them.

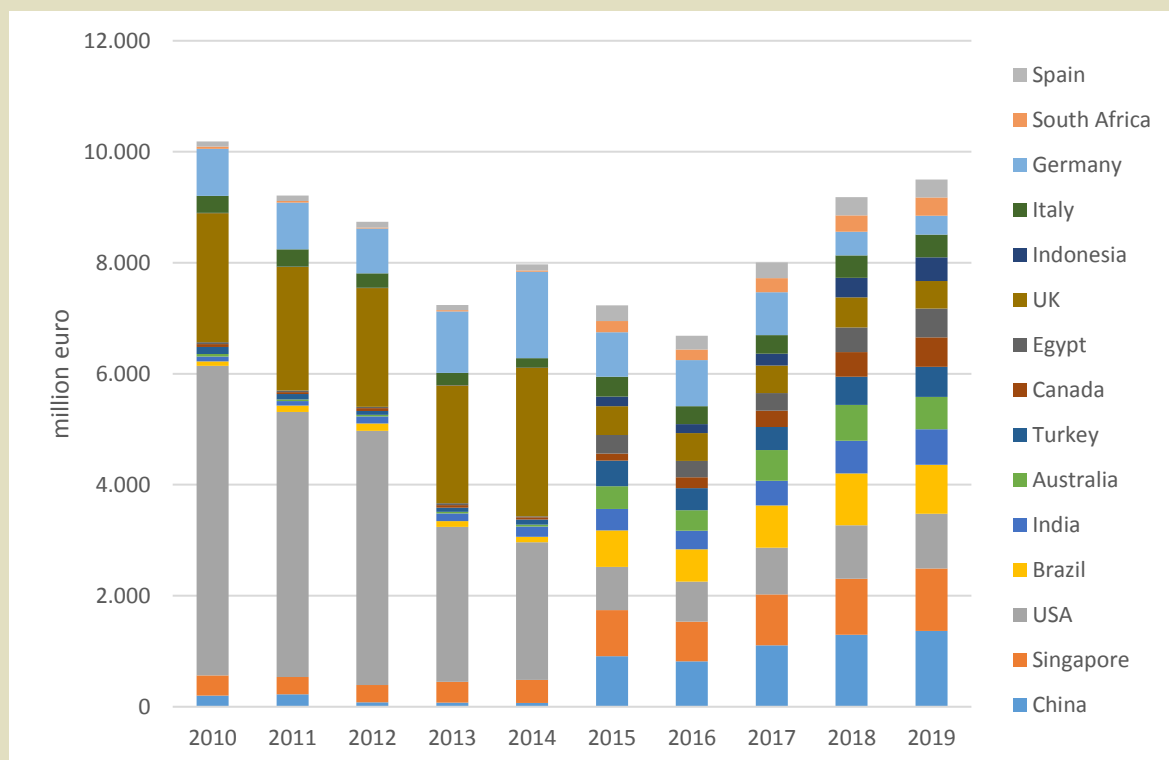


Transport tourism receipts approached €1.3 billion in 2019, with an upward trend since 2008, accounting for about 8% of total tourism receipts.

Per country, revenues from transport services in 2019 came mainly from China, with €1.4 billion (7.9% of total transport revenues) and mainly related to maritime transport. It is followed by Singapore with the receipts of the Greek economy amounting to €1.1 billion. It is pointed out that the receipts from both countries that are in the first two places, corresponded in 2010 to 3.6% of their total and were found at 14.4% in 2019. An important destination of transport services is the USA with a share of 5.7% in 2019 and a strong decline since 2010 (36%), followed by Brazil (5.1%), India (3.7%), Australia (3.4%) and Turkey (3.1%). Of the countries with a significant share of revenues from transport services, a high share of air services is recorded in the US, at 4.5% of total airline revenues, Canada with 17.7% and Germany with 10.8%. In 2010 the destination countries were relatively few, with most of the receipts coming from the USA, the United Kingdom and Germany and the three countries holding 56.7%, while in 2019 there is a significant dispersion, with the corresponding share (54.9%) to be distributed in 15 countries.

Figure 3.25

Receipts of transport services by country



Source: Eurostat

The pandemic caused a strong shock to economic activity, while transport in particular suffered significant losses due to the restriction of cross-border movements. Revenues from transport services decreased by 20.2% in 2020 due to the pandemic, while total revenues from services decreased by 43.5%, mainly affected by the tourist revenues that fell sharply, by 76%. Transport revenues decreased by 17.8% in the EU-27 in 2020 with a wide range of variations between countries. Ireland recorded the largest decline among EU-27 countries, with -70%, followed by Finland, with -50%.

In Greece, the fall in receipts from transfers occurred mainly in the second half of 2020, but the effects appeared as early as the second quarter of the year. In maritime transport, the decrease had the relatively least intensity the year before, with -15.3%, while other transport, which mainly concerns air services, decreased by 48%, as air transport either did not operate for a large part of the year, or was under-operating. In the first quarter of 2021,

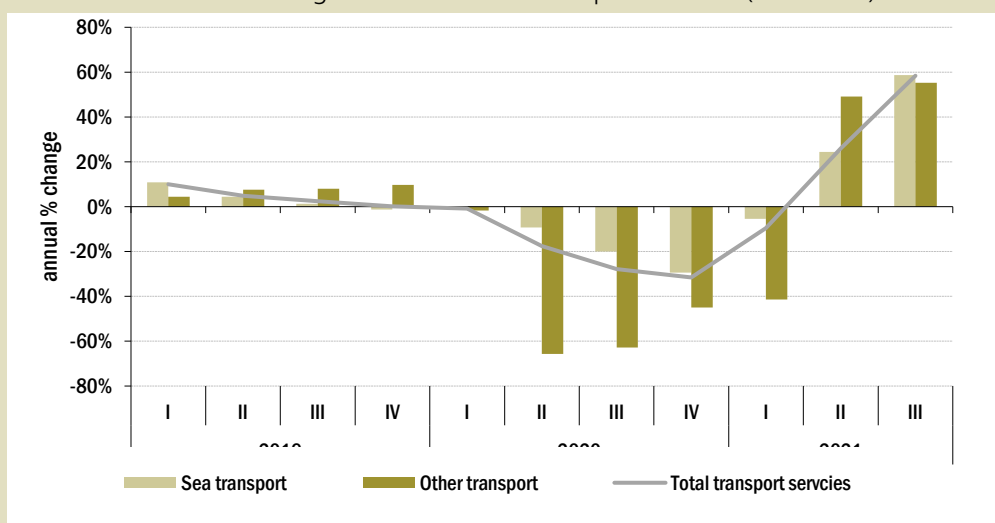


transport receipts continued their downward trend, mainly again other transport, as maritime revenues recorded a relatively small decline (-5.4%). The recovery of the Greek economy, combined with the recovery in the rest of the world in the 2nd and 3rd quarters of 2021, pushed transport services to an increase with a significant increase in the corresponding receipts.

Specifically, receipts from transfers increased by 26% and 58% in these two quarters, with the result that in the nine months of 2021, receipts returned to 2019 levels and slightly higher (+3.3%). The return of receipts was not similar between maritime and other transport, as other transfers were found in the nine months at 56% of 2019. In contrast, receipts from maritime transport gradually increased in 2021, and combined with the limited decline of 2020, they are 11% higher than the levels of 2019 (nine months).

Figure 3.26

Annual % change in revenue from transport services (2019-2021)



Source: Bank of Greece

In conclusion, apart from the tourism sector, transport services have also made a significant contribution to the Greek economy over time, which mainly come from maritime transport and especially from seagoing shipping. The share of transport services was close to 50% of total receipts from services in 2019, which reached a total of 9.4% of GDP for 2019. The main impetus to the transport services is given by the power of the seafaring shipping, as the Greek-owned fleet is in the first place in the world in terms of tonnage. The pandemic significantly affected transport revenues, as they decreased by 20.2% in 2020, with a sharper decline in air transport compared to maritime. The recovery of 2021 brought revenues back to 2019 levels in the nine months of January-September, due to the rise of maritime transport, which exceeded its level in this year, with air transport services however remaining at 56% of their level in 2019.



Table 3.11 Balance of payments (€million).

