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Foundation for Economic and Industrial Research (IOBE)

11, Tsami Karatassou Street, 117 42 Athens, Tel.: (+30210 921120010), Fax: (+30210 9233977),

URL: www.iobe.gr,,,

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Foreword

IOBE publishes its second bulletin on the Greek economy for 2020, as part of its series overviewing the Greek economy. Its publication takes place during a very critical period for the Greek and the global economy, as the pandemic of the novel coronavirus continues, with less intensity than in the second quarter - on average - in many countries, but also regaining strength or fluctuating in others (e.g. USA, Australia). Governments and state unions have taken unprecedented steps to reduce the spread of the health crisis and address its socioeconomic consequences. However, these have had a strong impact on economic activity and public finances respectively. Subsequently, the forecasts for the global economy have deteriorated. Like every IOBE quarterly bulletin, this report includes four chapters and an appendix with key structural indicators. The bulletin starts with a text analysing the recession due to the health crisis and the ways to deal with it in Greece. The rest of the report is structured as follows:

The first section is a brief overview of the report, which presents its key points, analysed in detail in the following sections. The second section focuses on the general economic conditions and includes: i) an analysis of the global economic environment in the first quarter of 2020, and its outlook for the rest of the year, based on the latest report of the International Monetary Fund, ii) an outline of the economic climate in Greece in the second quarter of 2020, based on data from the latest IOBE business and consumer surveys, iii) an assessment of the execution of the General Government Budget in the whole year 2019, as well as of the State Budget in the first four months in 2020, iv) an outline of the developments in the domestic financial system between March - May 2020.

The third section focuses on the performance of the Greek economy mainly in the first quarter of 2020. It starts with a mapping of the macroeconomic environment in the same quarter and forecasts for 2020, taking into account the preliminary data on the effects of the pandemic, both domestically and internationally. Then, it records developments in key productive sectors in the first quarter or the first four months of this year, depending on the data availability, while the export performance of the Greek economy is presented from the beginning of 2020 to April. Next, it examines the developments in the labour market in the January-March quarter. Then, it analyses the trends in inflation in the first five months of this year. The section concludes with the assessment of the balance of payments in the period January - April.

The fourth section of the report includes the presentation of a study on the pharmaceutical market and its sector in Greece.

At a methodological level, the report refers to and is based on data available until 30/06/2020.

IOBE's next guarterly bulletin on the Greek economy will be published in late October 2020.

COVID-19: RECESSION AND RESPONSE

As the health and financial crisis unfolds, the main aspects of the problem gradually become clearer. First, despite global efforts, the health problem is not easy to eliminate, as it requires perseverance and coordination between states. Likely the health problem will decline, but gradually and over months depending on the relevant scientific progress. Secondly, the impact on all economies is already severe. In addition to the direct blow to consumption and production capacity, the low recovery prospects for the coming months reduce the appetite to invest, while the blow to international trade is particularly significant. The recession forecasts this year in all major economies and worldwide are revised for the worse. Thirdly, the response from monetary and fiscal policy has been strong. It has mitigated to some extent the recession and the impact on affected households and businesses, and above all it has dampened concerns about a collapse of economies with rampant consequences.

Worldwide recession estimates are being revised for the worse

The same considerations apply to the Greek case. The first stage of tackling the health problem was certainly successful, but probably the problem and efforts to deal with it will continue. It seems that the recession for this year will be deeper than originally expected. However, the Government is taking intensive measures to protect businesses and households, which alleviate the problem this year and lay the groundwork for the future.

Unsurprisingly, the economic climate in the country, both in terms of consumer confidence and business expectations, shows a strong deterioration over the past three months, which is more gradual than in other European countries, where after a larger initial deterioration, the economic climate relatively improved in the last month. This development may suggest that the recession in the Greek economy will evolve more slowly than in other European countries that rely relatively more on exports of goods on the world market, while the Greek economy is interconnected with the world mainly via tourism and transport. Therefore, it can be expected that the

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problem for the Greek economy will become acute during the summer months, with indirect effects in the following months.

In this context, economic policy measures are important not only to alleviate the problem in the short term but also to reverse the recession thereafter. That is, achieving high growth rates next year and beyond should be equally taken into account while alleviating the recession for this year. This requires, on one hand, prudent management of the liquidity for the whole economy and preservation of its transition mechanism to businesses and households and, on the other, the implementation of pending structural reforms to increase the productivity of the economy.

Economic policy measures to reverse the recession

Over the last two years and with the end of the third programme, the Greek economy gradually moved towards stronger growth, higher than that of many other Eurozone economies for that period. The COVID-19 pandemic violently overturned this momentum, throwing it into recession like the rest of the world economy.

Despite the increasing difficulty in exporting goods and services, as well as in foreign investment, it is imperative that the recession be reversed as soon as possible and that strong growth be launched in the medium term. A positive element is the continuing access of the economy, to international markets with relatively low financing costs, in the midst of the crisis. However, budget deficits cannot remain high in the medium term, given the high public debt and the agreed European framework.

A significant part of the public opinion is optimistic as a result of the effective response to the health problem and the prospects of European funding. However, the large size of the problem should not be underestimated, which can only be tackled by launching substantial changes in the structure of the economy. The current crisis, like any strong international crisis, reveals particular weaknesses, and the weaknesses of the Greek economy, such as the low productivity over time, the low contribution of investments in GDP and the low labour participation are still strong. After all, additional liquidity based on new borrowing at Greek or European level will be granted precisely because the recession and its repercussion are expected to be very deep.

Measures already taken and those expected to be taken by the EU increase the financing of the economy. The expectation of a boost through European funding, mainly from the new special fund, is an important factor. This support is critical and necessary, as without it the Greek economy would be in danger of being dragged into the vortex of the global recession, vulnerable in important sectors such as tourism and transport, and without defence capabilities.

However, the resources that are hoped to come from the EU should not just cover up the deep and major problems of our economy in the short term, but should be used as much as possible for their systematic moderation over the medium term. In particular, the resources that are expected to be available from the EU in the coming years should be planned to be used to strengthen the production structure and change the orientation of the Greek economy, and not just for a temporary increase in consumption. They should be used, on the one hand, to adequately support the necessary infrastructure and, on the other, to finance structural reform initiatives. In other words, they must be

EU resourd should be conjunction framework institutiona used in conjunction with a framework of institutional changes that will affect the public sector and the production structure in order to put the economy on a higher growth trajectory.

1 BRIEF OVERVIEW

Global economy recession forecasts escalate in 2020

According to the latest available data on the development of economic activity worldwide, the annual rate of change in GDP in the OECD countries in the first quarter of 2020 changed significantly compared to the previous quarter, to -0.8% from 1.6%, while a year ago it was at 1.8%; a development that is due to the rapid escalation of the pandemic of the new corona-virus and the adoption of protective, restrictive measures in the operation of businesses and international passenger transport. The corresponding rate in the most developed economies (G7) stood at -1.3%, compared with a rate of 1.4% in the last quarter of 2019 and 1.9% in its first quarter. Therefore, the change in trend seems to be more pronounced in these countries compared to the developing and emerging economies. This development is due to the fact that among the strongest economies are some in which the impact of the health crisis was one of the strongest in the world, such as Italy, with a recession of 4.8% compared to stability in the previous quarter and France, with a recession of 5.4 % compared to growth 0.9% respectively. Japan (-2.2% from -0.7%) and the USA (+0.3% from 2.3%) had the mildest impact.

In China, where the pandemic began, there was a recession of 6.8% in the first quarter this year, from 6.0% growth the previous quarter and 6.4% a year earlier, while in another major Asian economy, India, GDP growth experienced only a slowdown, from 4.1% in the fourth quarter last year to 3.3%. In Latin America, Brazil's GDP fell marginally (-0.2%), compared with a 1.6% rise at the end of last year. Unlike the above countries, growth in the Russian economy accelerated slightly, to 1.8% from 1.5%, higher than in the first quarter of 2019 (1.1%).

Although the negative effects of the health crisis were evident and strong in the economic activity of many countries in the January-March quarter, as the pandemic occurred from the middle of this period or later, the effects did not fully manifest, which is expected to happen from the next quarter. In its latest forecasts, the IMF estimated that the pressures exerted in the first half of the year even in economies where the virus has so far declined, were stronger than initially expected. A special feature of the current recession is that, unlike other similar economic conditions in the past, private consumption and activity in the services sector have been hit just as significantly as investment. This development is due to unprecedented measures to protect public health (suspension of operations, restrictions on the movement of citizens, rules on distance-keeping), which have limited consumption opportunities and hit household expectations due to health concerns.

Although in many countries restrictive measures have been phased out since mid-May, the rules for 'social distancing' remain in force and are now likely to be maintained throughout 2020, with implications for the operation of businesses, especially those providing services to consumers with

physical presence. Suspension of operation in sectors with seasonal activity, primarily in the tourism sector, may be a disincentive to operate for the entire period in which they are usually open. In addition, in some countries where protective measures have been lifted, the new corona-virus spread is regaining strength, making it necessary to restore the restrictive regulations, at least locally and for a certain period of time. In addition to the negative effects of the pandemic that have just been reported, there is a possibility of a new outbreak in the fall, with consequences that are very difficult to estimate.

In order to deal with the impact of public health protection measures, budgetary and financial interventions were carried out in several countries and unions of states. Also, the largest central banks have provided emergency financial instruments. High availability of liquidity in capital markets has led to a recovery in the most important financial markets. However, this improvement is not in line with economic trends. Thus, the economic environment may worsen, e.g. from the developments in the pandemic, the capital markets may react strongly and the financial conditions may change dramatically.

The level of international trade also reflected the sharp decline in economic activity. According to the latest estimates of the World Trade Organization (WTO), world trade volume fell in the second quarter of 2020 by 18.5%, compared to a decline of 3.0% in the first quarter this year. IMF predicted at the end of June a 11.9% decline in the volume of international trade this year. The outbreak of the pandemic was also reflected in the price of oil. Despite the decision of OPEC and Russia in April to limit daily oil production for two years, starting with a cut of 9.7 million barrels, the price of Brent oil recovered only in part from its February decline by the end of June (\$40 vs. \$57). Subsequently, there are no expected effects on economic activity.

More broadly, it is estimated that the economic recovery will be more gradual (U-shape) than previous forecasts. Taking into account the above developments, contingencies and prospects, the IMF has recently revised down its forecasts for the rate of change in global GDP in 2020 to -4.9% from -3.0%.

Return to recession in the first quarter of 2020, at 0.9%

Greece's domestic product shrank in the first quarter of this year for the first time since the second quarter of 2016 by 0.9%. A year earlier it increased by 1.6% while in the last quarter of 2019 it increased by 1.0%.

In terms of trends in GDP components at the beginning of this year (2020), domestic consumption remained virtually unchanged compared to a year earlier (+0.1%), when at that time (beginning 2019) it had strengthened marginally, by 0.3%. The no-change outcome is solely due to the 2.0% higher public consumption, mainly due to fiscal interventions to address the effects of the new coronavirus, as household consumption declined by 0.7% in the January-March quarter. A year earlier public consumption was also boosted by 0.4%, while private consumption increased significantly by 1.3%.

Investments fell in early 2020 for the third consecutive quarter, with a similar intensity to the previous two (-5.1%), while in the first quarter of last year they strengthened significantly (+14.4%). However, unlike in previous quarters, their fall did not result from a smaller accumulation of stocks or a decrease compared to the same period last year, since they rose slightly in the first quarter this year by €58m, to €381m. The contraction in investment is due exclusively to the lesser fixed capital formation by 6.4%, while a year earlier investment was expanding by 8.8%.

Almost all categories of fixed capital formation decreased in the quarter January - March this year. The exception was Housing, with a strong increase of 22.6%, the largest in this quarter in the last three years, as well as investments in other products, which were slightly larger than a year ago (+0.7%), when they recorded a mild decline (-1.0%). By contrast, the fixed capital formation in transport equipment dropped sharply (-44.6%), more than offsetting last year's significant increase (+21.9%). Next rank declining investments in ICT equipment (-9.4%) and those in mechanical equipment (-6.2%), while at the beginning of 2019 they both increased by 3.3% and 4.9% respectively. The

smallest decline in the initial quarter of 2020 was recorded in investments in other constructions (-4.0%) and agricultural products (+3.3%).

Concerning the developments in the external balance of the economy, exports remained on an upward trajectory at the beginning of this year, albeit at a slower pace than in the same period last year, i.e. 2.5% versus 4.8%. Unlike the initial quarter of 2019, the increase this year came exclusively from higher exports of goods, by 4.7%, when a year earlier they fell marginally (-0.4%). Exports of services, which were the decisive factor in the expansion of total exports last year, were unchanged in the January-March quarter this year compared to the same period last year, which amounted to 10.3%.

At the same time, imports increased marginally, by 0.2%, however in this period last year their growth rate was almost double digits, 9.7%. Both product-imports and imports of services moved sluggishly, rising 0.2% and 0.3% respectively, while in the first quarter of 2019 the former were stronger, by 10.0% compared to a 6.3% increase in services. The larger increase in exports compared to the increase in imports improved the external balance, the deficit of which - in national accounting terms - was further reduced to €549 million (-41.7% compared to 2018) or just 1.2% of GDP).

Deep recession in the Greek economy in 2020 due to the novel coronavirus pandemic; deeper than originally expected.

The health crisis that started in China at the beginning of this year and spread to Europe since mid-February and in Greece since the beginning of March, the incidents it has caused (measures to protect public health, support businesses and citizens) and those that are to come hereafter in medium term, continue to be the main determinants of political and economic developments domestically and internationally.

Coronavirus protection measures taken worldwide have had a strong impact. The consequences affected primarily consumer demand in each country, due to the suspension in many sectors, as well as the bans on cross-border passenger travel. The lockdown directly affected international trade and the export sectors, while side effects were caused by the decline in employment and income in the suspended activities, but also in the wider value chain to which they belong. Pressures on domestic demand and international trade are also exerted by the weakening of the investment appetite, because of the uncertainty about the duration and intensity of the coronavirus effects. The negative effects and other implications between the GDP components are reflected in the latest, more unfavorable GDP forecasts of international organizations on major economic regions (IMF) as previously mentioned.

From the previous IOFE bulletin on the Greek economy, the two factors related to the new corona pandemic and considered as the most influential on the macroeconomic aggregates were: its duration, domestically and internationally, and the intensity of measures to deal with the effects. Additionally, some more issues related to the health crisis had emerged as determinants of macroeconomic developments in the medium term: the intensity and evolution of time (time profiling) of its economic impact in the Eurozone, as well as the magnitude of policy interventions at EU level to address the effects of the pandemic. Moreover, the trend in energy costs, approximated by the price of oil, was also included in the determinants of the forecasts. These parameters are still considered to be the most important for economic developments at least in the second half of this year. Given the remaining significant uncertainty about their evolution in the medium term, it remains impossible to make specific assumptions about them, which will be used to make predictions. For this reason, as in the previous IOBE bulletin on the Greek economy, (alternative) forecasts for the economic variables will be made corresponding to alternative assumptions. The forecasts resulting from the different assumptions will form a forecast interval for GDP, its components and other macroeconomic variables.

The basic forecast scenario is based on the assumption that internal measures to protect public health throughout the territory (suspension of operations, restrictions on the movement of citizens, etc.) will not be reinstated. Exceptions will be any areas with a new coronavirus outbreak. Moreover, restrictions on international passenger travel will not escalate significantly. Most of the exceptional

fiscal and financial assistance interventions will be completed shortly, as all businesses have been allowed to operate, but clearly later than expected in the baseline scenario of the previous bulletin (end of May). An exception will be measures whose duration already includes the following months (e.g. temporary VAT reduction). With regard to the recession in the Eurozone this year, it will be close to the recent forecasts (10%).

In the alternative, unfavourable scenario, it is assumed that the health crisis will recover domestically during the fourth quarter, leading to the reintroduction of public health protection measures until at least the end of this year. Similar developments are possible in many countries in Europe, America and Asia. Subsequently, extensive policy interventions, both domestically and pan-European, will be re-implemented to mitigate the impact on the economy. As for the recession in the Eurozone, it will be almost three times stronger than in 2009.

Analytically in terms of recent and most expected developments in the above factors that affect macroeconomic forecasts, new cases and victims have declined steadily since the end of April. These trends have allowed the lifting of restrictions on the movement of citizens during May and on the operation of businesses at the same time. Twelve-month hotels and summer cinemas opened on June 1st, and almost all suspended activities, including seasonal hotels, resumed operations on June 15th. On the same date, the first lifting of restrictions on direct international flights took place, triggering the start of the international tourist season.

From July 1, direct international flights to all airports are allowed from all countries except the United Kingdom and Sweden. Travelers from the Schengen and associated countries, as well as from 15 other countries, were also allowed to enter the country under an EU decision. However, these countries do not include some with a particularly high contribution to international tourism receipts in previous years, such as the USA (3rd place), Russia (10th) and Turkey (14th). The 10.6% of revenues came from these countries in the period 2017-2019. Therefore, the provision of international tourism services actually started domestically on 1 July, resulting in a significant reduction in the tourist season compared to previous years. In addition, restrictions on international arrivals from (some) countries of origin mean the loss of a significant part of the tourist receipts of previous years.

With regard to developments in support interventions for affected companies, their employees and the self-employed, the validity of almost all fiscal measures taken for the period March-April was extended in May and June. A number of additional fiscal interventions were also made, the most important of which are the following: ,(a) a reduction in the 2021 tax advance for businesses with a turnover fall of more than one percentage in the March-May quarter; (b) payment of 60% of the rent by companies which re-established in May, as well as in the tourism, catering, culture and sport sectors for the period June - August,(c) temporary VAT reduction for the period 01/06-31/10/2020 on passenger transport, coffee, non-alcoholic products, tourism services and cinemas, d) the establishment of the CO-WORK mechanism, within the framework of the European SURE initiative.

In addition, new corporate liquidity actions were announced (CoViD-19 Business Guarantee Fund, second and third return payment programme for SMEs, additional financial support from the European Commission €2.7 billion). These and previous financial interventions (e.g. Entrepreneurship Fund (TEPICH II) will strengthen the liquidity of enterprises in the current adverse juncture and are expected to contribute not only to the implementation of part of the investment projects that had been developed before this juncture, but also because of it.

More broadly, all policy interventions both fiscal and financial, will mitigate the impact of coronavirus protection measures both domestic and international, on business activity and employment, as well as on household income. Their positive effects will be commensurate with their implementation, which will depend on the conditions for joining them and their utilization by potential beneficiaries. From the relevant data available so far, it appears that the degree of implementation of the interventions varies between them. Indicatively, in the first phase of the repayable advance program, with a budget of €1.0 billion, approximately €600 million were credited to approximately 55,000 companies. Through TEPIX

II, 10.15 thousand applications for loans of €1.290 billion were approved, out of the 10.7 thousand applications for loans of €1.4 billion that were submitted.

While the implemented financial interventions for enterprises and workers mitigate the impact of the health crisis, on the other hand they burden the fiscal balance. In addition, there is a significant impact on it from losses of tax revenue, or insurance contributions, etc. from the compulsory cessation of activity in certain sectors and the suspension of payments of tax and (social security) contributions. In the two months of March-April this year, the State Budget expenditures were $\{1.48$ billion more compared to the corresponding period of 2019 (+18.5%), with their expansion coming mainly from the increase of current transfers outside the General Government , which include emergency measures, by $\{1.2$ billion. In terms of General Government revenues, there was a decline in March-April by $\{1.29$ billion (-16.7%) compared to the same period last year, mainly from lower indirect tax revenues (-23% or $\{1.48\}$ or $\{1.48\}$ million). Direct tax revenues fell only in April, but overall together with those in March they were $\{1.48\}$ more ($\{1.48\}$ million) than last year.

While companies use the financial instruments to raise some of the liquidity they need to meet their current liabilities (in the public sector, banks, their suppliers), they are expected to have a much smaller direct positive effect on investment. The high uncertainty about the development of the new coronavirus until an effective treatment or a way of preventing it is found, will have a strong deterrent effect on investment risk. Therefore, the availability of financial instruments is a sufficient, but not a necessary condition for a significant investment revival. Probably several companies have made or will make investments to adapt their mode of working, production and / or sales to the current conditions (e.g. teleworking, electronic sales). However, for the most part, these changes do not constitute new products or services. Exceptions to this trend will be investments related to health, from the public and private sector, e.g. for the creation of appropriate infrastructure to deal with the pandemic, for the preparation of medicines and consumables for health protection, for the hygienic safety of transport, etc. But also investments in public works, as well as in integrated privatisations, which are ongoing.

In particular, regarding the Public Investment Programme (PIP), with the supplementary state budget ratified at the end of May, its expenditure target for the current year increased by €1.25 billion, to €8.0 billion, for the PIP to finance the emergency measures. In the five months of January - May, the programme's expenditure reached €3.36 billion, a level more than double the relevant target in the 2020 (ordinary) Budget (€1.6 billion). In addition, expenditure were almost three times their level in the same period of 2019 (€1.17 billion). On the other hand, as stated in the accompanying text of the State Budget Execution Bulletin for May, the increased outflows of PIP are mainly due to the 'special purpose compensation' for businesses and the self-employed and to the cost of subsidizing loans for small and medium enterprises due to the COVID-19 pandemic. Therefore, a large part of the additional payments is not related to investment support. No information is provided on the exact level of expenditure for the above purposes. The financing of support measures and other expenditure to deal with the pandemic through the PIP, probably with EU funds, is quite likely to continue at least in the coming months. Therefore, it is expected that the financial support measures through the program (PIP) will be more than those of last year even for the rest of 2020, but their impact on investment activity will depend on their composition and whether they will relate to the health crisis.

The particularly unfavorable environment is considered to be an important deterrent to the realization of concessions and privatizations. As the HRADF (TAIPED) revenue target for the budget of this year is 77.4% higher than the maximum revenue in a year so far (€2.45 billion compared to €1.38 billion in 2017), it was considered ambitious from the beginning. Under the circumstances created by the pandemic, the previous IOBE bulletin estimated as the most probable eventuality that the target will not be achieved. The progress of HRADF (TAIPED) work during the first half of this year, is indicative on this foreseen development. In the first half of the year, the concession of Chios and Alimos marinas was completed, with the total revenue from the one-off part of the price reaching around €60 million. The most important bidding ongoing procedures are the sale of 100% of DEPA Infrastructure SA (second phase of the tender), 65% of DEPA Emporia SA (second phase of the tender) and 30% of AIA (second phase of the tender). However, if these procedures are completed this year, HRADF (TAIPED) revenues will continue to fall short of the 2020 target. However, as mentioned above, the

privatisations and concessions made by TAIPED in previous years will stimulate investment activity, with the boost from the investment in Elliniko to be estimated as the largest among them.

Regarding the liquidity injections from the banking system and the capital markets, banks in Greece are rushing to take advantage of the new possibilities of the ECB (assets Pandemic Emergency Purchase Program, TLTRO III). While these developments represent an incentive for credit expansion, on the other hand, caution over the duration and severity of the health crisis will have a deterrent effect on lending. After all, the suspension of activity in many sectors and the remaining restrictions on international passenger travel, which primarily affect the tourism sector, but also those associated with it, will put significant pressure on business activity and household incomes. Subsequently, default on banks is quite likely to recover, leading to a further increase of non-performing loans (NPLs). Similarly, uncertainty will be the reason for a sluggish demand for capital from businesses and households. Only if these sources of uncertainty recede, both supply and demand for bank credit will recover significantly.

Despite the current, particularly unfavorable situation, the domestic banking system seems to have significantly escalated lending to businesses, resulting in an overall credit expansion to the private sector. In the March-May quarter, the positive rate of change in loans to non-financial corporations from the end of 2018 amounted to 4.0%, from 1.4% in the first two months of this year and 2.3% in the corresponding period of 2019. However, the increase in business credit comes largely from emergency liquidity schemes to deal with the effects of the pandemic, such as TEPIX II. Therefore, if the pandemic does not recover and policy interventions are completed soon, as is the case in the baseline scenario, credit growth will weaken. On the other hand, credit contraction towards households continues unabated compared to the beginning of the year, by 2.9%, and it is slightly stronger than that one year earlier (2.3%). Subsequently, in the private sector as a whole, lending from the banking system expanded slightly in the March-May period, for the first time since the last quarter of 2010, at a rate of 0.4%, compared with a mild credit contraction of 0.7% in the two months of January-February and 0.3% a year earlier.

The expected weakening of the above trends in business credit means that many businesses and households that before the crisis considered bank lending, will not benefit from the very favorable conditions that have been formed in the recent period. The significantly lower lending rates for businesses and self-employed people in the second half of last year and in the four months of January to April this year are primarily related to the sharp de-escalation in the same period of Greek government lending rates. They are partly due to the increased liquidity supply by the ECB during the current crisis, also on favorable terms. In the two months of March-April the average interest rate on new fixed-term loans to non-financial corporations stood at 3.12%, up from 3.45% in the first two months of this year and 3.78% on average in 2019. The recent level is the lowest at least since 2010. For all new loans to households, the average interest rate in the two months of March to April was 4.75%, lower than its average level last year (4.94%).

While investment will probably suffer proportionately the strongest blow since the health crisis this year, export pressures from restrictions or bans on cross-border passenger movements and the wider contraction of international trade are projected to exert the strongest pressure on domestic product, and their share of GDP is much higher than investment (35.0% compared to 11.9% of GDP last year. As reported in the previous IOBE bulletin on the Greek economy, five countries in which the outbreak of the new coronavirus was among the strongest in the world (USA, UK, Italy, France, Spain), were in 2019 in the top-10 of export destinations, with Italy in first place and far behind second Germany (€3.63 billion vs. €2.25 billion). The decline in product exports will be mitigated by the fact that no restrictions were placed on their cross-border shipments, but also the escalation of the e-commerce in the lockdown period. The shorter duration of the tourist season this year, as well as the current restrictions on the countries of origin of visitors, which currently concern some countries from which a significant proportion of the tourist receipts in recent years came, will hit the main source of expansion of all exports in recent years. Of course, product imports will also weaken.

Restrictions on production activity worldwide due to the health crisis, as well as restrictions on international transport, have significantly reduced the demand for oil and other energy goods. On 12

April 2020, OPEC and its partner countries, together with Russia, agreed to cut production by April 2022 to limit the fall in prices. Nevertheless, the price of Brent oil last April stood at \$18.4/barrel, down 74.2% from the same month last year, while in May it reached \$29.4/barrel, falling by 58,8% compared to a year ago. Therefore, this specific reduction in oil supply does not seem to have a boosting effect on prices. Subsequently, the cost of oil in the current half year is assessed to be primarily affected by the impact of the COVID-19 pandemic on the economic activity and the uncertainty as to its development and response. According to the latest IMF forecasts, the recession due to the health crisis was stronger in the first and second quarters of this year than expected. Additionally, the recovery of the world economy seems to be slower and more gradual than originally estimated. Given the aforementioned data, the average price of oil in 2020 is estimated to stand at \$38/barrel, about 39% lower than the previous year.