		January – November			November		
		2019	2020	2021	2019	2020	2021
<b>I</b>	<b>CURRENT ACCOUNT (I.A + I.B + I.C + I.D)</b>	<b>-2,153.2</b>	<b>-10,325.0</b>	<b>-8,901.2</b>	<b>-1,385.3</b>	<b>-1,238.8</b>	<b>-2,515.4</b>
	<b>GOODS AND SERVICES ACCOUNT (I.A + I.B)</b>	<b>-585.0</b>	<b>-9,940.8</b>	<b>-10,136.1</b>	<b>-1,122.8</b>	<b>-1,019.8</b>	<b>-2,205.1</b>
<b>IA</b>	<b>GOODS ACCOUNT (I.A.1 - I.A.2)</b>	<b>-21,204.8</b>	<b>-17,001.7</b>	<b>-22,837.6</b>	<b>-1,683.2</b>	<b>-1,438.3</b>	<b>-2,741.3</b>
	Oil balance	-4,751.9	-2,891.6	-4,979.8	-338.5	-168.8	-982.9
	Trade balance excluding oil	-16,452.9	-14,110.1	-17,857.8	-1,344.7	-1,269.5	-1,758.4
	Ships balance	-269.1	-66.2	-19.2	12.1	0.0	10.0
	Trade balance excluding ships	-20,935.7	-16,935.5	-22,818.4	-1,695.3	-1,438.2	-2,751.2
	Trade balance excluding oil and ships	-16,183.8	-14,043.9	-17,838.6	-1,356.9	-1,269.5	-1,768.4
<b>IA.1</b>	<b>Exports of Goods</b>	<b>29,681.8</b>	<b>26,098.3</b>	<b>35,596.8</b>	<b>2,636.8</b>	<b>2,487.2</b>	<b>3,946.3</b>
	Oil	8,254.1	5,385.0	9,196.4	657.0	508.4	1,093.7
	Ships (sales)	83.7	78.1	113.1	21.3	3.6	26.1
	Goods excluding oil and ships	21,344.1	20,635.2	26,287.4	1,958.5	1,975.3	2,826.5
<b>IA.2</b>	<b>Imports of Goods</b>	<b>50,886.6</b>	<b>43,100.0</b>	<b>58,434.4</b>	<b>4,320.0</b>	<b>3,925.5</b>	<b>6,687.6</b>
	Oil	13,005.9	8,276.6	14,176.2	995.5	677.2	2,076.6
	Ships (buying)	352.8	144.3	132.3	9.2	3.6	16.2
	Goods excluding oil and ships	37,527.8	34,679.1	44,126.0	3,315.3	3,244.8	4,594.9
<b>IB</b>	<b>SERVICES ACCOUNT (I.B.1-I.B.2)</b>	<b>20,619.8</b>	<b>7,060.9</b>	<b>12,701.4</b>	<b>560.4</b>	<b>418.5</b>	<b>536.2</b>
<b>I.B.1</b>	<b>Receipts</b>	<b>37,897.8</b>	<b>21,200.2</b>	<b>32,559.6</b>	<b>2,164.5</b>	<b>1,543.2</b>	<b>2,527.7</b>
	Travel	17,884.4	4,284.0	10,476.5	315.4	70.3	286.8
	Transportation	15,867.4	12,822.0	16,944.4	1,430.5	1,029.6	1,762.0
	Other services	4,146.0	4,094.3	5,138.8	418.5	443.3	478.9
<b>I.B.2</b>	<b>Payments</b>	<b>17,278.0</b>	<b>14,139.2</b>	<b>19,858.2</b>	<b>1,604.1</b>	<b>1,124.7</b>	<b>1,991.5</b>
	Travel	2,478.1	760.2	1,006.7	206.6	37.0	113.0
	Transportation	10,371.9	9,138.6	13,565.4	972.9	720.0	1,428.3
	Other services	4,428.0	4,240.5	5,286.1	424.6	367.7	450.2
<b>IC</b>	<b>PRIMARY INCOME ACCOUNT (I.C.1-I.C.2)</b>	<b>-1,510.6</b>	<b>-387.5</b>	<b>595.4</b>	<b>-213.9</b>	<b>-60.4</b>	<b>-143.9</b>
<b>I.C.1</b>	<b>Receipts</b>	<b>5,600.8</b>	<b>5,765.6</b>	<b>6,439.5</b>	<b>347.4</b>	<b>336.7</b>	<b>463.5</b>
	From work (wages, compensation)	224.5	183.7	192.0	19.3	14.8	18.9
	From investments (interest, dividends, profit)	2,705.5	2,556.3	3,129.1	239.4	246.6	338.3
	Other primary income	2,670.8	3,025.7	3,118.4	88.7	75.3	106.3
<b>I.C.2</b>	<b>Payments</b>	<b>7,111.5</b>	<b>6,153.2</b>	<b>5,844.1</b>	<b>561.3</b>	<b>397.1</b>	<b>607.4</b>
	From work (wages, compensation)	1,294.4	1,237.3	1,186.5	113.8	102.5	116.7
	From investments (interest, dividends, profit)	5,431.6	4,520.8	4,190.5	431.3	259.1	457.7
	Other primary income	385.5	395.0	467.2	16.2	35.6	33.0
<b>ID</b>	<b>SECONDARY INCOME ACCOUNT (I.D.1-I.D.2)</b>	<b>-57.5</b>	<b>3.3</b>	<b>639.6</b>	<b>-48.6</b>	<b>-158.7</b>	<b>-166.4</b>
<b>I.D.1</b>	<b>Receipts</b>	<b>2,953.0</b>	<b>3,207.1</b>	<b>4,104.8</b>	<b>164.7</b>	<b>152.8</b>	<b>136.7</b>
	General government	1,637.3	1,756.6	2,833.8	29.6	25.1	35.4
	Other sectors	1,315.7	1,450.5	1,271.0	135.1	127.7	101.3
<b>I.D.2</b>	<b>Payments</b>	<b>3,010.5</b>	<b>3,203.8</b>	<b>3,465.2</b>	<b>213.2</b>	<b>311.5</b>	<b>303.1</b>
	General government	1,708.3	1,746.6	2,131.0	91.9	201.6	186.8
	Other sectors	1,302.2	1,457.2	1,334.2	121.3	109.9	116.3
<b>II</b>	<b>CAPITAL ACCOUNT (II.1-II.2)</b>	<b>463.6</b>	<b>2,183.0</b>	<b>3,569.4</b>	<b>257.8</b>	<b>344.7</b>	<b>464.0</b>
<b>II.1</b>	<b>Receipts</b>	<b>930.1</b>	<b>2,561.8</b>	<b>4,438.7</b>	<b>276.9</b>	<b>356.4</b>	<b>493.5</b>
	General government	780.3	2,405.5	3,594.9	271.3	350.2	158.2
	Other sectors	149.8	156.3	843.8	5.5	6.2	335.3
<b>II.2</b>	<b>Payments</b>	<b>466.5</b>	<b>378.8</b>	<b>869.3</b>	<b>19.1</b>	<b>11.7</b>	<b>29.6</b>
	General government	4.4	4.0	4.5	1.0	0.4	0.6
	Other sectors	462.1	374.8	864.8	18.0	11.4	29.0
	<b>BALANCE OF CURRENT AND CAPITAL ACCOUNT (I+II)</b>	<b>-1,689.6</b>	<b>-8,142.0</b>	<b>-5,331.7</b>	<b>-1,127.5</b>	<b>-894.2</b>	<b>-2,051.4</b>
<b>III</b>	<b>FINANCIAL ACCOUNT (III.A+III.B+III.C+III.D)</b>	<b>-2,055.9</b>	<b>-7,452.1</b>	<b>-4,464.0</b>	<b>-995.6</b>	<b>-975.7</b>	<b>-1,468.0</b>
<b>III.A</b>	<b>DIRECT INVESTMENT*</b>	<b>-3,128.9</b>	<b>-2,095.9</b>	<b>-3,819.6</b>	<b>-145.3</b>	<b>-165.5</b>	<b>-643.2</b>
	Assets	636.1	464.6	885.4	144.7	36.6	24.9
	Liabilities	3,765.1	2,560.5	4,705.0	290.0	202.1	668.1
<b>III.B</b>	<b>PORTFOLIO INVESTMENT*</b>	<b>24,138.2</b>	<b>43,988.5</b>	<b>18,550.5</b>	<b>1,550.3</b>	<b>4,079.2</b>	<b>4,018.2</b>
	Assets	26,420.1	33,104.0	22,862.4	695.9	1,912.8	4,298.8
	Liabilities	2,282.0	-10,884.5	4,311.9	-854.4	-2,166.4	280.6
<b>III.C</b>	<b>OTHER INVESTMENT*</b>	<b>-22,962.2</b>	<b>-50,513.8</b>	<b>-21,577.2</b>	<b>-2,381.5</b>	<b>-4,913.9</b>	<b>-4,804.0</b>
	Assets	-1,581.0	2,704.6	5,072.9	200.6	-62.1	757.9
	Liabilities	2,381.1	53,218.4	26,650.1	2,582.1	4,851.7	5,561.9
	(Loans of general government)	-4,740.9	1,482.9	-387.4	-2,755.6	1,990.7	-8.8
<b>III.D</b>	<b>CHANGE IN RESERVE ASSETS**</b>	<b>-103.0</b>	<b>1,169.0</b>	<b>2,382.3</b>	<b>-19.0</b>	<b>24.4</b>	<b>-39.0</b>
<b>IV</b>	<b>BALANCE ITEMS (I +II +IV +V = 0)</b>	<b>-366.3</b>	<b>689.9</b>	<b>867.7</b>	<b>132.0</b>	<b>-81.6</b>	<b>583.5</b>
	<b>RESERVE ASSETS (STOCK)***</b>				<b>7,295</b>	<b>9,174</b>	<b>12,480</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



## 4 THE MACROECONOMIC IMPACTS OF THE SUPPLEMENTAL PENSIONS REFORM <sup>31</sup>

- The study assesses the impact of the reform of the supplementary pensions introduced by Law 4826/2021 on macroeconomic variables and fiscal aggregates, both short-term and long-term, on the basis of scenarios under a series of assumptions.
- The implementation of the reform is estimated to lead to a significant increase in GDP and employment in Greece, compared to the level at which economic activity would have been without the implementation of the reform.
- The implementation of the reform has a direct budgetary cost, but this is offset by the beneficial effects of the strengthening of economic activity domestically and the strengthening of the tax revenues of the state in the medium term.
- At the same time, the reform does not worsen the adequacy of pensions compared to the 'no reform' scenario.

<sup>31</sup> The chapter is based on a recent study by IOBE on the macroeconomic effects of the reform of the supplementary insurance system introduced by Law 4826/2021 Government Gazette 160/A/7-9-2021. The full text of the study is available here: [http://iobe.gr/research\\_dtl.asp?RID=236](http://iobe.gr/research_dtl.asp?RID=236)

## 4.1 Introduction

A sustainable, stable, transparent and rewarding insurance system is a key condition for long-term prosperity and intergenerational justice in an economy. The principles governing the design of the insurance system are crucial both for the fiscal balance and for the long-term growth prospects of the real economy. The intensifying demographic aging in the country is gradually worsening the index of dependence of retirees in relation to the active population. If the insurance system remains purely distributive, then the amount of pensions should decrease in relation to that of salaries or the amount of contributions may increase. Increases in contributions will further reduce incentives for formal work and make it harder to increase productivity and extroversion in the economy. In addition, a dynamic of reducing pensions for future generations will be socially unfair and painful. In addition, a dynamic of reducing pensions for future generations will be socially unfair and painful.

The strengthening of the capital insurance enables part of the pensions to be covered by accumulated savings. The capitalization pillar can operate in addition to the master. The main benefits of moving to a partially capitalized system are the strengthening of incentives for more and more formal work, as well as the accumulation of investment funds that comes from household savings. Households will have stronger incentives to offer work when they have better control over their savings and when they can expect higher pensions with higher contributions during working life. The benefits also relate to greater risk dispersion and therefore greater security for pensions over time.

At the same time, however, the transition to a system where part of the current distributive insurance is being capitalized creates a financial gap. Part of the employees' contributions will be directed towards their future pensions and not towards the coverage of the pensions of the current pensioners.