Taking into account in particular the recent and possible future developments and effects of the new coronavirus pandemic, in particular the impact of bans on international passenger transport and the suspension of business operations, successive domestic fiscal policy packages to address them, as well as the trends in GDP and its components in the first quarter of this year, then a sharp decline in household consumption is expected. The pressures on consumer spending in the second quarter are expected to be unprecedented, mainly due to the suspension of the operation of physical retail, catering, etc. stores, hotels and entertainment and entertainment businesses.. It is estimated that the decline in household consumption of households from the threat to their health will have a limited effect, especially in this quarter. Private consumption will be probably reduced since the second quarter even more, by the projected significant rise in unemployment. The intensity of the unemployment increase will depend primarily on whether the pandemic will re-emerge, domestically and/or internationally, further affecting tourism-related jobs in the event of an international escalation.

The negative effects of these factors on household consumer spending will be mitigated by the escalation of electronic transactions and measures to support the income of employees and self-employed persons in suspension, as well as of the unemployed, which (measures) continued throughout the second quarter, while they expanded to the third quarter especially for seasonal employees in tourist enterprises in previous years. Taking into account the above strong, opposite effects, it is estimated that the reduction of household consumption expenditures will have an intensity of at least 7.5% in the basic forecast scenario, while in prolonged adverse conditions - in Greece and internationally - it will exceed 11.0%.

In contrast to private consumption, the new coronavirus pandemic will lead to widespread expansion of public consumption. This will come mainly from the emergency expenditure to support businesses and households, as well as from the expenditure already required and needed to protect public health. Similarly to private consumption and other components of GDP on the demand side, the expected upward trend in public consumption spending due to the health crisis will depend primarily on whether it recovers within the year, domestically or internationally, since in both cases additional measures will be implemented. The degree of implementation of policy interventions is another aspect of the expansion of public expenditure. The negative "base result" from its high level in the second quarter of last year, due to the electoral cycle, will have a deterrent effect on the rise of public sector consumer spending. In view of the above, it is predicted that the expansion of public consumption will be at least 7.0%, in case the health crisis does not recover - with possible exceptions in some areas of the country - and the restrictions on international travel will not escalate. Otherwise, i.e. if the pandemic returns in the fall, in Greece and internationally, or during the summer in many countries, then the required additional public spending will lead to an increase compared to 2019 by 9.5% or more.

Concerning investment, it is still anticipated that a large part of private sector investment projects have been put in and will remain on hold depending on developments in the new coronavirus. As investment implementation is decided by assessing potential trends and developments in the medium to long term, the current very high uncertainty on the prospects of the domestic, European and global economies creates significant obstacles in this process. The adverse investment environment will continue until the pandemic is eradicated or at least severely reduced, in Greece and in the vast majority of countries, especially those absorbing a significant proportion of domestic exports.

The clearly more available liquidity than a few years ago on behalf of the banking system, following the restriction of non-performing loans, the return of deposits, but also thanks to the accessibility by the banking system for the first time to an ECB assets purchase programme, probably will not largely be exploited by businesses, at least in the short term. Moreover, at least as long as the prospect of exit from the health crisis and its impact does not emerge, banks are expected to be more cautious in lending, as there is a risk of a further escalation of non-performing loans..

Given the postponements for many of the private investments, the role of public works and investments in integrated privatisations (Elliniko, Piraeus port, expansion of Athens International Airport, etc.), which have a long-term return horizon, it is estimated that it will be decisive for the level of investment activity this year. These investments will also be reflected in the construction sector. On the other hand, the construction sector will lose the recent years momentum from construction projects in Tourism, hotels, as well as from the renovation of houses for exploitation through Airbnb.

Taking into account the effects of these factors, the baseline forecast scenario expects investment expenditure to shrink by around 25%. In the adverse scenario, the decline may exceed 40%.

As the expansion of domestic exports last year and – to a large extent – in previous years has resulted mainly from increased international tourism receipts, the fact that restrictive measures to tackle the pandemic concerning international passenger transport have been lifted since 1 July, limiting the international tourist season, in combination with the travel ban for some countries with a significant contribution to tourist revenues is maintained until at least mid-July (United Kingdom, USA, Russia, Turkey), it will have a strong impact on the relevant receipts. As the Eurozone is the main export destination of Greek products, its projected strong recession, which according to the latest forecasts will be greater than initially expected, will be reflected in their demand respectively. Anyway, exports of products will be severely affected by the contraction in world trade. According to the latest estimates of the International Trade Organization, the trade volume fell in the second quarter by 18.5%, compared to a decline of 3.0% in the first quarter this year. In view of the above, it is predicted that the fall in exports in the baseline scenario will be between 20-25%. If restrictions on international tourism escalate during the summer season or the health crisis recovers in the autumn, the fall will exceed 35%.

The decline in imports will be determined primarily by the decrease in domestic demand for products and exports of goods which, mainly due to petroleum products, are characterised by a relatively high proportion of imported raw materials. The negative effects of public health protection measures on international passenger transport will be significantly milder in imports than in exports, as the share of travel payments in total imports is much smaller than in travel receipts in exports (3.7% versus 25.0%). For all imports, the negative change in the baseline forecast scenario is expected to be in the range of 20-25% throughout the year, while in the worst case scenario it may exceed 30-35%.

A forecast period for the change in domestic product has been set out in the GDP estimates procedure on the basis of different scenarios for developments in its determinants described above. According to this, the recession in the Greek economy this year will be tense in the baseline forecast scenario of about 7.5%. If conditions in the Greek and international environment deteriorate in the third quarter, resulting in a strong negative impact on passenger transport and tourism or a significant outbreak of the virus in the autumn, it is quite possible that the recession will be around 10,5%. In any case, these forecasts reflect current expectations and are quite likely to be significantly revised in future reports.

State Budget: Large deviation from targets due to pandemic impact and related policy interventions.

According to the State Budget implementation data, in the period January - May its deficit reached €7.5 billion, against a target of €2.5 billion. and a deficit of €1.76 billion. In addition, the primary balance of the State Budget was for the same period a deficit, by €4.8 billion, against a surplus of €916 million a year ago and against a small surplus target for the first five months of this year, amounting to €43 million. Since in the first two months of this year, before the outbreak of the

pandemic, the State Budget showed a deficit of €1.11 billion, against a target of €814 million, therefore from €5 billion in the five-month lag the €4.8 billion deficit was created during the health crisis. Respectively, taking into account the primary result and the target for the period January-February of the current year, the €4.8 billion out of the €4.9 billion of the five-month lag are due to the March-May quarter.

The lag behind the target for the period January - May is greater in terms of State Budget revenues, highlighting the effects of the decline in activity, but also the interventions to facilitate businesses and households towards their obligations to the state. Before tax refunds, revenues fell by €2.5 billion, reaching €17.8 billion. Receipts from VAT (€1.1 billion less) and income taxes (- €441 million) are mainly lower than expected in the 2020 Budget, then rank the sales of fixed assets (-€312 million). On the expenditure side of the State Budget, the shortfall against the target, which implies a higher level of expenditure, amounts to €2.27 billion. It stems mainly from the excessive expenditure of the Public Investment Programme (PIP) (+EUR 1.76 billion), to compensate special-purpose enterprises and self-employed persons and to subsidise the interest rate on SME loans due to the COVID-19 pandemic. Next rank the transfer costs, by €931 million, which mostly concern the special purpose compensation to employees and scientists. Therefore, even in the expenditure side, the deviation from the target is due to the data and conditions created by the health crisis.

As long as the pandemic does not recover significantly in the rest of the year in Greece and internationally, especially in key trading partners, exceptional budgetary and financial interventions will gradually draw to a close. While such a development will directly de-escalate the pressure on public spending, its effects on revenue will continue, depending on the changes that have taken place in domestic and international economic activity.

Unemployment declines in the first quarter this year. Rise in 2020, mainly from the impact of the crisis on export sectors and trade.

Unemployment does not reflect yet, any change of the GDP trend. A number of factors seem to have contributed in this aforementioned development: measures to protect jobs from the effects of the pandemic, the lag in some months of labor market developments relative to economic activity, and the fact that the number of unemployed fell sharply in March compared to the previous month (-106.2 thousand), a fact that was attributed primarily (2/3) to their exit from the workforce, not to the increase in employment. According to the relevant press release of EL.STAT., "Several job seekers stated that they are not immediately available to work and therefore, according to the definitions of the relevant European Regulation, they are classified as economically inactive." At sectoral level, the significant increase in consumer demand in the first two months of the year, the continued growth in the same period of exports of products, which stimulated the related activities (transport), but also the emergencies in health services, contributed primarily to the increase in employment.

Specifically, employment expanded in the quarter January-March this year by 1.0% or 38.6 thousand people, an increase which was the mildest in the last five years, since the second quarter of 2015. However, the further weakening of unemployment in this period compared to the corresponding one last year, by three percentage points, to 16.2%, came mainly (76.2%) from the reduction of the labor force, by 123.4 thousand people. This unemployment rate is the lowest since the second quarter of 2011. Most jobs compared to the first quarter last year were created primarily in the sectors Wholesale - Retail (+29.9 thousand or +4.4%), Transport - Warehousing (+21.4 thousand or +10.9%) and Human Health Activities (+16.2 or +6.6%). On the other hand, there was a decrease in employment mainly in the Primary sector, where it was particularly pronounced (-41.9 thousand or -9.0%), in the Public Administration – Defence (-16.2 thousand or -4.6%) and in the Construction sector (-5.1thousand or -3.5%).

The suspension of domestic enterprises which are mostly active in the provision of services to final consumers, as well as the strong restrictions and prohibitions on international passenger transport until the end of June, as part of pandemic protection measures, have put intense pressure on employment in the second quarter. These pressures are expected to manifest in sectors that have made a significant contribution to the decline in unemployment in recent years (Wholesale - Retail,

Catering, Accommodation, Transport). The business activity cessation measures, and even to a large extend, in countries with a large spread of the coronavirus and many losses in human lives, and which have a high share in the Greek products exports (e.g. Italy, Spain, France), in addition to the extensive contraction of international trade, will have a deterrent effect on the employment of extroverted Manufacturing sectors. In addition, the estimated significant decline in investment will hit the activity in the Construction Sector.

On the other hand, the current unfavourable situation has created specific needs for the provision of services, e.g. health, social care, the creation of internet services, land couriers, which, despite the general decline in economic activity, will maintain or even increase jobs in the respective sectors.. Examples include the recruitment of 5.1 thousand health workers in the public sector. Moreover, due to unfavourable labour market conditions, a significant proportion of those who have lost their jobs or will lose their jobs may be discouraged from seeking work, at least in the short term, as in March, according to ELSTAT. The measures to protect employment will preserve some of the threatened jobs, as is apparent from the data of the ERGANI system by May. The public sector will provide temporary employment for another year through OAED programmes.

As in all macroeconomic variables, the duration and intensity of the effects of the health crisis on employment will depend on its development, in particular on whether it will show a new upswing within the year. Taking into account all the above factors, the unemployment rate in 2020 will be higher from 1.5 to almost 3.0 percentage points, compared to last year's level (18.8%-20.3%).

Prices have decreased this year, because of lower energy prices and lower indirect taxes.

In the period from January to May this year there is a reversal of the price trend compared to last year, with the average rate of change in the National Consumer Price Index (CPI) being negative for the first time in three consecutive years of growth. Specifically, the national CPI declined compared to the 2019 corresponding period by 0.3%, from an 0.6% increase last year (2019) compared to 2018. The marginal decline in the five months is due to energy goods and indirect taxes, as the change in the CPI with fixed taxes and without energy goods was +1.9%, from +0.8% in the same period last year. Specifically, the effect of indirect taxes on the annual change in the price index this year was -1.3 percentage points, from -0.1 p.p. a year ago, and energy goods -0.5 percentage points, compared to a marginal growth effect last year (-0.1 p.p.). Among the main categories of products and services, the highest increases occurred in Clothing – Footwear (+2.9%), Health (+1.5%) and hotels, cafes, restaurants (+0.6%).

In the second half of 2020, the weakening of domestic demand, due to the effects of the new coronavirus pandemic on household disposable income, from the suspension of employment contracts, rising unemployment and other developments in the labor market, will significantly mitigate the strengthening effect that this factor exerted on prices in the previous six months. On the other hand, the relatively rapid lifting of restrictive measures to protect public health, without any subsequent outbreak of the pandemic for the time being, boosts citizen's expectations and revives private consumption. The gradual start-up of international tourism is also expected to have a positive impact on consumer demand. Obviously, the intensity of all these effects will depend on the evolution of the health crisis, but overall an increase in domestic demand is expected this year on prices, milder than in the initial half of this year.

In the field of indirect taxation, the new, temporary VAT reduction measures from 1 June to 31 October will act as deflationary. On the other hand, in May, the decline in prices was completed due to reductions in indirect taxes a year ago. Therefore, in all likelihood the negative effect of indirect taxation on prices continue in the second half, perhaps slightly weakened.

Restrictions on production activity, as well as on cross-border passenger transport, resulted in a sharp decline in demand for oil and other energy goods, and consequently on their price, in the period March-April 2020. Shortly after OPEC's decision along with Russia in April, to limit daily oil production for two years, the brent price decline was halted. In May, after the partial recovering of the losses

since mid-February, the cost of oil per barrel stabilised at a level (\$40) which is clearly far from the one of early this year (\$68), and also of a year earlier (\$64). As the decline in OPEC production will be lower in the current half-year and given the strong uncertainties on the global economy, a further decline in oil costs is now considered possible, at least in the third quarter. Therefore, the impact of energy products on prices will be clearly anti-inflationary this year. Taking into account deflation in the first five months, it is projected that the GCPI will fall this year from 1.6 to 1.8%. If the health crisis recovers later this year, domestically and internationally, further squeezing demand and oil prices, deflation will be around 3.0%.

Study: The Pharmaceutical Market and the Wider Sector in Greece.

The novel coronavirus disease pandemic (COVID-19) is a new major challenge for the Greek economy, as it highlighted important issues with economic, social and health implications that will be seen in the coming years. The transition to a new health reality highlights the need to protect public health and ensure the adequacy of medicines, as well as the need to promote research and development of new vaccines, diagnostic tests and treatments. This study first presents the demographic trends and health profile of Greeks and the funding sources of health expenditure. The analysis then focuses on the structure of pharmaceutical expenditure accordingly to its sources of origin. Then, the overall ecosystem of the pharmaceutical industry is presented, from the production and storage, to the distribution of drugs. Next, the direct contribution of drug production to GDP, employment and the trade balance is reported. The study and the chapter are completed with the calculation of the indirect and the induced effect of the pharmaceutical sector in the Greek economy. In total, it accounts for 3.7% of GDP (€6.9 billion) and 3% of domestic employment (136 thousand jobs), while the impact on tax revenues exceeds €1.9 billion.



2 ECONOMIC ENVIRONMENT.

2.1 Trends and Prospects of the Global Economy

A. The Global Environment.

- The global economy is projected to shrink at a rate of 4.9% in 2020, more than estimated earlier this year (+1.9 p.p.). It is expected to mildly recover in 2021 (+5.4%).
- The coronavirus pandemic has a big impact on economic activity, while the possibility of a rapid recovery gradually becomes less likely.
- Many countries reopen their economies after the lockdown, taking unprecedented fiscal and monetary measures to boost businesses and households.
- Uncertainty about the full assessment of the effects of the health crisis this year and 2021 remains, as it will depend on its duration and the possibility of new outbreaks.

The new coronavirus pandemic has significantly affected economic activity worldwide since the first quarter of the year. The annual GDP growth rate in the OECD countries in the first quarter of 2020 changed significantly compared to the previous quarter, to -0.8% from 1.6%. Growth in the most developed economies (G7) stood at -1.3%, compared to a rate of 1.4% in the last quarter of 2019 and 1.9% in its first quarter. An important feature of the recession in the world economy, unlike other similar conditions in the past, is the sharp and strong decline in consumption and activity in the services sector.

The IMF recently revised its forecast for global GDP growth in 2020 to -4.9% from -3.0% (April forecast), as the economic effects of the health crisis were higher than expected in the first half of the

year. It also expects the recovery to be more gradual (U-shape) than the previous forecast, placing the growth forecast for 2021 at 5.4%, compared to 5.8% in its previous report.

Strong uncertainty regarding the evolution of the pandemic phenomenon remains. As the number of new cases declined in early May, many economies entered an opening phase following the lockdown, which began in most countries in mid-March. However, a hasty opening up of the economy and poor adherence to precautionary measures pose risks of a significant resurgence of the crown leading to a new lockdown.

Even if the process of opening up the economy is successful, the chances of a short and complete recovery are limited due to the conditions of social exclusion, the losses suffered by the supply side due to the intensity of the downturn and the reduced productivity of many companies because of the imposed precautionary and hygiene measures in the workplace. Geolocation data from mobile devices show that, as many countries open up their economies, mobility has not fully restored to retail, leisure, transit and workplace areas.

An additional factor of uncertainty is the possible deterioration of conditions in the financial markets, in case of reversal of the positive climate that prevails due to expectations of a speedy recovery. To a great extent, the rise in asset prices is fuelled by unprecedented fiscal and monetary support to the economies, globally, while it is increasingly argued that markets are disconnected from the real economy.

The health crisis inevitably led to a fall in world trade by 3.5% year-on-year in the first quarter of this year, as consumer demand, tourism and productivity have been hit. The pandemic has also led to escalating tensions between the US and China and an increase in global social unrest.

Policymakers have taken countermeasures in many countries by supporting the labour market and providing liquidity to businesses in order to prevent worse losses in economies. Around the world, fiscal measures of almost \$ 10.8 trillion have been announced (12.4% of the world GDP) since the beginning of the crisis. Half of these concern increased expenditure and reduced government revenues, which burden state budgets. The rest relates to liquidity assistance programmes through loans and guarantees, as well as to participation in company equity. Although these funds do not directly affect public deficits and debts, they pose risks to the future in the event of a default by the recipients. However, the level of fiscal intervention as a percentage of GDP varies from country to country, as it depends largely on the fiscal space available and the cost of servicing its debt. Specifically, the fiscal response of the developing economies is currently estimated at 5.1% of GDP, in contrast to the developed ones where it is estimated at 19.76% of GDP².

Table 2.1 presents the latest IMF forecasts for annual GDP changes in the global economy and in selected developed and developing countries for the years 2020 and 2021.

The following is an analysis of recent and expected trends in the economies of major countries and associations of countries in the midst of a health crisis. Policy interventions to address it are also reported.

Table 2.1 Global Environment (annual % GDP growth, in real terms, unless stated otherwise)

Economy	2019	2020			2021
		Forecast	Difference from previous forecast*	Forecast	Difference from previous forecast*

¹ Source: https://www.google.com/covid19/mobility/

² Source: https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19



World	2.9	-4.9	-1.9	5.4	-0.4
Developed economies	1.7	-8.0	-1.9	4.8	0.3
Developing economies	3.7	-3.0	-2.0	5.9	-0.7
USA	2.3	-8.0	-2.1	4.5	-0.2
Japan	0.7	-5.8	-0.6	2.4	-0.6
Canada	1.7	-8.4	-2.2	4.9	0.7
United Kingdom	1.4	-10.2	-3.7	6.3	2.3
Eurozone	1.3	-10.2	-2.7	6.0	1.3
Germany	0.6	-7.8	-0.8	5.4	0.2
France	1.5	-12.5	-5.3	7.3	2.8
Italy	0.3	-12.8	-3.7	6.3	1.5
Developing Europe	2.1	-5.8	-0.6	4.3	0.1
Russia	1.3	-6.6	-1.1	4.1	0.6
Turkey	0.9	-5.0	0.0	5.0	0.0
Developing Asia	5.5	-0.8	-1.8	7.4	-1.1
China	6.1	1.0	-0.2	8.2	-1.0
India	4.2	-4.5	-6.4	6.0	-1.4
Middle East & Central Asia	1.0	-4.7	-1.9	3.3	-0.7
Saudi Arabia	0.3	-6.8	-4.5	3.1	0.2
Latin America and the Caribbean	0.1	-9.4	-4.2	3.7	0.3
Brazil	1.1	-9.1	-3.8	3.6	0.7
Sub-Saharan Africa	-3.2	-3.2	-1.6	3.4	-0.7
World Trade	0.9	-11.9	-0.9	8.0	-0.4

^{*} Difference in percentage points compared with IMF estimates in April 2020

Source: World Economic Outlook Update, IMF, June 2020

Among the most developed countries, the US economy slowed significantly in the first quarter of 2020 as the spread of the coronavirus forced many states to impose shutdown measures in mid-March, leaving millions of people out of work. The annual rate of GDP change for the first quarter stood at 0.3%, up from 2.3% in the previous quarter and 2.7% a year ago. For 2020, a reduction of GDP by 8.0% compared to 2019 is forecast, while for 2021 a partial replacement of this year's recession is foreseen (recovery of 4.5%). Since the outbreak of the coronavirus crisis, the US federal government has taken action worth \$ 3.98 trillion (18.6% of GDP) with an estimated impact in the government deficit of \$ 2.48 trillion (11.6% of GDP). Additional support initiatives are expected by the end of the year. The economy began to open up in early May, with varying degrees between states depending on the extent of the virus, and some restrictions remain in place in several states. However, there are fears of a second wave of coronavirus spread, as daily new cases have been on a sharp upward trajectory recently.

In the Eurozone, the annual GDP change rate declined sharply in the first quarter of this year, to -3.1%, from 1.0% in the previous quarter and 1.5% in the same quarter last year. A 10.2% fall in GDP is forecast for the whole of 2020, while a partial recovery of 6.0% is also expected for 2021. At EU level, so far, measures totalling €3.9 trillion have been taken. (28% of EU GDP), including measures adopted by the European Commission at national level. Moreover, under consideration is a new €750 billion (5.4% of EU GDP) support package, the Recovery Fund, which is planned to be covered by the EU budget, with most of it being in the form of grants (66 %) and the rest in loans, so as not to further burden the public debt of the Member States.

In the UK, GDP fell 1.6% year-on-year in the first quarter of this year, from an increase of 1.1% in the previous quarter and growth of 2.0% a year ago. For the whole year, a recession of 10.2% is forecast, while in 2021 a recovery of 6.3% is foreseen. To date, measures totalling approximately £463 billion (20.9% of GDP) have been taken to curb the effects of the coronavirus, of which £330

billion (14.9% of GDP) relates to loans and guarantees. Depending on the evolution of the pandemic phenomenon, new interventions are planned from next autumn³.

In Japan, GDP shrank by 1.9% in the first quarter of 2020, following a 0.7% decline in the previous quarter. For the whole of the current year, a contraction of 5.8% is forecasted but for the next year a recovery 2.4%. In May, the Japanese government approved a second large fiscal package to support the economy, amounting to ¥117 trillion (21% of GDP), i.e. an intervention similar to the first package adopted in April, aimed at strengthening the solvency of households and businesses. In addition, a further financial support package is envisaged in the autumn to support the development of⁴.

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

In particular, China's economy shrank at an annual rate of 6.8% in the first quarter of 2020, as it was the first country to be hit by COVID-19, resulting in a lockdown from the end of January, from a growth of 6.0% in previous quarter and growth of 6.4% a year earlier. Growth rate of 1.0% is forecast for the whole of 2020, while for 2021 a growth acceleration to 8.2%. China has so far taken fiscal measures estimated at RMB 4.2 trillion (4.1% of GDP) to address the effects of the coronavirus. However, the overall level of intervention is significantly higher, taking into account measures to strengthen the health system, support measures by public enterprises and automatic fiscal stabilizers.

India's economy grew at a rate of 3.3% per year in the first quarter of 2020 from 4.1% in the previous quarter and 5.4% in the initial quarter of 2019. In response to the economic impact of COVID-19, and in addition to the stimulus measures announced on 26 March - valued at around 0.8% of GDP - the Government announced new support measures in mid-May, totalling 5.1% of GDP, to the benefit of businesses and households. Anyway, this year GDP is projected to shrink 4.5%, followed by a strong recovery of 6.0% in 2021.

Russia's gross domestic product increased by 1.8% year-on-year in the first quarter of 2020, accelerating from the previous quarter (1.5%), and the corresponding quarter last year (1.0%). For the whole of 2020, GDP is projected to shrink by 6.6% and partially rebound it in the next year (4.1%). So far, the size of the undertaken fiscal-support measures is estimated at around 3.4% of GDP.

Turkey's economy grew at an annual rate of 4.4% in the first quarter of 2020 from 5.9% in the previous quarter and a recession of 1.0% a year ago. GDP for the whole of this year is estimated to shrink by 5.0%, while a strong, approximate recovery of 5.0% is projected for 2021. According to the country's authorities, so far, the overall measures to address the economic impact of the coronavirus are estimated at more than TL 498 billion (10.8% of GDP).

In Latin America, the average recession this year will be 9.4%. In the first quarter of 2020, Brazil's economy shrank at an annual rate of 0.2%, up from 1.6% in the previous quarter. For 2020, the Brazilian economy is projected to shrink by 9.1% while for 2021 a partial recovery of 3.6% is expected. For mitigating the economic effects of the coronavirus, the Brazilian authorities have announced a total of 11% of GDP.

The OECD Composite Leading Indicator for its member countries recovered slightly in May by 1.5% to 95.65 points, after falling in the previous two months, cumulatively by 5.3%. Business and

³ Source: https://uk.reuters.com/article/us-health-coronavirus-britain-budget/uks-sunak-to-delay-major-stimulus-package-until-autumn-ft-idUKKBN23C2VQ

⁴ Source: https://www.reuters.com/article/us-health-coronavirus-japan-amari/japan-expected-to-compile-next-econ-stimulus-in-fall-says-pm-abes-ally-idUSKBN23T3AF



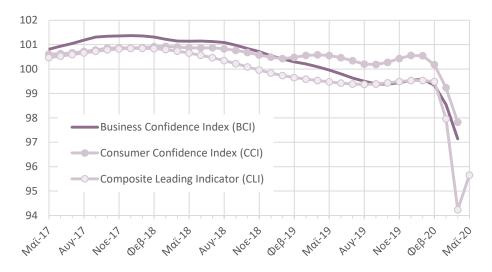
consumer confidence indices fell cumulatively in March and April by 2.2% and 2.4%, respectively, according to the latest data.

Average inflation among developed economies fell by almost 1.3 percentage points from the beginning of the year to April to 0.4%, while in emerging markets it fell by 1.2 percentage points to 4.2%. Falling demand and fuel prices have so far outpaced supply disruption.

In the midst of the health crisis, global monetary policy continues to be supportive in reducing the impact of the pandemic on the banking system and financial markets. In particular, the Fed announced that it will maintain its key interest rate in the range 0-0.25% until 2022, while it has announced unlimited asset purchases, through the quantitative easing program (QE4), to reduce losses in jobs and incomes. Already, as of February 26, the Fed's balance sheet has increased by \$ 2.9 trillion (13.6% of GDP), reaching \$ 7 trillion. Respectively, the ECB on 4 June⁵ decided to keep its key interest rates stable and at the same time announced an increase in the funds of the extraordinary pandemic asset purchase programme (PEPP) by €600 billion, to €1.35 trillion. Together with the additional program decided on March 12 under the APP program, the total bank of packages for the purchase of assets reaches € 1.47 trillion (12.3% of Eurozone GDR) untriadial banks of up to € 3 trillion (around 25% of Eusocanter GDP) through refinancing operations with very low interest rates, up to -1%. Since 28 February etse to CB3% in balance sheet has increased by €1.5 trillion (12.6% of euro area GDP), reaching €6.2 trillion virinester

Figure 2.1

Business Confidence Index and Composite Leading Indicator for OECD countries (seasonally corrected data, long run average of all observations=100)



Source: OECD

The UK central bank has cut its key interest rate since March to a historic low of 0.1%, and has already allocated almost £200bn (9% of GDP) in bond markets since the crisis began. The Bank of Japan in June kept the key short-term lending rate at -0.1% and long-term financing costs close to 0%, while it has allocated \pm 75 trillion liquidity by the same month. (13.5% of GDP) to support businesses to reduce the effects of the pandemic.