The aim of the study was to highlight the macroeconomic effects of the supplementary insurance system reform on the basis of alternative scenarios. This reform concerns the conversion of the first pillar supplementary insurance into a fully capitalized. As far as its scope is concerned, this includes at least the new entrants to the labour market from 1/1/2022 employees and professionals who were part of the existing auxiliary, with the optional inclusion of young self-employed and self-employed professionals who did not have auxiliary insurance until today, as well as optional inclusion of those already insured up to a certain age limit. The reform does not include changes in the main pension, does not affect the rates of existing pension contributions or the way of calculating the pension benefits of the supplementary and main pension to date.

The study assessed the impact of the reform on macroeconomic variables such as GDP and employment, as well as on measures such as the fiscal balance, both short-term and long-term. The main channel of impact considered is that of the accumulation of reserves in the context of the new capitalization of supplementary insurance resulting from private savings, giving impetus to new investments. Part of these new investments are aimed at the formation of fixed capital within the Greek economy that stimulate domestic demand and employment, but mainly enhance productivity. Therefore, the accumulation of reserves affects the course of the economy. The estimates examined the impact of the implementation of the reform, under different scenarios with different hypothetical application rates of the new supplement to the population for which it will be optional, different percentages of all domestically directed investments, as well as different long-term returns on investments. The macroeconomic effects of the reforms were studied by performing simulations of the implementation of alternative policy scenarios with the Global Integrated Monetary and Fiscal Model (GIMF) macroeconomic model. In the context of the macroeconomic analysis, the financial gap that will arise from the redirection of the



supplementary insurance contributions for their capitalization will be covered through public borrowing, in proportion to the working hypotheses of the alternative scenarios.

## 4.2 Methodology

In order to calculate the supplementary pension insurance contributions paid by the insured, as well as the corresponding pension benefits that the insured will receive when they retire, microeconomic calculations were performed that monitor the transitions of the insured between labour force, financial inactivity and pension, registration the age of the insured and the history of their working life at any time. Under this model, the number of employees, the unemployed, the retired and the economically inactive were calculated per year, for a long period. For these calculations, statistical data and projections for a number of financial figures were used by Eurostat, ELSTAT, the National Actuarial Authority (EAA), the National Social Security Agency (EFKA) and the Council of Economic Experts (SOE) of the Ministry of Finance.

With the implementation of the reform, the new Auxiliary Insurance Fund is created, which collects resources from the contributions of the insured and will pay pensions when the insured retire. The accumulated resources (stock) of the Fund, at any given time, are placed in a set of investments. Part of the Fund's resources are considered to be located abroad, another part is placed in Greek Government bonds and the rest, the third part of the Fund's resources, is invested in domestic investments other than Greek Government bonds (domestic productive investments). These placements generate annual return on investment. The return on investment received by the Fund is added to its resources, capitalized and reinvested. In all the scenarios examined, it is assumed that 20% of the Fund's resources are invested abroad. Various cases are being considered regarding the part of the Fund's resources that is placed in domestic productive investments, thus contributing to the formation of new fixed capital in Greece, and in Greek Government bonds. Various assumptions are also considered regarding the amount of the average real annual return on the Fund's investments.

The study examines 18 scenarios, covering different price combinations for three basic parameters: a) the degree of optional participation in the new system by those already insured in the former ETEAEP up to 35 years, as well as by insured without auxiliary insurance to date, (b) the percentage of reserves that are channelled into domestic productive investments; and (c) the average annual real rate of return on invested capital over the long term. These scenarios are contrasted with the "no reform" scenario, which assumes that the current system of supplementary capitalization (NDC) insurance remains in place. Table 4.1 summarises the scenarios under consideration. The basic scenario of the reform proposal (baseline scenario, MMM) concerns the case in which 20% of the former ETEAEP policyholders (before 2023) and 5% of the former OAEE policyholders participate voluntarily in the new system, 80% of the reserves are invested domestically, of which 50% in domestic productive investments (fixed capital formation) and 30% in Greek Government bonds, while the average annual real rate of return on the Fund's investments is 2%.

The economic impact of the implementation of each supplementary pension reform scenario was assessed by performing simulations with the Global Integrated Monetary and Fiscal Model (GIMF) macroeconomic model). The GIMF is a dynamic stochastic macroeconomic model of general equilibrium (DSGE model), developed by the International Monetary Fund and widely used to study the effects of changes in economic policy. The calibration of the model was based on statistical data for Greece by Eurostat for 2019.

Table 4.1

Parameter values per scenario

#	Scenario name	Percentage of ETEAEP insured persons (before 2023) participating	Percentage of OAEE insured persons participating	Percentage of resources placed in domestic investments	Actual return on investments
1	MMM (Base)	20%	5%	50%	2,0%
2	HMM	30%	10%	50%	2,0%
3	QMM	30%	5%	50%	2,0%
4	RMM	20%	10%	50%	2,0%
5	SMM	10%	10%	50%	2,0%
6	TMM	10%	5%	50%	2,0%
7	LMM	0%	0%	50%	2,0%
8	MHO	20%	5%	60%	3,1%
9	MHH	20%	5%	60%	2,5%
10	MHM	20%	5%	60%	2,0%
11	MLM	20%	5%	40%	2,0%
12	MLL	20%	5%	40%	1,5%
13	MMO	20%	5%	50%	3,1%
14	MMH	20%	5%	50%	2,5%
15	MML	20%	5%	50%	1,5%
16	HHO (optimistic)	30%	10%	60%	3,1%
17	HHH	30%	10%	60%	2,5%
18	LLL (conservative)	0%	0%	40%	1,5%

Source: IOBE

The simulations relate to the period 2022-2070. Each simulation examines the effects of a series of shocks on the economy, which corresponds to the implementation of a scenario relating to the parameters of the reform. In particular, each simulation examines the results of domestic investments, in the form of an external shock to the economy, as these investments are projected to result from the implementation of the scenario under consideration. The results of the tests are presented as differences from the 'no reform' scenario. The results therefore reflect a comparison of estimated trends in macroeconomic variables, such as GDP and employment, in the reform scenarios, as opposed to an estimate of the long-term trend that the same variables would have in the 'no reform' scenario.

## 4.3 Results

The results of the analysis show that the implementation scenarios of the reform bring about a significant increase in economic activity over time, which begins to be felt from the earliest years. They also highlight the impact of the reform on domestic investment and the government bond market. The analysis examined the funding gap and the time horizon required to fully cover it, as well as the budgetary effects so directly, due to a decrease in revenues from contributions, as well as indirectly, through the medium- to long-term increase of public revenues from enhanced economic activity. Estimates are made of the main economic variables in the different scenarios, on the basis of a sensitivity analysis in relation to (1) the degree of voluntary participation in the new supplementary insurance, (2) the part of the reserves of the Fund of the new supplementary insurance that will be channelled into domestic productive investments and (3) the actual annual rate of return on investments.



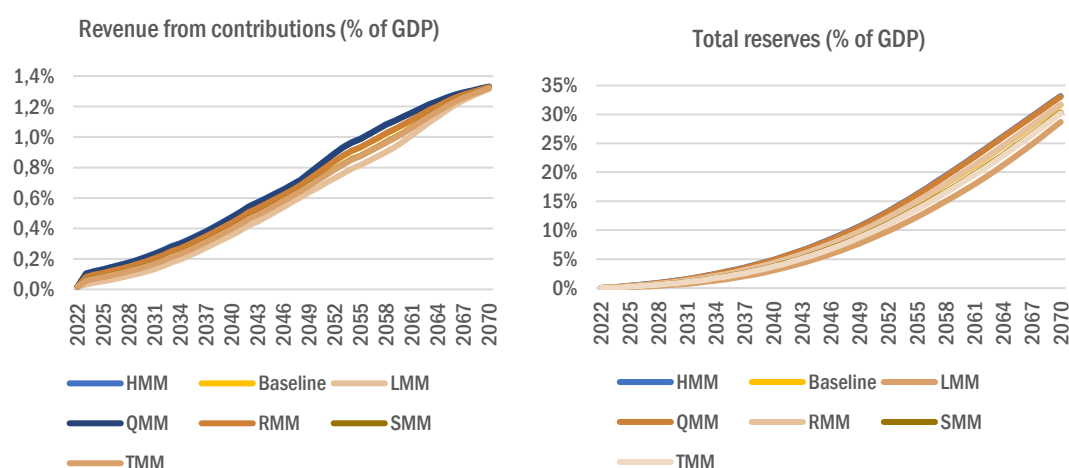
### Degree of participation in the new system

Examining the alternative scenarios regarding the percentage of new employees who voluntarily choose to join the new auxiliary system (see Table 4.1), it is observed that the number of insured people ends up converging at the level of 3.0 to 3.1 million people. at the end of the period under review, in 2070, while revenues from contributions to the new system start from €34 to €35 million in 2022 and reach €12.6 to €12.7 billion in 2070, at current prices (Figure 4.1). Towards the end of the period, the number of retirees will range between 216 thousand and 454 thousand people, with the pension expenditure ranging between €1.9 and €3.9 billion. The effect on the Fund reserve is between €289 and €316 billion (29% and 33% of GDP) (Figure 4.1), while there is a positive effect on new investments at levels of about 1% of GDP per year at the end of the period.

The implementation of the reform leads to an increase in the country's GDP by a percentage ranging between 6% and 7% in the various participation scenarios, in 2070, compared to the level of GDP that would be recorded if the reform did not take place. Respectively, the implementation of the reform leads to an increase in employment by about 0.4% in 2070, compared to the level of employment without the reform.

Figure 4.1

Annual revenue from contributions and reserve of the Fund (sum of flows in nominal terms), as % of GDP, per participation scenario



Source: IOBE analysis

The estimated net fiscal impact of the cash-based reform includes (a) the direct negative impact on public cash inflows from insured persons' contributions to the new system, which are now directed to the fund for investments; (b) the positive impact of the reduced public cash outflows for supplementary pensions of pensioners in the new system, especially towards the end of the period under review, since these are now covered by the fund's reserves; (c) the positive effect on public funding resulting from the assumption that a certain percentage of the reserves are used to purchase Greek government bonds, and (d) the positive indirect effect on tax revenues resulting from the economic growth brought about by the reform.