⁵ https://www.ecb.europa.eu/press/pr/date/2020/html/ecb.mp200604~a307d3429c.en.html

B. EU and Euro area economies.

- Following the unexpected outbreak of the novel coronavirus in Europe in the first quarter, trends of its de-escalation in the second quarter, of uneven intensity among countries.
- Successive programs to support the European economy, most significantly the enlargement of the ECB's PEPP and the EU Recovery Fund.
- Nevertheless, a significant weakening of the Economic Sentiment Indicator in both zones in the second quarter.
- Negative GDP growth rate in the EU and the Euro area in the first quarter of 2020, 2.6% and 3.1% respectively, the lowest since Q3 2009, in both cases.
- Negative contribution of net exports to growth in the period January March in the Euro area and the European Union.
- First European Commission forecasts amid the crisis, on Eurozone recession 7.7% in 2020 and recovery 6.3% next year (May 2020).

The COVID-19 pandemic and the restrictive measures implemented to ensure public health across Europe have disrupted the functioning of the EU economy. The impact is strong on demand, supply chains, labour supply, industrial production, prices, trade and capital flows. The impact of the health crisis also played an important role in the fact that the European economy at this juncture was relatively vulnerable to a shock, as it had already slowed down significantly in 2019 due to some structural problems in its industry sectors. It is now possible that the EU has entered the deepest economic downturn in its history.

Specifically, in the first quarter of 2020, the economies of the European Union and the Eurozone experienced a recession, by 2.6% and 3.1% respectively, compared to growth of 1.8% in the EU and 1.5% in the EC a year earlier. According to the European Commission's recent forecast report⁶, after growth of 1.2% last year, in the Eurozone, the recession is expected to reach 7.7% for 2020 while for 2021 a recovery of 6.3% is forecast; while for the European Union, after growth of 1.5% in 2019, a recession of 7.4% this year and then, in 2021, a significant correction of 6.1% of GDP is forecast.

The recession in the European Union's economies in January-March this year resulted from the decline in domestic demand, with the positive contribution of investment weakening from 0.5% in the fourth quarter of 2019 to 0.1% in the following one, however that of private consumption became negative (-1.7%) from positive (0.9%) in the same fourth quarter of the previous year. The impact of net exports on GDP change in the first quarter of 2020 was negative for the second consecutive quarter, by 1.1%, compared to a marginal negative impact of 0.7% in the previous quarter. Similar are the trends in the structure of the recession in the euro area economies, with domestic demand being the main recessionary factor (-1.7 p.p. from +1.7 p.p. in the fourth quarter of 2019). There was also a smaller positive contribution of investment than in the fourth quarter of last year, 0.2% of GDP versus 0.7% of GDP (respectively), while the contribution of consumption changed, from +0.7 am in the previous quarter to -2.1 am at the beginning of this year. In addition, in this quarter, the contribution of net exports to the Eurozone was negative, by 1.4%, worse than in the previous quarter (-0.8%).

The structure of GDP components on the expenditure side stood almost similar for the EU-27 and the Euro area, with consumption accounting for 74.5% and 74.8% of GDP respectively, investments accounting for 22.6% and 22.5% of GDP, exports 51.1% and 49.7%, and imports 48.2% and 46.9% of GDP.

⁶ European Economic Forecasts Spring 2020, Ευρωπαϊκή Επιτροπή, Μάιος 2020



The highest growth rates in the EU-27 in the first quarter of this year (annual changes in seasonally adjusted data) were recorded in Ireland (4.5%), Romania (2.7%), Bulgaria and Lithuania (2.4%). Greece, with a recession of 0.9%, performed much better than the Eurozone average (-3.1%). The countries with the deepest recession were Italy (5.4%), France (5.0%), and Spain (4.1%). At the 12-month rolling level, Greece showed a growth rate of 1.3%, higher than that of the EU (0.4%) and the EZ (0.1%), as well as than that of France and Germany, which recorded a negative growth rate of 0.2% both. The country with the lowest rate, on a 12-month basis, was Italy (-1.1%), while Austria and Spain (0.4%) were also low. In contrast, the countries with the highest growth rate in the EU-27 were Ireland (4.9%) and Hungary (4.1%).

In terms of economic climate trends and key precursor indicators of economic activity in the euro area and the European Union, the €-COIN index rose in the first quarter of 2020 to 0.22 points, from 0.15 points in the previous quarter, while it was lagging slightly behind when compared to the first quarter of the previous year (0.25). The monthly performance of March 2020, at 0.13 points is at the same level as in October 2019 showing the reversal of the economic climate, while then the index shows a significant decline indicating the deterioration of the economic climate due to the economic impact of the COVID pandemic -19.

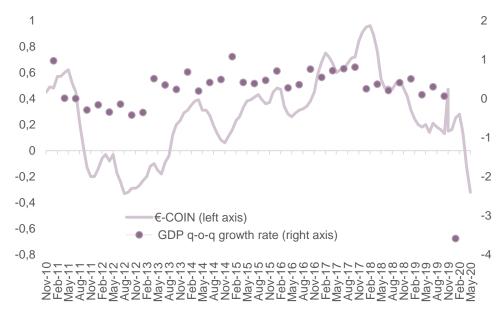
The European Commission's Economic Sentiment Indicator for the EU-27 and the Eurozone fell significantly between March and May this year, by 36.3 and 39.9 points respectively, to 66.7 and 67.5 as a result of the health measures taken to tackle the pandemic, despite that in January and February 2020, it had increased after a six-month downward trend. In June 2020 the Economic Sentiment Indicator increased to 74.8 points in the EU-27 and stood at 75.7 points in the Eurozone, 8.1 and 8.2 points higher than the previous month. In addition, it was 28.3 and 27.2 points lower than a year ago, in June 2019.

Overall in the second quarter of 2020, the EU Economic Sentiment Indicator was 31.6 points lower than in the previous quarter and 35.6 points lower than in the corresponding quarter of 2019. In the Eurozone, the Economic Sentiment Indicator was 30.7 points lower than in the previous quarter and 34.5 points below its value in the same period last year. Among the largest economies of the EU, in France in the second quarter of this year the climate index declined compared to the first quarter of 2020 by 31.9 points, while compared to the second quarter of 2019 the index stood at 31.4 points lower. Germany's economic climate also deteriorated by 21.9 points, while the index was 27.3 points lower than in the second quarter of last year. In Italy the index fell by 28.3 points compared to the previous quarter and by 33.3 points compared to a corresponding quarter in 2019. Finally, in the period April - June 2020, the level of the Economic Sentiment Indicator in Greece decreased significantly less than in other European countries. Compared to the previous quarter it decreased by 18.9 points. The country's index stood at 87.6 points in June, almost 15.1 points lower than a year earlier (102.7 points).

Figure 2.2

Monthly index €-COIN & Eurozone GDP*

Large decrease of the leading index €-COIN in April and May of 2020, because of the economic effects of the health crisis



^{*} The Centre of Economic Policy Research in cooperation with the Bank of Italy estimates the leading index of economic activity €-COIN for the Eurozone on a monthly basis. The index is a prediction of the quarterly GDO growth and is a combination of many different features like the industrial production prices, labor market data and financial data.

Source: CEPR and Bank of Italy

Table 2.1

Economic Sentiment Indicator EU-28 & Euro Area (av. 1990-2018=100)

Month	July- 18	Aug- 18	Sept- 18	Okt- 18	Nov- 18	Dec- 18	Jan- 19	Feb- 19	Mar- 19	Apr - 19	May - 19	June - 19
EE-27 (2020)*	111.5	111.5	110.7	110.1	109.3	107.5	106.2	105.4	105.2	104	105	103.1
Euro area	111.2	111	110.4	109.7	109.5	107.4	106.3	106.2	105.6	103.6	105	102.9

Month	July- 19	Aug- 19	Sep- 19	Oct- 19	Nov- 19	Dec- 19	Jan- 20	Feb- 20	Mar- 20	Apr - 20	May - 20	June - 20
EE-27 (2020)*	102.4	102.7	101.3	100.4	100.9	101	102.5	103	94.6	63.8	66.7	74.8
Euro area	102.3	102.6	101.1	100.2	100.7	100.9	102.6	103.4	94.2	64.8	67.5	75.7

^{*27} countries after 2020

Source: European Commission (DG ECFIN), June 2020

More complete information on the trends in the figures of the GDP of the Eurozone and the EU in the first quarter of 2020 and other macroeconomic variables, as well as on the estimated trends in the near future is provided next in this subsection. The forecasts for 2020-2021 are presented as they arise for the regions of EU and euro area countries in the most recent forecast report of the European Commission.

Analytically, according to Eurostat data for the first quarter of 2020 (annual changes in seasonally adjusted data), private consumption in the European Union decreased by 3.3%, while in the previous quarter it increased (1.6%), as in the corresponding period of 2019 (1.5%). In the Eurozone, household consumption fell by 3.9%, from an increase of 1.3% in the previous quarter, while a year earlier it had increased by 1.2%. The European Commission last May forecast a 8.5% reduction in



total household consumption in the EU by 2020 and a recovery to 6.21% in 2021. For the Eurozone, it forecasts a 9.0% weakening of private consumption in 2020 and an acceleration for next year, to 7.1%. At country level, private consumption in Germany was 2.8% lower, while in the previous quarter it was up (+ 1.3%) and in France there was a larger decline (4.5%). In Italy it decreased by 6.3%, from an increase of 0.3% a quarter ago, and in Spain it shrank by 6.6%, from an increase of 1.2% in the fourth quarter of 2019. In Greece, the decline was significantly smaller, 0.7%, while in the fourth quarter of last year there was an expansion of 1.3%.

Expansion of public consumption shrank in the EU and the Eurozone in the first quarter of 2020, to 1.1% and 1.0%, from 2.1% and 1.9% respectively a quarter before. In the corresponding quarter of 2019, public consumption amounted to 1.6% and 1.5% in EU and Eurozone. For 2020 and 2021 the European Commission expects an increase in growth in the EU-27 compared to last year, primarily to address the effects of the health crisis, to 3.3% and 0.6% respectively, while for the Eurozone it estimated similar increases, 3.2% and 0.6%. In the first quarter of this year, there was an increase in public consumption in Greece, by 2.0%, while in the previous quarter it was reduced by 1.4%.

In January-March 2020, investments in the EU increased marginally, by 0.3%, significantly less than in the previous quarter (2.4%), while their growth slowed down in the Eurozone, to 1.0%, compared to 3.0% in the fourth quarter of last year. In the corresponding quarter of 2019 investment had expanded by 3.3% in the EU and 3.2% in the Euro area. The European Commission forecasts a 13.2% contraction in 2020 and a 9.7% increase in 2021 in the EU, while expecting a 13.3% decline and a 10.2% recovery for the Eurozone respectively. In the first quarter of 2020, investment shrank in Germany by 1.3% from a larger decrease but by 4.5% in the previous quarter, while in Italy they continued to fall by 5.8% from a 5.1% decrease in the quarter October - December 2019. The decline in investment in France was at 8.4%, versus an increase by 1.1% in the previous quarter. In Greece there was a decline of 5.1%, compared to a negative change of 5.6% in the fourth quarter of 2019.

Table 2.2

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

		EU-27			Eurozone			
	2019	2020	2021	2019	2020	2021		
GDP	1.5	-7.4	6.1	1.2	-7.7	6.3		
Private Consumption	1.6	-8.5	6.7	1.3	-9.0	7.1		
Public Consumption	1.8	3.3	0.6	1.7	3.2	0.6		
Gross Investment	5.7	-13.2	9.7	5.7	-13.3	10.2		
Exports of Goods and Services	2.7	-12.8	9.5	2.5	-12.9	9.5		
Imports of Goods and Services	3.7	-12.8	9.5	3.8	-12.9	9.7		
Employment	1.0	-4.4	3.3	1.2	-4.7	3.9		
Unemployment (% labour force)	6.7	9	7.9	7.5	9.6	8.6		
Inflation	1.4	0.6	1.3	1.2	0.2	1.1		
Balance of General Government (% GDP)	-0.6	-8.3	-3.6	-0.6	-8.5	-3.5		
Debt of General Government (% GDP)	79.4	95.1	92.0	86.0	102.7	98.8		
Current Account Balance (% GDP)	3.2	3.1	3.4	3.3	3.4	3.6		

Source: European Economic Forecasts, Spring 2020, European Commission, May 2020

A decrease was recorded in exports of goods and services in the first quarter of 2020, both in the EU (2.8%), and in the EZ (3.5%), compared with an increase of 1.7% and 1.8%, respectively in the previous quarter and of 3.5% and 3.3% in the first quarter of 2019 correspondingly. For 2020, the European Commission forecasts a decrease in exports to the EU-27 compared to 2019, by 12.8% and then an increase of 9.5% next year. For the Eurozone it expects a contraction of 12.9% for the whole of 2020 and an increase in 2021 to 9.5%. At country level, Germany saw exports squeeze 3.9% in the first quarter of 2020, versus a 0.9% increase in the fourth quarter of 2019. The contraction in exports to France and Italy in the first quarter of this year was 7.4% and 7.5% respectively, from a fall of 1.0% and an increase of 0.2% in the previous quarter. In Greece there was an acceleration of exports growth in the first quarter compared to a quarter earlier, to 2.5% from 0.7%. Exports in Spain decreased by 6.3%, from an increase of 3.3% in the previous quarter, as well as in Cyprus (5.3%), after an increase of 5.5% in the fourth quarter of last year.

Imports fell in the first quarter of 2020 in the EU compared to the previous quarter, to 0.7% from a positive change of 3.2%. A similar change was observed in EZ, to 0.8% from an increase of 3.6% in the last quarter of 2019. A year earlier, an increase of 3.9% was recorded in both the EU and the Eurozone. For the years 2020 and 2021, the European Commission has forecast a fall of 12.8% for the EU-27 and an increase of 9.5% respectively. For the Eurozone it expects a reduction in 2020 of 12.9% and growth in 2021 of 9.7%. At country level, in the first quarter of 2020 imports decreased in Spain by 7.4%, compared with an increase of 2.1% in the previous quarter. Similarly in France they were on a downward trajectory, by 5.8%, from an increase of 1.2% in the previous quarter, and in Italy to -6.3% from -2.7%. Negative rate was recorded in Germany (-2.1%), from an increase of 0.8% in the fourth quarter of 2019. In Greece, by contrast, imports increased marginally by 0.2%, while in the previous quarter they were less than 0.3%.

Based on the developments in the GDP components in the Eurozone, the net exports contribution to it was negative in the fourth quarter of 2019 and in the first quarter of 2020 (-0.8% and -1.4% respectively), versus a marginally negative one in first quarter of 2019 (-0.1%). The slightly larger negative contribution of net exports in the first quarter stemmed from the simultaneous change in the

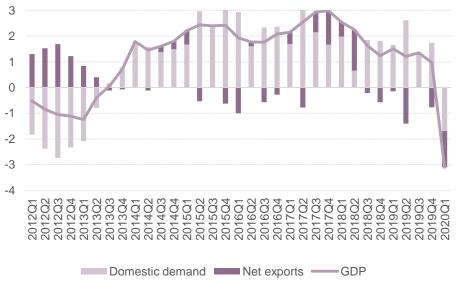


contribution of exports, from + 0.9% in the last quarter of 2019 to -1.8% in January-March 2020, and of the similar change - but milder - trend in imports, from + 1.6% in the fourth quarter to -0.3% in the next. As already mentioned, the negative contribution of domestic demand was about 1.7% of GDP, which was diametrically opposed to that of the previous quarter (+ 1.7%). The decrease was mainly due to the fall in private consumption, which contributed by 0.7% of GDP in the fourth quarter of 2019 while in the first quarter of 2020 its contribution was negative, by 2.1 p.p.

Harmonised inflation index strengthened in the first quarter of 2020 in the EU and the Eurozone, recording a rate of 1.5% and 1.1%, from 1.3% and 1.0% respectively. In the first quarter of 2019, harmonized inflation was at approximately the same level, at 1.5% and 1.4%, in EU and EZ respectively. For the year 2020 the European Commission recently predicted that inflation will slow significantly in the EZ, to 0.2%, but also in the EU, to 0.6%, while in 2021 it will return closely to current levels, to 1.1% and 1.3% respectively.

Figure 2.3

Eurozone GDP changes – Contribution of each component to the real yearly growth rate (in p.p.)



Negative
contribution of net
exports to the GDP
change in the first
quarter of 2020.
Negative
contribution of
domestic demand
due to the decline in
private consumption

Source: Eurostat

Employment growth was lower in the first quarter of 2020 compared to the fourth quarter 2019, 0.4% in the EU and the EZ from 1.0% and 1.1% respectively; while on year-over-year basis, it fell behind comparatively to the same period of 2019 (1.2% and 1.4% respectively). The European Commission forecasts a reduction in job creation in the EU for 2020 and an increase in 2021, by 4.4% and 3.3% respectively, following the rise of 1.0% in 2019. For the Eurozone, it also forecasts a drop in employment this year, by 4.7%, and an increase of 3.9% in 2021, following the expansion of 1.2% in 2019. The strongest employment growth in the first quarter of 2020 was recorded in Malta (6.4%), Luxembourg (3.0%), Cyprus (2.4%), Ireland (2.2%) and Estonia (1.5%). In Greece, employment growth reached 0.3%. In contrast, employment fell in Bulgaria (1.3%), Slovakia (0.5%), Portugal (0.5%), and the Czech Republic (0.4%) and the Czech Republic (0.4%).

Unemployment increased marginally in the fourth quarter of 2019, to 6.6% in the EU and 7.4% in the Eurozone, compared to 6.5% and 7.3% respectively in the third quarter of 2019. In the fourth quarter of the year before last, it was 7.1% in the EU and 7.9% in the EZ. For 2020, the European Commission has forecast an increase in unemployment rates in the EU-27 and the Eurozone, to 9.0% and 9.6% respectively, from 6.7% and 7.5% respectively in 2019, while for 2021 expects unemployment rates of 7.9% and 8.6%, compared to 6.7% and 7.5% in the whole of last year. In the

period October - December 2019, the highest unemployment rate was recorded, for another quarter, in Greece (16.8%), with Spain (13.8%) and Italy (9.9%) following, while in France unemployment was 8.4% and in Germany 3.1%.

In the field of fiscal performance, the general government balance deficit in the EU-27 in the fourth quarter of 2019 was limited to 0.7% of GDP, similar to the third quarter of 2019. The European Commission predicts that it will change in 2020 and 2021, to -8.3% and -3.6% of GDP respectively. Regarding the average budget deficit Eurozone, European Commission expects it to expand to -8.5% of GDP in 2020 and -3.5% in 2021, from -0.6% in 2019. In respect to public debt of the Eurozone countries in the fourth quarter last year it amounted to 84.2% of GDP. For the whole of the same year (2019) it was equal to 86.0%. It is estimated that it will increase in 2020 to 102.7% and next year it will fall to 98.8% of GDP respectively. Government debt, as a percentage of GDP, remained particularly high in the fourth quarter of 2019 in several Member States, with the highest level in Greece (176.6%), Italy (134.8%), Portugal (117.7%), Belgium (98.6%) and The Netherlands (98.6%). France (98.4%).

With regard to the monetary policy framework, due to the COVID-19 epidemic and the associated adverse economic effects, recall that the ECB launched in mid-March a series of monetary and credit policy measures aimed at boosting liquidity. The Pandemic Emergency Purchase Programme (PEPP) aims to prevent the fragmentation of credit markets and the weakening of the transmission of monetary policy. On 4 June, the ECB announced that PEPP would be extended by €600 billion to €1.35 billion. In addition, the market horizon under this framework will be extended at least until the end of June 2021. The same communication states that the interest rate on the main refinancing operations as well as the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.00%, 0.25% and -0.50% respectively. The amounts of the principal from the redemption of securities acquired under this programme at maturity will be reinvested until at least the end of 2022. An important fact is the exception for Greece's participation in the extraordinary assets purchasing programme (except the PEPP where it participates). The measures collectively support the provision of bank loans, in particular by facilitating the conditions under which credit claims are accepted as collateral.

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

- Tackling the new coronavirus pandemic, in particular as regards the process of lifting public health protection measures and implementing liquidity-enhancing actions by the European Commission and the European Central Bank (e.g. Recovery Fund).
- Increased uncertainty in both consumer and business markets.
- Sectoral disturbances, with the tourism and travel sectors most affected.
- Implementation of the UK Exit Agreement on specific issues such as the rights of EU citizens in the UK, the economic settlement and the settlement of trade conditions.
- Geopolitical tensions in the Middle East and migration flows.



2.2 The Economic Environment in Greece

A. Economic Sentiment

- Significant decline of the Economic Sentiment Indicator in Greece in the second quarter of 2020 compared to the immediately preceding quarter (91.8 from 110.7 units), as a result of the impact of the pandemic of the new coronavirus on expectations. Milder deterioration compared to the corresponding quarter last year (102.4 units). The recent level is similar to the 2015 average.
- Business expectations weakened in the recent quarter compared to the previous one in all sectors and more strongly in Construction and Services.
- The Consumer Confidence Indicator was markedly lower in the April-June period than in the first quarter of this year, at -31.1 from -10.4 points. However, it did not differ significantly from its level a year earlier (-29.4 units).

IOBE's economic surveys provide important information on developments in the economy, both on the supply side (business) and on the final demand side, i.e. consumers. Moreover, key indicators included in them are precursor indicators for different economic sizes and can be used adequately to predict immediate developments, even for the GDP trend ⁷.

In the second quarter of this year, the Economic Sentiment Indicator fell sharply compared to the previous quarter. Obviously, this development is mainly due to the effects of the new coronavirus pandemic, which was an unprecedented and unexpected event, mainly the restrictive measures in the operation of businesses and the movement of citizens domestically. Similar was the evolution of the Consumer Confidence Indicator. The decline was reinforced by the fact that both the first index had been at its highest level in the previous quarter in the last 19 years, and the second close to it. Nevertheless, the decline of the Economic Sentiment Indicator domestically was milder compared to the EU and the Eurozone, while on the contrary the change in the Consumer Confidence Indicator was more pronounced than in Europe. It is noted that in June the first index fell slightly, by 0.9 points, while the second rose by 5.3 points, a development which is considered to be due to the maintenance of the best epidemiological characteristics domestically in May and next month, but also in phasing out of many restrictive measures. The latest development signals the prospect of a not slow return to conditions and everyday life before the pandemic. Of course, the economic climate trend in the coming months will depend on a number of factors, both domestic and external. Significant economic policy interventions are expected at national and European level, and in particular how they are implemented. Globally, the pandemic problem continues with considerable intensity and fluctuations in some large population countries, while the recession forecasts for this year are being revised up to the worse. In any case, the next period is extremely critical, as the third quarter is the one that largely determines the developments in the field of domestic product and on an annual basis.

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country.

⁷ It is pointed out that since last March, the series presented in the sub-indices of business expectations, i.e. the indices in Industry, Retail, Services and Construction have changed in terms of their base period. Specifically, the period 2000-2010 (= 100) was defined as a new basis, thus differentiating the indicators, which until February 2018 were formed based on the period 1996-2006. However, the series have been completely revised backwards so that the data are comparable to each other. As a result, the indices with the new base period are overall higher compared to those with the older base period. The change of base period by IOBE does not affect the overall Economic Sentiment Indicator for Greece or any other

Analytically, the Economic Sentiment Indicator in Greece in the quarter April-June 2020 was strongly weakened compared to the first quarter of 2020, at 91.8 points, while it also fluctuated at a significantly lower level compared to the average corresponding to last year (102.4 units). The recent level is close to the 2015 average.

In Europe, the corresponding average was significantly lower during the quarter compared to the previous one, both in the EU and in the Eurozone. Specifically, the Economic Sentiment Indicator stood at 68.4 (out of 100.0) points in the second quarter of this year in the EU, and at 69.3 (out of 100.1) points in the Eurozone.

At the sector level, business expectations in Greece fell in the second quarter of this year compared to the previous one in all sectors. In Industry and Retail there was a slight decline while in Services and Construction the decrease was more pronounced. On the consumer side, there was a significant deterioration in the Consumer Confidence Indicator. Compared to the same quarter last year, the average indicators deteriorated in all sectors, mainly in Construction, Services and Consumers, while in Retail and Industry the decrease was milder. In more detail:

The Consumer Confidence Indicator in Greece in the April-June quarter this year was significantly lower on average than in the first quarter of 2020, at -31.1 from -10.4 points, a performance marginally worse than a year ago (-29.4 points). The corresponding average index fell slightly in the EU, to -19.0 (from -7.8) points, as well as in the Eurozone (-18.5 from -8.8 points). These levels are significantly lower than a year ago (-6.2 and -7.0 units respectively).

Trends in the separate key elements that constitute the overall index were mainly downward in the second quarter of this year compared to the first quarter of the year. Thus, both the forecasts of consumers in Greece for the economic situation of their households over the next 12 months and those for the economic situation of the country fell sharply, as did the estimates of households for their current situation, while the intention for major purchases in the coming period was limited.

More specifically, the percentage of those who are pessimistic about the financial situation of their household in the next 12 months increased significantly, to 55% (from 29% in the previous quarter), while it decreased to 6% (from 19%) the percentage of those who state the opposite. Also, the percentage of consumers in Greece who make ominous forecasts regarding the economic situation of the country increased sharply to 71% (from 28%), with only 10% (from 35%) expecting an improvement. As for the intention to save, the percentage of households that do not consider saving as possible in the next 12 months increased slightly, to 84% (from 80%), while it decreased to 15% (from 17%), the percentage of those who consider it likely. In the forecasts for the development of unemployment, the percentage of those who estimate that the situation will worsen has sharply increased to 85% (from 33%), with on average only 4% (from 33%) expressing the opposite view. The proportion of consumers reporting being "indebted" in the second quarter of 2020 was slightly reduced to 7% (from 10%), slightly lower than in the corresponding quarter last year (10%). Also, the percentage of respondents who state that they save a little increased slightly to 18% (from 15% in the corresponding quarter last year). Finally, the percentage of those who report that they "just make ends meet" increased to 65% (from 60%) and the percentage of households who report that they "draw from their savings" was marginally reduced to 10% (from 12%), level marginally lower than that in the corresponding quarter of 2019 (11%).

The index of business expectations in Industry in the second quarter of this year stood at 87.6 (from 108.6) points, much lower than its corresponding performance last year (103.8 points). In the key activity data, the index in the forecasts for the short-term developments of the production fell significantly in the examined quarter and then balanced (+34.0 points on average), while the estimates for the level of orders and demand moved further negatively (at -32, 0 from -9.8 points the relevant index). Estimates of stocks of finished products indicate a slight strengthening (at +14.1 from +8.9 units the relevant index), while trends in export variables are sharply downward: The forecasts for the export dynamics of the next quarter fell significantly (-0.4 from +27.6 units), while the current estimates for the exports of the sector changed equally (to -15.0 from +7.0 units), as well



as the estimates for orders and demand abroad (-24.7 from -5.9 units). In the employment forecast, the relative average quarterly balance fell to +2.5 (from +14.5) points on average. And the percentage of utilization of the factory potential decreased to 65.9% (from 71.3%), while the months of guaranteed production of the enterprises increased, to 6.3 months on average.