Among the participation scenarios, there is initially a net annual budgetary cost on a cash basis during most of the first decade of implementation of the reform, which is gradually declining and is soon fully offset on a cumulative basis. Scenarios with higher participation result in higher net fiscal costs in the first years of implementation, up to 0.2% of GDP, but at the same time in these scenarios there is a faster transition to a net fiscal benefit,

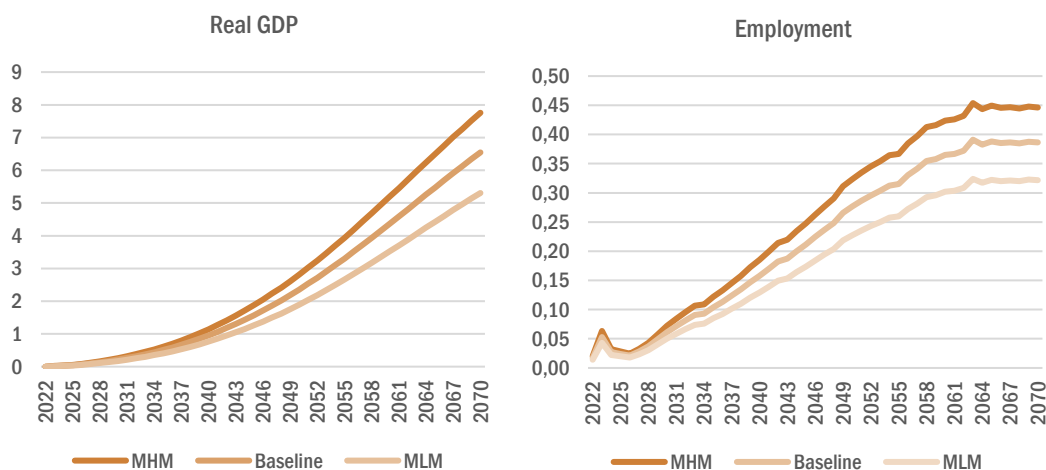
which translates into faster recovery of implementation costs over time, as opposed to scenarios with low participation. Among the participation scenarios, the cumulative fiscal balance becomes positive for the first time between 2039 and 2044.

### Percentage of investments in domestic investments

Looking at the alternative scenarios regarding the percentage of the Fund's reserves placed in domestic productive investments (see Table 4.1), a positive annual impact on new investments domestically of between 0.9% and 1.3% of GDP in 2070 emerges. Real GDP stands at levels between 5% and 8% higher in 2070, compared to the level of GDP that would have been recorded without the reform. Similarly, employment in 2070 reaches levels of 0.3% and 0.45% higher than without the reform (Figure 4.2). Taking into account all the parameters that affect the revenues and expenditures of the government, the cumulative net fiscal result becomes positive for the first time between the years 2039 and 2040.

Figure 4.2

Impact on real GDP and employment in the country, per domestic investment scenario, % variation from the corresponding level without reform, in percentage points



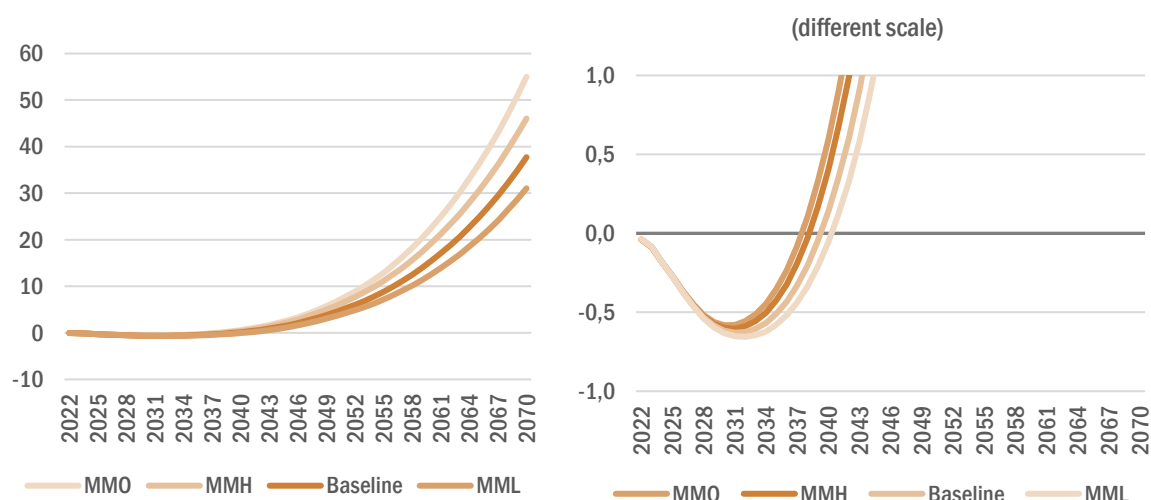
Source: IOBE analysis

### Actual return on investments

Looking at the alternative scenarios for the average real annual return on the Fund's investments (see Table 4.1), a positive annual impact on new investments of up to 1.3% of GDP in 2070 emerges. GDP stands at levels ranging from 6.1% to 7.6% higher in 2070, compared to the level of GDP that would have been recorded without the reform. Similarly, employment in 2070 reaches levels between 0.35% and 0.47% higher than without the reform. Taking into account all the figures that affect public revenues and expenditures, the cumulative net fiscal balance becomes positive for the first time between the years 2038 and 2041 (Figure 4.3 - right the same chart is presented as on the left, but with a different scale on the vertical axis, in order to highlight the years in which fiscal cash balance is achieved - break even).

Figure 4.3

Cumulative net fiscal impact per real yield scenario, difference from the level without reform, € billion, constant 2019 prices



Source: IOBE analysis

### Most optimistic and more conservative scenario

Of particular interest are the scenarios with the most optimistic and the most conservative combination of assumptions (scenarios HHO, HHH and LLL, see Table 4.1). These scenarios result in an annual impact on new domestic investments between €7.7 billion. and €15.5 billion. (0.8% to 1.6% of GDP) in 2070. Under these scenarios, GDP is between 4.5% and 9.5% higher in 2070, compared to the level of GDP that would have been recorded without the reform. Similarly, employment in 2070 reaches levels between 0.31% and 0.53% higher than without the reform. Taking into account all the figures affecting government revenues and expenditures, the cumulative net fiscal result appears positive for the first time between 2038 and 2045.

### Adequacy of the new system

The adequacy of pensions refers to the extent to which the social security system protects the elderly from poverty and ensures that a stable income is maintained, which is as similar as possible to that which the pensioner had in his or her working life. For each of the reform scenarios under consideration, it is estimated that the total payments for supplementary pension in 2070 would be greater than the payments that would have been made without reform. In addition, it is estimated that the average annual supplementary pension will be higher than the supplementary pension in the old system for each of the scenarios considered. Since the amount of supplementary pensions to be paid under the old supplementary insurance scheme was already deemed sufficient, there is no evidence to call into question the adequacy of pensions in the new supplementary scheme under the present assumptions.

## 4.4 Conclusions

The implementation of the reform of the supplementary insurance system introduced by Law 4826/2021, leads to a significant strengthening of Greece's GDP, compared to the level of economic activity if the reform had not been implemented. This GDP growth in the baseline scenario reaches 6.55% in 2070. Under the optimistic scenario (HHO), the country's GDP strengthens due to the reform by 9.5% in 2070, compared to the level of economic activity if the reform is not implemented. The sensitivity analysis showed that the effects of the reform on the country's GDP are significantly affected by the alternative assumptions about the return on investment of the Fund and the part of the Fund's

resources invested domestically in productive investment, but are not equally affected by alternative cases for voluntary participation in the new supplementary insurance system. The reform's implementation leads to a smaller but significant increase in employment in the country, compared to the level of employment if the reform had not been implemented. In the baseline scenario, employment strengthened by 0.39% in 2070 due to the reform, compared to the level of employment if the current system were maintained. Under the optimistic scenario, employment growth reaches 0.53% in 2070, compared to the maintenance of the current system.

The implementation of the reform has a direct budgetary cost on a cash basis, since it causes a funding gap, as the contributions of the insured persons under the new system no longer constitute revenue of the State. However, one of the beneficial effects of the strengthening of economic activity, which is caused by the implementation of the reform, is the strengthening of public tax revenues. It is extremely important that this increase in public revenues in the short term fully compensates, in real terms, for the annual budget gap created by the reform. The increased government revenues, due to the growth generated by the implementation of the reform, fully cover the cumulative fiscal losses in real terms in 2040, under the baseline scenario. Under the optimistic scenario this cumulative fiscal balance occurs two years earlier, in 2038.

Moreover, comparing the estimated average level of new supplementary pensions with that of existing supplementary pensions shows an expected increase in the average income of the pensioner in each of the scenarios considered. The reform therefore does not worsen the adequacy of pensions compared to the 'no reform' scenario.

## APPENDIX

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**Table 1: GDP Rate of Change**

	Annual data (%)							
	2013	2014	2015	2016	2017	2018	2019	2020
Austria	0.0	0.7	1.0	2.0	2.4	2.6	1.4	-6.7
Belgium	0.5	1.6	2.0	1.5	1.9	1.5	1.4	-6.3
Bulgaria	0.3	1.9	4.0	3.8	3.5	3.1	3.4	-4.2
France	0.6	1.0	1.1	1.1	2.3	1.8	1.5	-7.9
Germany	0.4	2.2	1.5	2.2	2.6	1.3	0.6	-4.6
Denmark	0.9	1.6	2.3	3.2	2.8	2.2	2.8	-2.1
Czech Republic	0.0	2.3	5.4	2.5	5.2	3.2	2.3	-5.8
EU 27	0.0	1.6	2.3	2.0	2.8	2.1	1.5	-5.9
Greece	-2.7	0.7	-0.4	-0.5	1.3	1.6	1.9	-9.0
Estonia	1.3	3.0	1.8	3.2	5.5	4.4	5.0	-3.0
Euro area	-0.2	1.4	2.0	1.9	2.6	1.8	1.3	-6.3
Ireland	1.2	8.6	25.2	2.0	9.1	8.5	5.6	5.9
Spain	-1.4	1.4	3.8	3.0	3.0	2.4	2.0	-10.8
Italy	-1.8	0.0	0.8	1.3	1.7	0.9	0.3	-8.9
Croatia	-0.5	-0.1	2.4	3.5	3.1	2.7	2.9	-8.0
Cyprus	-6.6	-1.8	3.2	6.4	5.2	5.2	3.1	-5.2
Latvia	2.3	1.1	4.0	2.4	3.3	4.0	2.1	-3.6
Lithuania	3.6	3.5	2.0	2.5	4.3	3.9	4.3	-0.1
Luxembourg	3.7	4.3	4.3	4.6	1.8	3.1	2.3	-1.8
Malta	5.5	7.6	9.6	3.9	8.0	5.2	4.9	-8.3
Netherlands	-0.1	1.4	2.0	2.2	2.9	2.4	1.7	-3.8
Hungary	1.9	4.2	3.8	2.1	4.3	5.4	4.6	-4.7
Poland	1.1	3.4	4.2	3.1	4.8	5.4	4.5	-2.5
Portugal	-0.9	0.8	1.8	2.0	3.5	2.8	2.2	-8.4
Romania	3.8	3.6	3.0	4.7	7.3	4.5	4.2	-3.9
Slovakia	0.7	2.6	4.8	2.1	3.0	3.8	2.3	-4.4
Slovenia	-1.0	2.8	2.2	3.2	4.8	4.4	3.2	-4.2
Sweden	1.2	2.7	4.5	2.1	2.6	2.0	1.3	-2.8
Finland	-0.9	-0.4	0.5	2.8	3.3	1.5	1.1	-2.9