The index of business expectations in Retail Trade in the quarter under consideration was significantly lower than the previous one, at 80.3 points (from 115.1), a performance higher however compared to the corresponding quarter of the previous year (97.8 points). Of the key variables of the

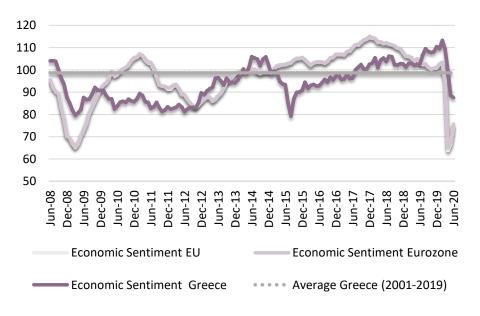
index, the average balance sheet for current sales estimates fell significantly to - Of the companies in the sector, 49% believe that its sales have decreased, wi estimating the opposite. In terms of forecast sales, the index of +41 points fel escalating further (at +27 from +15 points the index). Of the other economic change in the balance of provisions for orders to suppliers was sharply declining the average quarterly price), while in contrast to the employment of the sector, the balance shows a slight increase to + 22 (from +17) units. Finally, in telecorresponding balance decreased and turned negative (-8 from +11) points, we companies to express expectations of price de-escalation and 83% (from 81%). A decline in business expectations was recorded in the second quarter of 2020 the Retail trade except the Food-Beverage-Tobacco sector.

A higher percentage of households (65%) reported that it "barely made ends meet" compared to the first quarter, small reduction in the percentage of people who are in debt

Business expectations in Construction fell sharply in the second quarter of this yet balance reaching 28.1 (from 84.8) points on average, a decline that was the broadest among the main sectors of activity. This performance is at a much lower level than in the corresponding quarter of the previous year (54.8 points). In the key variables, the employment forecasts for this sector deteriorated sharply, with the relative balance reaching -68 (out of -22) points and only 4% (out of 14%) of companies expecting more jobs when the 72% (from 36%) expect their reduction. The companies' forecasts for their planned operations deteriorated sharply (at -83 from -31 points the index), while the estimates for the current level of their work program fell significantly (at -27 from -8 points the relevant balance).

Figure 2.4

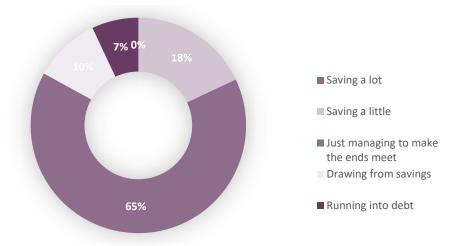
Business Confidence Indicator: EU-27, Eurozone and Greece, (1990-2018=100, seasonally adjusted)



Source: European Commission, DG ECFIN

Figure 2.5

Evidence from a household consumption survey (April - June 2020)



Source: IOBE

The BCI in the second quarter was much lower than it was in the first quarter. It was also lower than it was in the second quarter last year



The months of secured activity of the companies in the (aforementioned) sector improved significantly to 13.0, while the negative balance in the price forecasts strengthened (-27 from -14 points), with 33% (from 22%) of the companies expecting a decrease in the short term and 7% increase. Finally, the percentage of companies reporting that they do not face obstacles in its operation was limited to 2% (from 13%); while from the other companies, 12% of them (from 26%) consider low demand as the most important obstacle, 35% the insufficient funding and 46% (from 15%) consider factors such as the general economic situation of the country, capital controls, high taxes, lack of projects, late payment by the state, etc. as the biggest obstacles in its operation. At the sectoral level, business expectations moved strongly downwards in both the Private Construction and Public Construction sectors.

Table 2.3

Economic Sentiment Indicator

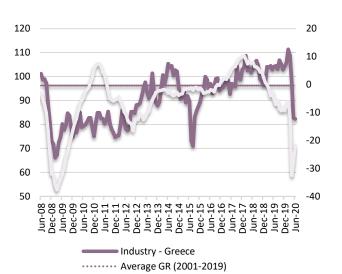
Time Period	Econ	onic Sentiment In	dicator		Consumer Confidence Indicator (Greece)			
					(Gree	ce)		
	EU-27	Eurozone	Greece	Industry	Construction	Retail Trade	Services	
2010	99.3	99.1	86.3	79.9	52.2	61.3	68.1	-56.9
2011	99.8	99.9	84.8	81.1	37.7	60.9	66.1	-70.5
2012	88.0	88.1	83.7	81.4	47.5	59.1	58.8	-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
Q1 2018	113.6	113.6	103.2	105.1	60.3	97.1	91.4	-49.8
Q2 2018	112.2	112.2	104.5	102.7	60.5	104.7	104.4	-48.7
Q3 2018	111.2	111.2	104.8	105.7	55.0	108.3	97.6	-44.7
Q4 2018	109.0	109.0	102.6	97.7	56.6	108.2	94.6	-32.6
Q1 2019	106.0	105.8	102.4	101.8	56.7	105.8	85.7	-31.1
Q2 2019	104.0	103.8	102.4	103.8	54.8	97.8	92.6	-29.4
Q3 2019	102.1	102.0	108.1	104.8	52.7	115.5	108.2	-11.7
Q4 2019	100.8	100.6	108.8	104.1	68.1	119.1	104.4	-7.1
Q1 2020	100.0	100.1	110.7	108.6	84.9	115.1	106.5	-10.4
Q2 2020	68.4	69.3	91.8	87.6	28.1	80.3	58.6	-31.1

Sources: European Commission, DG ECFIN, IOBE

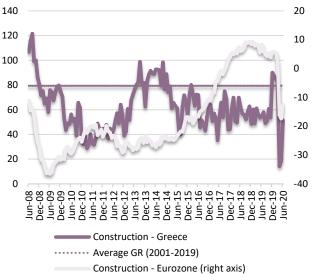
In Services, the average Business Confidence Indicator showed the largest decline among sectors in the second quarter of 2020 compared to the previous one, at 58.9 (from 106.5) points, well below the corresponding period in 2019 (92.6 points). Of the key variables, estimates of current demand deteriorated sharply, with the relevant index losing 59 points on average to -34 points.

Figure 2.6
Business Expectations Index



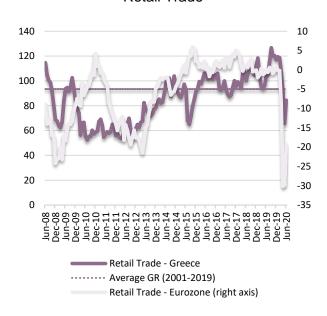


Constructions

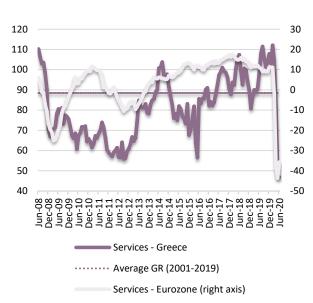


Retail Trade

Industry - Eurozone (right axis)



Services



Source: IOBE

Business expectations weakened in the last quarter compared to the previous one in all sectors, especially in Construction and Services and more mildly in Industry and Retail, reflecting the effects of the health crisis on expectations

Estimates for the current business situation moved similarly sharply downwards (-39 from +18 units on average), with the balance in the forecasts for the short-term demand of the companies in the sector also falling sharply, at -21 (from + 29) units. From the rest of the activity data, the balance of employment forecasts of the respondents presented an extensive deterioration (at -10 from +23 points on average), while at the same time in the prices, the average index of business expectations weakened significantly and stood at -23 (from +4) units. Finally, it fell sharply, to 17% (from 32%) on average the proportion of respondents reporting a seamless business operation, with 34% indicating the lack of demand as the main obstacle to its operation, 14% the lack of working capital and 30% (from 16%) other factors linked to the general economic situation, such as inability to borrow, high



taxation, late payments, etc. Of the services sectors examined, the sub-indices fell sharply in the second quarter of this year across all sectors, with the most pronounced decrease in Hotels-Restaurants-Tourist Agencies and Land Transport.

B. Fiscal Developments and Outlook

- General Government Surplus Balance for the fourth year in 2019, by 1.4% of GDP, against a target of 0.6% of GDP and a performance of 1.0% in 2018
- Improvement exclusively from the result of the Central Government, which from a deficit of €2.1 billion the year before last turned into a surplus of € 0.9 billion in 2019. In turn, this is due to extraordinary revenues of €3.1 billion.
- Implementation of state budget 2020 (Jan-Apr): significant deterioration of deficit to €4.072 million from €1.041 million A year ago. Deficit more than double the target for the fourth quarter this year (€1.655 million).
- Deviation from the target due almost exclusively to the pandemic (87.9% in the two months of March-April).
- 68.9% of the deviation from the target in the two months March-April is due to revenue shortfall and 31.1% to overspending.

General Government Balance: 2015—2019

According to the most recent national accounting data relating to the General Government (G), which were communicated to Eurostat last April, its balance for 2019 was, for the fourth consecutive year, surplus. In particular, the surplus stood at 1.4% of GDP, whereas initially, in the 2019 Budget, a surplus of 0.6% of GDP had been budgeted. Similarly, the primary surplus reached 4,3% of GDP, compared with an initial forecast of a surplus of 3,9% of GDP (Table 2.5). Also, according to the methodology of the Enhanced Surveillance, the primary surplus is estimated at a range of 3.7-3.9% of GDP, while the country's contractual obligation foresaw a primary surplus of 3.5% of GDP for the previous year.

Despite the easing of fiscal policy and the lag of economic growth rate in 2019, the General Government surplus was more than double the forecast in the 2019 Budget. At the same time, it increased by 40% compared to the surplus in 2018. Similarly, the primary surplus was increased by 0.4 percentage points of GDP compared to the 2019 Budget forecast (Table 2.5).

The improvement in relation to the target is found exclusively in the balance of the Central Government, which from a deficit of €2.1 billion in 2018 turned into a surplus of €0.9 billion in 2019. In contrast, the surplus of Social Security Organizations (OKA) was reduced from €3.3 billion in 2018 to €1.8 billion in 2019. Also, the surplus of local authorities (OTA) decreased from €0.7 billion in 2018 to €0,1 billion in 2019.

Table 2.4

General Government Balance * (% OF GDP, National Accounts data, ESA 2010)

	2015	2016	2017	2018	2	019
					Initial target	Actual
General Government Balance	-2.9	0.3	0.8	1.0	0.6	1.4
Primary Balance General Government	0.6	3.5	3.9	4.3	3.9	4.3
GDP	177,258	176,488	180,218	184,714	192,749	187,456

Source: Financial and fiscal data for the period 2016-2019 -1st Notification, ELSTAT, April 2020 and Explanatory Budget Report 2019, December 2018, Ministry of Finance, pp. 39-41.

*Without the impact of financial institution support.

The great improvement in the result of the Central Government is primarily due to the collection of extraordinary revenues from the Ordinary Budget, totalling \leq 3.1 billion. It is also due to a \leq 0.6bn reduction in interest expenditure compared to 2018, as well as to the new significant cuts in public investment by \leq 1.4 billion, versus the relevant budget credits (of 2019) and also comparatively to 2018⁸.

Contrary to the good fiscal performance, in 2019 significant, chronic problems remained unsolved, such as e.g. the final regulation of non-performing loans, the promotion of privatizations, the start of works in Elliniko, etc., which would significantly accelerate the pace of economic growth. The growth performance and prospects of the economy are taken very seriously by the markets, perhaps more so than primary surpluses, when they are not accompanied by comparable growth.

Unfortunately, the epidemic of the new coronavirus struck the Greek economy while the return to "normality" had begun, after almost ten years of economic adjustment, thus halting, at least temporarily, the path towards normalization of the economic activity domestically. It is characteristic of this perspective that the Economic Sentiment Indicator had reached 113.2 points in February, the highest point in two decades.

In addition, the Greek economy is still characterized by huge macroeconomic imbalances. Total debts to the tax office ⁹ (€105 billion), the insurance funds (over €34 billion) and to PPC (DEH) (€2.7 billion) have reached approximately 75.5% of GDP, while taken together with the debts to banks far exceed that number. Continuous debt "settlement" only exacerbates and perpetuates the problem, as it allows strategic defaulters to abuse the arrangements. It is typical that of those debtors who are initially part of a settlement, after a short period of time most do not continue to service their debts. The absence of asset criteria for inclusion in the 120 instalments is not considered to be a cadet. Even bank deposits are not taken into account. The settlements pose a huge "moral hazard" and pose a major challenge to honest taxpayers, who have also lost the 1.5% minimum income tax deduction since 2018. It is very important that the epidemic is not used as a pretext for default and the creation of a new generation of non-performing loans, debts to the tax office and insurance funds, etc..

General Government Debt

After three years of continuous growth, the General Government's debt fell in 2019 both as an absolute size and as a percentage of GDP, compared to the previous year. Thus, the GDP debt ratio was reduced to 176.7% compared to 181.2% the previous year (Table 2.6).

The decrease compared to 2018 is found in the category "long-term loans" which included the IMF loan which was repaid. On the contrary, lending to long-term bonds increased due to the issuance of new securities at low interest rates.

A further reduction in the debt ratio to 167.0% of GDP was planned for 2020, but after the pandemic this seems impossible. The recession will negatively affect the denominator of GDP's government debt ratio, while emergency fiscal and financial interventions to tackle the health crisis will increase the ratio numerator.