**Table 2: General Government Debt as % of GDP**

	Annual data (%)							
	2013	2014	2015	2016	2017	2018	2019	2020
Austria	81.3	84	84.9	82.9	78.3	74	70.4	83.9
Belgium	105.5	107	105.2	104.9	101.7	99.8	98.6	114.1
Bulgaria	17.1	27.1	26	29.3	25.3	22.3	20.4	25
France	93.4	94.9	95.6	98	98.3	98.1	98.1	115.7
Germany	78.7	75.7	72.1	69.2	65.3	61.9	59.8	69.8
Denmark	44	44.3	39.8	37.2	35.8	33.9	33.2	42.2
Czech Republic	44.9	42.2	40	36.8	34.7	32.6	30.8	38.1
EU 27	92.6	92.8	90.9	90	87.8	85.8	84.1	98
Greece	177.4	178.9	175.9	178.5	176.2	181.2	176.6	205.6
Estonia	10.2	10.6	10	10.2	9.3	8.4	8.4	18.2
Euro area	86.4	86.6	84.7	84	81.6	79.6	77.8	90.7
Ireland	119.9	104.4	76.7	73.8	67.7	63.5	58.8	59.5
Spain	95.8	100.7	99.3	99.2	98.6	97.6	95.5	120
Italy	132.5	135.4	135.3	134.8	134.1	134.8	134.8	155.8
Croatia	81.2	84.7	84.3	80.8	77.8	74.7	73.2	88.7
Cyprus	104	109.2	107.5	103.4	93.9	100.6	95.5	118.2
Latvia	40.3	41.6	37.3	40.9	39.3	37.2	36.9	43.5
Lithuania	38.7	40.6	42.6	39.7	39.1	33.8	36.3	47.3
Luxembourg	23.7	22.7	22	20.1	22.3	21	22.1	24.9
Malta	68.4	63.4	58	55.5	50.3	45.6	43.1	54.3
Netherlands	67.7	67.8	64.6	61.9	56.9	52.4	48.6	54.5
Hungary	77.4	76.8	76.2	75.5	72.9	70.2	66.3	80.4
Poland	56	50.8	51.3	54.3	50.6	48.8	46	57.5
Portugal	131.4	132.9	131.2	131.5	126.1	122	117.7	133.6
Romania	37.6	39.2	37.8	37.3	35.1	34.7	35.2	47.3
Slovakia	54.7	53.5	51.9	52	51.3	49.4	48	60.6
Slovenia	70	80.3	82.6	78.7	74.1	70.4	66.1	80.8
Sweden	40.4	45.1	43.9	42.2	40.8	38.8	35.1	39.9
Finland	56.2	59.8	63.6	63.2	61.3	59.6	59.4	69.2

**Table 3: General government balance as % of GDP**

	Annual data (%)							
	2013	2014	2015	2016	2017	2018	2019	2020
Austria	-2	-2.7	-1	-1.5	-0.8	0.2	0.7	-8.9
Belgium	-3.1	-3.1	-2.4	-2.4	-0.7	-0.8	-1.9	-9.4
Bulgaria	-0.4	-5.4	-1.7	0.1	1.1	2	2.1	-3.4
France	-4.1	-3.9	-3.6	-3.6	-2.9	-2.3	-3	-9.2
Germany	0	0.6	0.9	1.2	1.2	1.9	1.4	-4.2
Denmark	-1.2	1.1	-1.2	0.1	1.8	0.7	3.7	-1.1
Czech Republic	-1.2	-2.1	-0.6	0.7	1.5	0.9	0.3	-6.2
EU 27	-2.9	-2.4	-1.9	-1.3	-0.8	-0.4	-0.6	-6.9
Greece	-13.2	-3.6	-5.6	0.5	0.7	1	1.5	-9.7
Estonia	0.2	0.7	0.1	-0.5	-0.8	-0.6	-0.3	-4.9
Euro area	-3	-2.5	-2	-1.5	-1	-0.5	-0.6	-7.2
Ireland	-6.2	-3.6	-2	-0.7	-0.3	0.1	0.4	-5.0
Spain	-7	-5.9	-5.2	-4.3	-3	-2.5	-2.8	-11.0
Italy	-2.9	-3	-2.6	-2.4	-2.4	-2.2	-1.6	-9.5
Croatia	-5.3	-5.3	-3.3	-1	0.8	0.2	0.4	-7.4
Cyprus	-5.8	-8.7	-1	0.3	2	-3.7	1.7	-5.7
Latvia	-1.2	-1.6	-1.4	0.2	-0.8	-0.8	-0.2	-4.5
Lithuania	-2.6	-0.6	-0.3	0.2	0.5	0.6	0.3	-7.4
Luxembourg	0.8	1.3	1.3	1.8	1.3	3.1	2.2	-4.1
Malta	-2.4	-1.7	-1	1	3.3	1.9	0.5	-10.1
Netherlands	-2.9	-2.2	-2	0	1.3	1.4	1.7	-4.3
Hungary	-2.6	-2.8	-2	-1.8	-2.5	-2.1	-2	-8.1
Poland	-4.2	-3.6	-2.6	-2.4	-1.5	-0.2	-0.7	-7.0
Portugal	-5.1	-7.4	-4.4	-1.9	-3	-0.4	0.2	-5.7
Romania	-2.1	-1.2	-0.6	-2.6	-2.6	-2.9	-4.3	-9.2
Slovakia	-2.9	-3.1	-2.7	-2.5	-1	-1	-1.3	-6.2
Slovenia	-14.6	-5.5	-2.8	-1.9	0	0.7	0.5	-8.4
Sweden	-1.4	-1.5	0	1	1.4	0.8	0.5	-3.1
Finland	-2.5	-3	-2.4	-1.7	-0.7	-0.9	-1.1	-5.4

**Table 4: Percentage of Population in Poverty or Social Exclusion \* (see. p. 189)**

	Annual data (%)							
	2013	2014	2015	2016	2017	2018	2019	2020
Austria	18.8	19.2	18.3	18.0	18.1	17.5	16.9	17.5
Belgium	20.8	21.2	21.1	20.9	20.6	20.0	19.5	18.9
Bulgaria	48.0	40.1	41.3	40.4	38.9	32.8	32.5	32.1
France	18.1	18.5	17.7	18.2	17.0	17.4	17.9	18.2
Germany	20.3	20.6	20.0	19.7	19.0	18.7	17.4	24.0
Denmark	18.3	17.9	17.7	16.8	17.2	17.4	16.3	15.9
Czech Republic	14.6	14.8	14.0	13.3	12.2	12.2	12.5	11.9
EU 27	24.6	24.5	23.8	23.7	22.5	21.6	21.1	:
Greece	35.7	36.0	35.7	35.6	34.8	31.8	30	28.9
Estonia	23.5	26.0	24.2	24.4	23.4	24.4	24.3	23.3
Euro area	23.1	23.5	23.1	23.1	22.1	21.6	21.1	:
Ireland	29.9	27.7	26.2	24.4	22.7	21.1	:	:
Spain	27.3	29.2	28.6	27.9	26.6	26.1	25.3	26.4
Italy	28.5	28.3	28.7	30.0	28.9	27.3	:	:
Croatia	29.9	29.3	29.1	27.9	26.4	24.8	23.3	23.2
Cyprus	27.8	27.4	28.9	27.7	25.2	23.9	22.3	21.3
Latvia	35.1	32.7	30.9	28.5	28.2	28.4	27.3	:
Lithuania	30.8	27.3	29.3	30.1	29.6	28.3	26.3	24.8
Luxembourg	19.0	19.0	18.5	19.8	21.5	21.9	20.6	20.9
Malta	24.6	23.9	23.0	20.3	19.3	19.0	20.1	19.0
Netherlands	15.9	16.5	16.4	16.7	17.0	16.7	16.5	16.3
Hungary	34.8	31.8	28.2	26.3	25.6	19.6	18.9	17.8
Poland	25.8	24.7	23.4	21.9	19.5	18.9	18.2	17.3
Portugal	27.5	27.5	26.6	25.1	23.3	21.6	21.6	19.8
Romania	41.9	40.3	37.4	38.8	35.7	32.5	31.2	30.4
Slovakia	19.8	18.4	18.4	18.1	16.3	16.3	16.4	14.8
Slovenia	20.4	20.4	19.2	18.4	17.1	16.2	14.4	15.0
Sweden	18.3	18.2	18.6	18.3	17.7	18.0	18.8	17.9
Finland	16.0	17.3	16.8	16.6	15.7	16.5	15.6	16.0

**Table 5: Inflation**



	Annual data (%)			January - August			Change (%)	
	2018	2019	2020	2019	2020	2021	2021/20	2020/19
Austria	2.1	1.5	1.4	1.6	1.5	2.4	0.9	0.0
Belgium	2.3	1.3	0.4	1.6	0.5	1.7	1.3	-1.2
Bulgaria	2.6	2.5	1.2	2.6	1.6	1.6	0.0	-1.0
France	2.1	1.3	0.5	1.3	0.8	1.2	0.5	-0.6
Germany	1.9	1.4	0.4	1.5	0.8	2.4	1.5	-0.6
Denmark	0.7	0.7	0.3	0.8	0.3	1.5	1.2	-0.5
Czech Republic	2.0	2.6	3.3	2.4	3.5	3.0	-0.5	1.0
EU 27	1.8	1.4	0.7	1.5	0.9	2.0	1.1	-0.6
Greece	0.8	0.5	-1.3	0.6	-0.8	-0.8	0.0	-1.4
Estonia	3.4	2.3	-0.6	2.5	-0.3	2.5	2.8	-2.8
Euro area	1.8	1.2	0.3	1.3	0.5	1.7	1.2	-0.8
Ireland	0.7	0.9	-0.5	0.9	-0.1	1.0	1.1	-1.0
Spain	1.7	0.8	-0.3	1.0	-0.1	1.9	2.0	-1.1
Italy	1.2	0.6	-0.1	0.8	0.1	1.2	1.1	-0.8
Croatia	1.6	0.8	0.0	0.8	0.1	2.1	1.9	-0.6
Cyprus	0.8	0.6	-1.1	0.8	-1.0	1.0	2.0	-1.8
Latvia	2.6	2.7	0.1	3.0	0.4	2.0	1.6	-2.6
Lithuania	2.5	2.2	1.1	2.4	1.4	3.3	1.9	-0.9
Luxembourg	2.0	1.7	0.0	1.9	0.2	2.6	2.3	-1.6
Malta	1.7	1.5	0.8	1.6	1.0	0.4	-0.6	-0.6
Netherlands	1.6	2.7	1.1	2.7	1.2	1.8	0.6	-1.4
Hungary	2.9	3.4	3.4	3.5	3.6	4.7	1.2	0.1
Poland	1.2	2.1	3.7	1.9	3.7	4.5	0.9	1.7
Portugal	1.2	0.3	-0.1	0.4	0.1	0.3	0.2	-0.3
Romania	4.1	3.9	2.3	4.0	2.6	3.0	0.5	-1.5
Slovakia	2.5	2.8	2.0	2.6	2.3	2.6	0.3	-0.4
Slovenia	1.9	1.7	-0.3	1.7	0.0	1.3	1.2	-1.7
Sweden	2.0	1.7	0.7	1.8	0.8	1.9	1.1	-1.0
Finland	1.2	1.1	0.4	1.2	0.5	1.4	1.0	-0.8

Table 6: GDP per Capita (in PPS, EE-27 =1)

	Annual data (%)							
	2013	2014	2015	2016	2017	2018	2019	2020
Austria	1.10	1.11	1.11	1.12	1.13	1.13	1.13	1.14
Belgium	1.12	1.12	1.11	1.12	1.13	1.13	1.13	1.12
Bulgaria	0.94	0.92	0.94	0.96	0.99	1.01	1.03	1.05
France	1.13	1.13	1.12	1.12	1.12	1.11	1.09	1.09
Germany	1.07	1.07	1.08	1.08	1.08	1.09	1.10	1.12
Denmark	10.20	10.23	10.16	10.20	10.03	9.96	9.96	9.88
Czech Republic	17.72	17.73	18.00	18.11	18.11	18.23	18.58	18.95
EU 27	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Greece	0.88	0.85	0.85	0.85	0.84	0.83	0.83	0.81
Estonia	0.72	0.74	0.75	0.76	0.78	0.80	0.81	0.80
Euro area	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.06
Ireland	1.12	1.14	1.13	1.14	1.16	1.16	1.19	1.17
Spain	0.94	0.92	0.92	0.93	0.92	0.93	0.94	0.92
Italy	1.02	1.03	1.03	1.01	1.00	1.00	1.00	0.99
Croatia	4.96	4.95	4.89	4.87	4.87	4.90	4.90	4.80
Cyprus	0.95	0.95	0.92	0.90	0.90	0.90	0.90	0.91
Latvia	0.69	0.69	0.69	0.70	0.71	0.72	0.74	0.72
Lithuania	0.61	0.62	0.62	0.63	0.65	0.66	0.68	0.68
Luxembourg	1.24	1.23	1.23	1.23	1.24	1.24	1.26	1.28
Malta	0.80	0.82	0.83	0.84	0.85	0.86	0.86	0.86
Netherlands	1.11	1.13	1.13	1.15	1.14	1.15	1.17	1.16
Hungary	173.26	180.63	184.37	190.13	196.61	203.17	210.42	221.55
Poland	2.44	2.47	2.46	2.50	2.54	2.58	2.61	2.67
Portugal	0.81	0.81	0.81	0.82	0.84	0.85	0.85	0.85
Romania	2.23	2.27	2.31	2.30	2.35	2.45	2.53	2.56
Slovakia	0.68	0.68	0.68	0.72	0.74	0.74	0.75	0.79
Slovenia	0.82	0.83	0.83	0.83	0.83	0.84	0.84	0.83
Sweden	11.92	12.18	12.32	12.70	12.76	12.98	13.06	13.12
Finland	1.26	1.27	1.26	1.27	1.26	1.26	1.27	1.26

Table 7: Average Labour Productivity (euro per hour of work, EE-27 =100)

	Annual data							
	2013	2014	2015	2016	2017	2018	2019	2020

Austria	117.3	116.8	117.3	117.5	116.3	116.5	115.5	114.4
Belgium	130.2	131.2	131.6	130.7	129.7	129.2	129.1	126.3
Bulgaria	42.9	44	44.5	45.7	46	47.1	48.6	50.3
France	116.8	116.1	115.7	115.3	114.9	115.3	116.7	114.8
Germany	104.3	106.3	105.3	105.9	105.7	105.1	103.6	103.5
Denmark	115.5	115.5	114.9	114.8	116	116.7	116.9	121.9
Czech Republic	76.8	79.3	79.9	79.9	81.4	83.8	85.3	86.7
EU 27	100	100	100	100	100	100	100	100
Greece	87.2	86.4	83.5	81.5	80.6	80.5	78.5	69.7
Estonia	73.8	75.4	72.4	73	74.2	76.7	78.7	82.7
Euro area	107.5	107.6	107.3	107.2	106.9	106.4	105.7	105
Ireland	143	146.5	188.6	182.3	187	195.1	196.9	218.4
Spain	103.4	103.3	102.2	101.8	101.5	99.6	98.2	95.7
Italy	109.4	107.7	106.6	108.1	107.4	106.4	104.9	102.8
Croatia	73.5	70.8	70.7	72	71.9	72.7	72.1	71.1
Cyprus	86	84	84.9	87.1	85.5	85.3	83.7	82.7
Latvia	62.6	64.7	64.4	64.8	66.7	68.6	68.7	71.9
Lithuania	74.1	74.4	72.8	71.8	75	76	77.5	82.5
Luxembourg	163.8	169.7	169.6	170.8	166	164.6	162	163.3
Malta	89.7	91.5	95.2	95.9	94.1	94.4	93.5	90.6
Netherlands	115.4	113.5	112.8	110.5	110.5	109.8	108	111.6
Hungary	73.1	71.4	70.9	67.4	67.7	70	71.6	71.4
Poland	74.1	73.8	74.5	74	74.9	76.7	80.1	82
Portugal	79.9	79	78.3	77.9	75.8	75.1	76.1	74.4
Romania	56.2	56.7	58.6	63.1	66.1	68.7	72.6	74.6
Slovakia	84.1	84.3	83.5	77	75.7	76.2	76.2	75
Slovenia	81.1	81.5	80.6	80.8	81.7	82.1	81.9	83.4
Sweden	115.9	115.2	116.7	113.4	112.9	111.6	112.2	115.6
Finland	108.3	107.7	107.6	108.1	109	107.9	106.6	110.5

Table 8: Employment Rate for People aged 20-64 (\*)

	Annual data (%)			Q2			Change (%)	
	2018	2019	2020	76.9	74.3	74.9	2020/19	2019/18
Austria	76.2	76.8	75.5	71.0	69.6	70.5	-1.3	0.7
Belgium	69.7	70.5	70.0	75.7	72.2	72.7	-0.5	0.8
Bulgaria	72.4	75.0	73.4	71.8	70.8	73.3	-1.6	2.6
France	71.3	71.6	71.4	80.5	:	79.4	-0.2	0.3
Germany	79.9	80.7		78.3	77.4	79.0		0.8
Denmark	77.5	78.3	77.8	80.2	79.4	79.2	-0.5	0.8
Czech Republic	79.9	80.3	79.7	73.2	71.6	73.0	-0.6	0.4
EU 27	72.3	73.1	72.4	61.9	60.5	62.3	-0.7	0.8
Greece	59.5	61.2	61.1	79.3	77.3	78.0	-0.1	1.7
Estonia	79.5	80.2	78.8	72.7	70.9	72.4	-1.4	0.7
Euro area	71.9	72.6	71.7	74.8	71.4	74.1	-0.9	0.8
Ireland	74.1	75.1	73.4	68.2	63.7	67.4	-1.8	1.0
Spain	67	68.1	65.7	64.0	62.0	62.7	-2.3	1.0
Italy	63	63.5	62.6	66.4	67.1	68.3	-1.0	0.6
Croatia	65.2	66.7	66.9	76.6	75.2	75.2	0.2	1.5
Cyprus	73.9	75.7	75.0	77.2	76.8	75.1	-0.8	1.8
Latvia	76.8	77.4	77.0	78.4	76.4	77.0	-0.4	0.5
Lithuania	77.8	78.2	76.7	73.2	71.9	74.5	-1.6	0.4
Luxembourg	72.1	72.8	72.1	76.9	76.3	78.0	-0.6	0.7
Malta	75.5	77.2	77.4	80.1	79.6	82.3	0.6	1.3
Netherlands	79.2	80.2	80.0	75.2	74.0	78.6	-0.2	0.9
Hungary	74.4	75.3	75.1	73.1	72.7	75.1	-0.3	0.9
Poland	72.2	73.0	73.6	76.1	73.5	76.0	0.5	0.9
Portugal	75.4	76.2	74.7	71.6	70.4	67.5	-1.5	0.8
Romania	69.9	70.9	70.8	73.0	71.7	74.0	-0.2	1.1
Slovakia	72.4	73.4	72.5	77.1	74.9	76.8	-0.9	0.9
Slovenia	75.4	76.5	75.6	82.4	80.7	81.1	-0.9	1.0
Sweden	82.4	82.1	80.8	77.5	75.9	77.4	-1.3	-0.3
Finland	76.3	77.2	76.5	76.9	74.3	74.9	-0.8	0.9

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

Table 9: Employment rate for people aged 55-64 (\*)

	Annual data (%)			Q2			Change (%)	
	2018	2019	2020	2018	2019	2020	2020/2019	2019/2018
Austria	54.0	54.5	54.7	54.2	54.2	55.0	0.2	0.5
Belgium	50.3	52.1	53.3	52.3	53.5	54.4	1.2	1.8
Bulgaria	60.7	64.4	64.2	65.0	64.0	64.6	-0.2	3.7

France	52.3	53.0	53.8	53.1	53.6	55.7	0.7	0.8
Germany	71.4	72.7		72.3	:	71.5		1.3
Denmark	69.2	71.3	71.4	72.1	71.4	71.7	0.1	2.1
Czech Republic	65.1	66.7	68.2	66.7	68.1	68.4	1.5	1.6
EU 27	57.8	59.1	59.6	59.1	59.2	60.2	0.5	1.3
Greece	41.1	43.2	44.6	43.6	43.9	48.4	1.4	2.1
Estonia	68.9	72.5	72.0	71.3	69.9	69.0	-0.5	3.5
Euro area	58.8	60.0	60.2	60.0	59.8	60.8	0.2	1.3
Ireland	60.4	61.8	61.8	61.3	61.1	61.2	0.0	1.4
Spain	52.2	53.8	54.7	53.9	53.7	55.4	0.9	1.7
Italy	53.7	54.3	54.2	54.8	54.0	53.5	0.0	0.6
Croatia	42.8	44.0	45.5	45.0	45.3	48.4	1.5	1.2
Cyprus	60.9	61.1	61.0	62.4	61.0	62.2	-0.2	0.2
Latvia	65.4	67.3	68.6	67.0	69.4	68.1	1.2	1.9
Lithuania	68.5	68.4	67.6	69.4	66.8	69.4	-0.8	-0.1
Luxembourg	40.5	43.1	44.0	42.6	43.0	47.7	0.9	2.7
Malta	50.2	51.6	52.9	50.3	52.7	54.7	1.8	0.9
Netherlands	67.7	69.7	71.0	69.3	70.7	71.7	1.3	2.0
Hungary	54.4	56.7	59.6	56.1	58.8	62.2	2.9	2.3
Poland	48.9	49.6	51.8	49.2	50.6	53.8	2.3	0.6
Portugal	59.2	60.4	60.8	60.3	59.3	63.8	0.4	1.2
Romania	46.3	47.8	48.5	48.1	48.2	43.6	0.7	1.5
Slovakia	54.2	57.0	58.3	57.1	58.1	59.7	1.3	2.8
Slovenia	47.0	48.6	50.5	49.7	51.5	55.0	1.8	1.6
Sweden	78.0	77.7	77.6	77.9	77.2	76.8	-0.1	-0.3
Finland	65.4	66.8	67.5	66.6	66.7	68.2	0.7	1.3

(\*) % of employed people between 55 and 64 in relation to their total population

**Table 10: Change in Employment (persons aged over 15)**

	Annual data (%)			Q2		
	2018	2019	2020	2019	2020	2021
Austria	1.3	0.9	-1.3	0.8	-3.1	0.9
Belgium	2.4	1.5	-0.6	3.1	-1.8	1.4
Bulgaria	-0.1	2.2	-3.6	2.8	-5.9	-0.2
France	0.8	0.2	-0.6	0.3	-1.8	3.6
Germany	0.4	1.0		1.0	:	:
Denmark	1.5	1.5	-0.9	1.2	-1.7	2.1
Czech Republic	1.0	0.1	-1.2	0.0	-1.5	-0.8
EU 27	1.1	0.9	-1.4	0.8	-2.5	1.5
Greece	1.9	2.0	-1.2	2.3	-3.1	1.6
Estonia	0.7	0.6	-2.2	-0.1	-3.7	-0.2
Euro area	1.2	1.0	-1.5	1.1	-2.5	1.9
Ireland	2.6	2.7	-1.5	2.1	-3.9	5.2
Spain	2.6	2.3	-3.1	2.3	-6.2	5.5
Italy	0.6	0.4	-2.0	0.2	-3.6	0.5
Croatia	1.7	1.2	-1.2	0.0	-0.4	1.1
Cyprus	5.4	3.5	0.3	3.2	0.3	1.8
Latvia	1.3	-0.3	-2.1	-0.8	-1.8	-3.9
Lithuania	1.4	0.0	-2.0	0.5	-2.5	0.7
Luxembourg	3.1	3.2	1.0	5.3	-0.2	5.8
Malta	8.1	5.5	2.7	6.8	2.2	2.8
Netherlands	2.0	1.7	-0.1	1.9	-0.7	4.8
Hungary	0.9	0.6	-1.4	0.4	-2.7	4.8
Poland	0.3	-0.2	-0.3	-0.6	-1.5	1.9
Portugal	2.2	0.8	-2.1	0.6	-3.7	3.2
Romania	0.2	0.3	-1.6	0.2	-3.2	-6.0
Slovakia	1.2	0.4	-2.1	0.6	-2.6	1.4
Slovenia	2.0	0.8	-0.5	1.4	-2.4	0.7
Sweden	1.6	0.6	-1.5	0.5	-2.2	0.5
Finland	2.6	0.9	-1.5	0.6	-2.8	2.4

**Table 11: Unemployment Rate – Total Population**

	Annual data (%)			Q2			Change (%)	
	2018	2019	2020	2018	2019	2020	2021/20	2020/19
Austria	4.9	4.5	5.4	4.5	5.7	6.5	0.8	1.2
Belgium	6.0	5.4	5.6	5.3	4.9	6.1	1.2	-0.4
Bulgaria	5.2	4.2	5.1	4.3	6.0	5.6	-0.4	1.7
France	9.0	8.4	8.0	8.1	6.8	7.6	0.8	-1.3

Germany	3.4	3.1	3.8	3.1	3.8	3.6	-0.2	0.7
Denmark	5.1	5.0	5.6	4.7	5.2	4.7	-0.5	0.5
Czech Republic	2.2	2.0	2.6	1.9	2.4	3.0	0.6	0.5
EU 27	7.2	6.7	7.1	6.6	6.7	7.2	0.5	0.1
Greece	19.3	17.3	16.3	16.9	16.7	15.8	-0.9	-0.2
Estonia	5.4	4.4	6.8	5.1	7.1	6.9	-0.2	2.0
Euro area	8.1	7.5	7.8	7.4	7.3	7.9	0.6	-0.1
Ireland	5.8	5.0	5.7	5.4	5.1	7.3	2.2	-0.3
Spain	15.3	14.1	15.5	14.0	15.3	15.3	0.0	1.3
Italy	10.6	10.0	9.2	9.8	7.7	9.6	1.9	-2.1
Croatia	8.5	6.6	7.5	6.1	6.5	8.0	1.5	0.4
Cyprus	8.4	7.1	7.6	6.5	6.8	8.4	1.6	0.3
Latvia	7.4	6.3	8.1	6.4	8.6	7.9	-0.7	2.2
Lithuania	6.2	6.3	8.5	6.2	8.6	7.4	-1.2	2.4
Luxembourg	5.6	5.6	6.8	5.3	6.4	5.5	-0.9	1.1
Malta	3.7	3.6	4.3	3.6	4.6	3.5	-1.1	1.0
Netherlands	3.8	3.4	3.8	3.3	3.8	4.0	0.2	0.5
Hungary	3.7	3.4	4.3	3.3	4.6	4.1	-0.5	1.3
Poland	3.9	3.3	3.2	3.2	3.1	3.5	0.4	-0.1
Portugal	7.1	6.5	6.9	6.3	5.6	6.7	1.1	-0.7
Romania	4.2	3.9	5.0	3.8	5.4	5.1	-0.3	1.6
Slovakia	6.5	5.8	6.7	5.7	6.6	6.9	0.3	0.9
Slovenia	5.1	4.5	5.0	4.2	5.2	4.4	-0.8	1.0
Sweden	6.4	6.8	8.3	7.1	9.1	9.9	0.8	2.0
Finland	7.4	6.7	7.8	7.7	8.9	9.0	0.1	1.2

Table 12: Unemployment Rate among Men

	Annual data (%)			Q2			Change (%)	
	2018	2019	2020	2019	2020	2021	2021/20	2020/19
Austria	5.0	4.6	5.5	4.5	5.9	6.6	0.7	1.4
Belgium	6.3	5.7	5.7	5.6	5.1	5.9	0.8	-0.5
Bulgaria	5.7	4.5	5.4	4.5	6.1	5.6	-0.5	1.6
France	9.0	8.5	8.1	8.2	7.2	7.7	0.5	-1.0
Germany	3.8	3.5	4.2	3.4	4.2	4.0	-0.2	0.8
Denmark	4.9	4.8	5.3	4.8	4.7	4.7	0.0	-0.1
Czech Republic	1.8	1.7	2.2	1.6	2.2	2.4	0.2	0.6
EU 27	7.0	6.4	6.8	6.4	6.6	6.8	0.2	0.2
Greece	15.4	14.0	13.6	13.7	14.1	12.4	-1.7	0.4
Estonia	5.4	4.1	7.0	4.7	6.8	7.4	0.6	2.1
Euro area	7.8	7.2	7.5	7.2	7.2	7.5	0.3	0.0
Ireland	5.8	5.2	5.6	5.6	5.1	7.4	2.3	-0.5
Spain	13.7	12.5	13.9	12.5	14.1	13.4	-0.7	1.6
Italy	9.8	9.1	8.4	9.1	7.2	8.7	1.5	-1.9
Croatia	7.7	6.2	7.5	5.3	6.1	7.8	1.7	0.8
Cyprus	8.1	6.3	7.6	6.4	7.0	7.5	0.5	0.6
Latvia	8.4	7.2	9.1	8.0	10.2	9.3	-0.9	2.2
Lithuania	6.9	7.1	9.3	6.8	9.7	7.7	-2.0	2.9
Luxembourg	5.3	5.7	6.6	5.3	6.7	5.1	-1.6	1.4
Malta	3.8	3.4	4.2	3.3	4.3	4.0	-0.3	1.0
Netherlands	3.7	3.4	3.7	3.3	3.8	4.0	0.2	0.5
Hungary	3.5	3.4	4.1	3.4	4.4	4.1	-0.3	1.0
Poland	3.9	3.0	3.1	3.2	3.2	3.6	0.4	0.0
Portugal	6.7	5.9	6.6	5.9	5.6	6.5	0.9	-0.3
Romania	4.7	4.3	5.3	4.1	5.6	5.2	-0.4	1.5
Slovakia	6.1	5.6	6.4	5.7	6.7	7.0	0.3	1.0
Slovenia	4.6	4.0	4.4	3.8	4.5	3.5	-1.0	0.7
Sweden	6.5	6.7	8.3	7.0	9.1	9.8	0.7	2.1
Finland	7.4	7.2	8.0	8.2	9.0	9.8	0.8	0.8

**Table 13: Unemployment Rate among Women**

	Annual data (%)			Q2			Change (%)	
	2018	2019	2020	2019	2020	2021	2021/20	2020/19
Austria	4.7	4.4	5.2	4.4	5.4	6.4	1.0	1.0
Belgium	5.6	4.9	5.4	5.0	4.7	6.3	1.6	-0.3
Bulgaria	4.7	3.9	4.8	3.9	5.7	5.6	-0.1	1.8
France	9.1	8.4	8.0	7.9	6.4	7.5	1.1	-1.5
Germany	2.9	2.7	3.4	2.8	3.4	3.2	-0.2	0.6
Denmark	5.3	5.3	6.0	4.6	5.7	4.7	-1.0	1.1
Czech Republic	2.8	2.4	3.0	2.3	2.6	3.7	1.1	0.3
EU 27	7.5	7.0	7.3	6.9	6.8	7.5	0.7	-0.1
Greece	24.2	21.5	19.8	20.9	19.9	19.9	0.0	-1.0
Estonia	5.3	4.8	6.6	5.5	7.4	6.3	-1.1	1.9
Euro area	8.5	7.9	8.1	7.8	7.4	8.3	0.9	-0.4
Ireland	5.7	4.7	5.7	5.2	5.1	7.2	2.1	-0.1
Spain	17.0	16.0	17.4	15.8	16.7	17.4	0.7	0.9
Italy	11.8	11.1	10.2	10.7	8.4	10.9	2.5	-2.3
Croatia	9.4	7.2	7.6	7.0	6.9	8.2	1.3	-0.1
Cyprus	8.8	8.0	7.6	6.7	6.6	9.5	2.9	-0.1
Latvia	6.4	5.4	7.1	4.7	6.9	6.4	-0.5	2.2
Lithuania	5.4	5.5	7.7	5.5	7.4	7.1	-0.3	1.9
Luxembourg	5.9	5.5	7.0	5.4	5.9	6.0	0.1	0.5
Malta	3.5	4.0	4.4	4.0	5.0	2.8	-2.2	1.0
Netherlands	4.0	3.4	4.0	3.3	3.8	4.0	0.2	0.5
Hungary	4.0	3.5	4.5	3.2	4.9	4.2	-0.7	1.7
Poland	3.9	3.6	3.3	3.3	3.1	3.5	0.4	-0.2
Portugal	7.5	7.2	7.1	6.7	5.6	7.0	1.4	-1.1
Romania	3.5	3.4	4.7	3.3	5.1	4.9	-0.2	1.8
Slovakia	7.0	6.0	7.1	5.7	6.6	6.9	0.3	0.9
Slovenia	5.7	5.0	5.6	4.7	5.9	5.4	-0.5	1.2
Sweden	6.2	7.0	8.3	7.2	9.1	10.0	0.9	1.9
Finland	7.3	6.2	7.5	7.1	8.7	8.1	-0.6	1.6

**Table 14: Long-Term Unemployment Rate (\*)**

	Annual data (%)						Change (%)	
	2018	2019	2020	2019	2020	2021	2021/20	2020/19
Austria	28.9	25.1	24.5	8.4	11.7	11.6	-0.1	3.3
Belgium	48.7	43.5	41.6	13.6	15.3	18.9	3.6	1.7
Bulgaria	58.4	56.6	45	10.7	18.3	15.5	-2.8	7.6
France	41.6	40	36.5	19.1	21.0	18.2	-2.8	1.9
Germany	40.9	37.8	29.6	5.4	8.1	7.1	-1.0	2.7
Denmark	19.1	16.4	16.4	8.2	10.8	8.7	-2.1	2.6
Czech Republic	30.5	30	22.1	5.7	7.2	7.2	0.0	1.5
EU 27	44.4	41.4	35.4	15.1	17.1	17.4	0.3	2.0
Greece	70.3	70.1	66.5	33.6	36.0	38.2	2.2	2.4
Estonia	24.9	20	17.1	14.1	18.4	19.1	0.7	4.3
Euro area	46.4	43.5	37.5	15.7	17.5	17.6	0.1	1.8
Ireland	36.3	32.1	23.6	15.7	16.6	21.1	4.5	0.9
Spain	41.7	37.8	32.1	33.1	39.6	38.4	-1.2	6.5
Italy	58.1	56	51.5	28.4	24.7	29.3	4.6	-3.7
Croatia	40.2	35.8	28.1	9.7	19.8	22.7	2.9	10.1
Cyprus	31.7	29.1	28.1	14.9	17.8	17.0	-0.8	2.9
Latvia	41.6	38	27.3	15.1	18.2	16.7	-1.5	3.1
Lithuania	32.2	30.6	29	10.2	21.1	19.4	-1.7	10.9
Luxembourg	24.7	22.8	25.5	17.5	23.3	16.2	-7.1	5.8
Malta	48.1	25.1	25.5	9.1	11.1	10.6	-0.5	2.0
Netherlands	36.6	30.3	23.2	6.3	9.5	9.3	-0.2	3.2
Hungary	38.5	31.9	26.2	10.8	14.7	13.3	-1.4	3.9
Poland	26.9	21.6	20	10.4	9.5	13.3	3.8	-0.9
Portugal	43.7	42.6	33.3	18.1	19.9	23.7	3.8	1.8
Romania	44.1	42.4	29.9	15.0	15.4	17.6	2.2	0.4
Slovakia	61.8	58.2	47.8	14.6	18.5	20.0	1.5	3.9
Slovenia	42.9	43	38.8	6.5	15.6	14.2	-1.4	9.1
Sweden	17.2	13.7	13.9	23.5	30.0	30.0	0.0	6.5
Finland	21.8	17.6	15.4	22.5	28.2	23.9	-4.3	5.7

(\*) % long term unemployed (12 months or more) as a % of total unemployed

**Table 15: Unemployment Rate among Youth 15-24 years old**

	Annual data (%)			Q2			Change (%)	
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	2018	2019	2020	2019	2020	2021	2021/20	2020/19
Austria	9.4	8.5	10.5	8.4	11.7	11.6	-0.1	3.3
Belgium	15.8	14.2	15.3	13.6	15.3	18.9	3.6	1.7
Bulgaria	12.7	8.9	14.2	10.7	18.3	15.5	-2.8	7.6
France	20.8	19.5	20.2	19.1	21.0	18.2	-2.8	1.9
Germany	6.2	5.8	7.5	5.4	8.1	7.1	-1.0	2.7
Denmark	10.5	10.1	11.6	8.2	10.8	8.7	-2.1	2.6
Czech Republic	6.7	5.6	8.0	5.7	7.2	7.2	0.0	1.5
EU 27	16.0	15.0	16.8	15.1	17.1	17.4	0.3	2.0
Greece	39.9	35.2	35.0	33.6	36.0	38.2	2.2	2.4
Estonia	11.8	11.1	17.9	14.1	18.4	19.1	0.7	4.3
Euro area	16.8	15.6	17.4	15.7	17.5	17.6	0.1	1.8
Ireland	13.8	12.5	15.3	15.7	16.6	21.1	4.5	0.9
Spain	34.3	32.5	38.3	33.1	39.6	38.4	-1.2	6.5
Italy	32.2	29.2	29.4	28.4	24.7	29.3	4.6	-3.7
Croatia	23.7	16.6	21.1	9.7	19.8	22.7	2.9	10.1
Cyprus	20.2	16.6	18.2	14.9	17.8	17.0	-0.8	2.9
Latvia	12.2	12.4	14.9	15.1	18.2	16.7	-1.5	3.1
Lithuania	11.1	11.9	19.6	10.2	21.1	19.4	-1.7	10.9
Luxembourg	14.2	17.0	23.2	17.5	23.3	16.2	-7.1	5.8
Malta	9.1	9.3	10.7	9.1	11.1	10.6	-0.5	2.0
Netherlands	7.2	6.7	9.1	6.3	9.5	9.3	-0.2	3.2
Hungary	10.2	11.4	12.8	10.8	14.7	13.3	-1.4	3.9
Poland	11.7	9.9	10.8	10.4	9.5	13.3	3.8	-0.9
Portugal	20.3	18.3	22.6	18.1	19.9	23.7	3.8	1.8
Romania	16.2	16.8	17.3	15.0	15.4	17.6	2.2	0.4
Slovakia	14.9	16.1	19.3	14.6	18.5	20.0	1.5	3.9
Slovenia	8.8	8.1	14.2	6.5	15.6	14.2	-1.4	9.1
Sweden	17.4	20.1	23.9	23.5	30.0	30.0	0.0	6.5
Finland	17.0	17.2	21.4	22.5	28.2	23.9	-4.3	5.7

(\*) For the exact definition of the index see here:

[http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=DSP\\_GLOSSARY\\_NOM\\_DTL\\_VIEW&StrNom=CODED2&StrLanguageCode=EN&IntKey=16664385&RdoSearch=BEGIN&TxtSearch=&CboTheme=36940331&IsTer=TERM&IntCurrentPage=4&ter\\_valid=0](http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=DSP_GLOSSARY_NOM_DTL_VIEW&StrNom=CODED2&StrLanguageCode=EN&IntKey=16664385&RdoSearch=BEGIN&TxtSearch=&CboTheme=36940331&IsTer=TERM&IntCurrentPage=4&ter_valid=0)

[http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=DSP\\_GLOSSARY\\_NOM\\_DTL\\_VIEW&StrNom=CODED2&StrLanguageCode=EN&IntKey=27697382&RdoSearch=BEGIN&TxtSearch=&CboTheme=36940331&IsTer=TERM&IntCurrentPage=44&ter\\_valid=0](http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=DSP_GLOSSARY_NOM_DTL_VIEW&StrNom=CODED2&StrLanguageCode=EN&IntKey=27697382&RdoSearch=BEGIN&TxtSearch=&CboTheme=36940331&IsTer=TERM&IntCurrentPage=44&ter_valid=0)