Table 2.5

Consolidated General Government Debt (EUR million).

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 $^{^{\}rm 8}$ These issues were detailed in the IOBE Bulletin for the first quarter of 2020.

⁹ Without surcharges and fines.



	2014	2015	2016	2017	2018	2019
Consolidated General Government debt.	319,629	311,729	315,010	317,485	334,723	331,063
% АЕП	178.9	175.9	178.5	176.2	181.2	176.6
АΕΠ	178,656	177,258	176,488	180,218	184,714	187,456

Sources: Fiscal data for the 2016-2019 period -1st disclosure, ELSTAT, April 2020

From the experience of 2010-2018 it is clear that the decline in nominal GDP has a strong upward effect on the ratio of government debt to GDP, especially if the recession is accompanied by a simultaneous rise in government borrowing rates. Recent estimates¹⁰ for the period 2010-2018 showed that the difference between the average borrowing rate and the rate of change of nominal GDP was the most important factor in the growth of the debt/GDP ratio, causing a cumulative increase of 79.6 percentage points in the debt/GDP fraction in nine years. Over the same period, the primary result contributed only 10.5 percentage points to the increase in the debt/GDP ratio.

In mid-February 2020, the yield on the Greek benchmark bond was below 0.9%. One month later, due to the crisis, the yield on the Greek bond had exceeded 4.0%. However, the announcement of Greece's participation in the ECB's new quantitative easing program reduced the yield on the Greek benchmark bond to around 2.0%, while it is now at 1.6%. This has significantly reduced the strengthening of the dynamics of public debt.

Implementation of the 2020 State Budget, January-April

The impact of the health crisis on the economy is expected to have very significant negative effects on public finances. In order to tackle the pandemic, it was necessary, inter alia, to shut down or to under-operate most sectors of the economy, which is expected to cause a particularly strong recession. In addition, in order to support businesses and preserve the jobs and incomes of their employees, a series of measures have been taken since mid-March, which have already begun to affect both revenue and budget expenditure in the four months.

On the revenue side, the recession began to negatively affect the budget tax revenues as well as the contributions to the insurance funds. Additional downward pressures on revenues are exerted by the measures of suspension of the tax liabilities of the affected companies, their employees and the self-employed, as well as the 25% deduction in the amount of the tax, for those who met their tax obligations on time. The withholding of income tax was also negatively affected as hundreds of thousands of employees were placed under the 'suspension' of their employment contract.

On the expenditure side, the overruns that have already occurred are mainly due to measures to support the incomes of employees, whose employment contracts have been suspended, as well as to the reinforcement of the self-employed and the self-employed. Extraordinary expenditure was also required to deal with the crisis, e.g. the recruitment of a significant number of doctors and nurses, the supply of medical supplies.

It should be noted that the results of the January-April quarter presented below reflect a small part of the impact on public finances on an annual basis, as the announcement of the measures began gradually from mid-March and was implemented from April onwards. In addition, the categories of beneficiaries were constantly expanding during April and May. In the last ten days of May, many new measures were announced to support businesses as well as the income of employees, which will last until October (reduction of VAT, reduction of rent, unemployment benefit to seasonal employees of previous years). All this will have a negative impact on the fiscal outcome in the coming months.

Balance and primary balance of the State Budget

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 $^{^{10}}$ Report of the Governor for the year 2020, Bank of Greece, March 2020, p. 175.

The implementation of the State Budget in the first four months of the year has been affected by the coronavirus pandemic in March and April. The available four-month data already show a significant worsening of the State Budget deficit, which reached €4,072 million, compared to a deficit of €1,041 million in the corresponding period of 2019. The deficit is also more than double compared to this year's four-month target (€1,655 million). Respectively, the primary result of the State Budget was transformed from a surplus of €1,463 million in 2019 to a deficit of €1,515 million this year (Table 2.7).

The deviation from the deficit target in the four months is €2,417 million. Of this, €293 million had already been recorded in the period January-February and was due exclusively to the Public Investment Program (PIP). Thus, in the two months March-April, the deficit was exceeded by €2,124 million. Of this amount, €2,003 million comes from the ordinary budget and €121 million from the PIP¹¹.

About 68.9% of the deviation from the OB deficit target in the two months March-April is due to revenue shortfall and 31.1% to expenditure overruns relative to the respective targets. According to the available data, the direct burden of OB expenditures from the payment of the "special purpose allowance" to employees amounted to €720 million, but other expenditures were made for the immediate response to the crisis (supply of sanitary equipment, etc.), whose level is not known. Other categories of expenditure are also certain to be retained, as over-payments in the two months of March-April are only €623m. On the revenue side of the Ordinary Budget, the shortfall in the two-month period is estimated at €1,380 million, as in the previous January-February period there was a lag of €126 million.

Table 2.6
SB implementation: January-April 2020* (million €)

	Ja	nuary- Apri	il	% ch	ange	2018	2019	2020	% ch	ange
	2018	2019	2020	19/1 8	20/1 9			Budget	19/1 8	20/1 9
I. SB REVENUE (1+2	15,387	15,956	14,100	3.7	-11.6	51,793	55,097	53,751	6.4	-2.4
1. Gross OB revenue	14,294	15,063	12,833	5.4	-14.8	49,155	52,240	50,072	6.3	-4.2
α. OB revenue before tax refunds.	15,652	16,254	14,158	3.8	-12.9	54,735	57,284	54,998	4.7	-4.0
β. Less Tax refunds	1,358	1,191	1,325	-12.3	11.3	5,580	5,044	4,926	-9.6	-2.3
2. PIP revenue	1,093	893	1,267	-18.3	41.9	2,638	2,857	3,679	8.3	28.8
II. SB EXPENDITURE	15,268	16,997	18,172	11.3	6.9	56,372	55,265	56,037	-2.0	1.4
3. OB expenditure	14,764	16,111	16,364	9.1	1.6	50,135	49,623	49,287	-1.0	-0.7
α. Primary expenditure	13,083	13,607	13,807	4.0	1.5	45,459	44,398	44,787	-2.3	0.9
β. Interest (gross) ¹	1,681	2,504	2,557	49.0	2.1	4,676	5,225	4,500	11.7	-13.9
4. PIP expenditure	504	886	1,808	75.8	104.1	6,237	5,642	6,750	-9.5	19.6
III. SB Deficit (-) / Surplus (+)	119	-1,041	-4,072			-4,580	-168	-2,286		
% of GDP	0.1	-0.6				-2.5	-0.1	-2.4		
OB deficit/surplus	1,800	1,463	-1,515			91	5,057	2,215		
% of GDP	1.0	0.8	•••			0.1	2.7	1.1		
GDP (at current prices)	184,714	187,456				184,714	187,456	197,315		

Source: Monthly SB Execution Bulletin April 2020, Ministry of Finance, May 2020.

OB = Ordinary Budget, SB = State Budget

¹¹ Most of the PIP deficit, amounting to € 384 million, was created in the two months of January-February. By contrast, in the first two months of the year, OB had a deficit below target of just € 91 million.



* According to the new way of presenting revenue and expenditure

If all the divergences in OB revenues and expenditure in the two months from March to April (against the corresponding targets) are attributed to the pandemic, then the cost of dealing with the crisis, including measures to support the economy, amounted for this period to at least €2,003 million. On an annual basis it is estimated that the cost will be multiple.

Ordinary Budget Revenue.

In the first four months of the year, revenue from the Ordinary Budget, before tax refunds, decreased by 12.9% compared to 2019 and amounted to €14.2 billion. At the same time, they are lagging behind by €1,400 million or 9.0% compared to the initial target for the four months (Table 2.8). This negative development is mainly due to the measures taken to suspend the payment of taxes and certified debts by the companies that ceased to operate, as well as the 25% discount for those companies that paid their debts on time. It is also due to the significant reduction of economic activity and travel in the two months March-April.

Table 2.7
State Budget Revenue* (million €)

	State Budget Revenue (million €)											
		Jan. – Apri	ı	% cł	nange	2018	2019	2020П	% ch	ange		
	2018	2019	2020	19/1 8	20/19				19/18	20/19		
Net SB revenue	15,387	15,956	14,100	3.7	-11.6	51,793	55,097	53,751	6.4	-2.4		
Net OB revenue	14,294	15,063	12,833	5.4	-14.8	49,155	52,240	50,072	6.3	-4.2		
Tax refunds	1,358	1,191	1,325	-12.3	11.3	5,580	5,044	4,926	-9.6	-2.3		
OB revenue	15,652	16,254	14,158	3.8	-12.9	54,735	57,284	54,998	4.7	-4.0		
Income tax, of which:	3,725	3,597	3,429	-3.4	-4.7	16,548	16,716	16,577	1.0	-0.8		
Personal	2,966	2,911	2,778	-1.9	-4.6	10,902	11,029	11,327	1.2	2.7		
Corporate	342	324	286	-5.3	-11.7	4,299	4,512	4,030	5.0	-10.7		
Property tax	520	505	396	-2.9	-21.6	3,082	2,786	2,813	-9.6	1.0		
Taxes on donations, inheritance etc.	45	77	56	71.1	-27.3	161	245	270	52.2	10.2		
Tariffs	76	89	86	17.1	-3.4	232	298	322	28.4	8.1		
Taxes on goods and services, of which:	8,728	9,043	8,215	3.6	-9.2	27,437	28,013	28,490	2.1	1.7		
VAT	5,514	5,872	5,371	6.5	-8.5	17,184	17,792	18,217	3.5	2.4		
Excise duties	2,243	2,183	2,048	-2.7	-6.2	7,184	7,125	7,213	-0.8	1.2		
Other production taxes	695	442	613	-36.4	38.7	1,238	991	1,136	-20.0	14.6		
Other current taxes	520	441	421	-15.2	-4.5	2,564	2,365	2,389	-7.8	1.0		
Social contributions	19	18	18	-5.3	-	65	55	55	-15.4	-		
Transfers, of which:	408	343	295	-15.9	-14.0	141	2,001	782	193.4	-60.9		
Sales of goods and services	199	1,104	142	454.8	-87.1	740	1,682		435.7	-		
Other current revenue	712	594	486	-16.6	-18.2	2,509	1,728	700	133.5	-59.5		
Sales of fixed assets	5	2	2	-60.0	-	18	1,119	-	-	-		
PIP Revenue	1,093	893	1,267	-18.3	41.9	2,638	2,076	1,132	5.5	-45.5		

Sources: Table 3.2, Explanatory Budget Report 2020, Ministry of Finance, December 2019 and Monthly SB Execution Bulletin April 2020, Ministry of Finance, May 2020.

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

 $^{^{12}}$ It is likely that the cost is significantly higher as not all related costs are known.

Specifically, revenues from income tax decreased in the four months by 4.7%, compared to 2019. Relatively to the target, the lag is essentially located ¹³ in the income from the taxation of natural persons and amounts to €220 million. This is obviously the revenue from the withholding, as thousands of employees were on suspension of employment contract. On the other hand, the shortfall against the target from the taxation of legal persons and other categories of income tax is a total of only €11 million.

Reduced in the four months, both compared to 2019 by 21.6%, and in relation to the target, are receipts from the taxation of immovable property (mainly ENFIA), as well as income from the taxation of inheritances, donations, etc. (-27.3% compared to 2019). The total shortfall from both taxes in relation to the target amounts to €78 million. (Table 2.8).

As expected, the largest revenue losses were recorded in indirect taxation, as much of retail and economic activity in general, as well as travel, was disrupted. VAT revenues decreased by 8.5% compared to the previous year and by €474 million or 8.1%, compared to the four-month target. It is noted, however, that VAT revenues in the initial four months of 2019 were increased by €272 million from the extension of the concession contract of Athens Airport. Excluding these one-off revenues, the decrease compared to 2019 is limited to 4.1%.

Receipts from Excise Duties (ED) also decreased by 6.2% compared to 2019, with the decrease being found exclusively in the ED-fuel, due to traffic restrictions. The shortfall in fuel receipts from the four-month target reached €137m. On the contrary, revenues from the ED-tobacco products were marginally above the target and also relatively to 2019.

Revenues from "other production taxes", which consist mainly of income (dividend) from the Bank of Greece were higher by 38.7%. The significant increase is due to the high dividend from the BoG, which amounted to € 528 million, compared to € 353 million in the previous year.

In general, the evolution of revenues in the four-month period reflects the decrease of economic activity as well as the measures to defer the payment of taxes and certified debts by businesses and households. It is noted that after the positive 6th Report of Enhanced Surveillance for Greece by the European Commission, the revenues in the coming months will be increased by the amount of € 748 million from the profits of the European Central Bank on the Greek bonds (ANFA's and SMP's).

Ordinary Budget Expenditure

In the four months January-April the Ordinary Budget payments increased by 1.6% compared to 2019 and reached €16.4 billion. This amount includes financial assistance to employees who had their employment contracts suspended, amounting to €720 million, which was paid in April, as well as all other emergency costs related to the pandemic. In relation to the target (€16.0 billion), OB expenditure in the four-month period exceeded €370 million. The total of extraordinary expenses falls into the category of primary expenses which increased at a rate of 1.5% compared to the previous year. In relation to the target, primary expenditures exceeded €251 million (Table 2.9).

Of the sub-categories of primary expenditures, payments for "employee benefits" decreased by 2.4% compared to 2019. However, the 2019 budget includes the retroactive payment of €324 million. If the necessary adjustments are made for comparability reasons, then the rate of change in 2020 is reversed from a decrease to an increase of 5.1%. It is noted that in the last five years, staff costs show a small but continuous increase every year.

Table 2.8
State Budget Expenditure* (million €)

January-April	% change	2018	2019	2020П	% change

 $^{^{13}}$ State Budget Implementation Bulletin April 2020, Ministry of Finance, May 2020

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	2018	2019	2020	19/18	20/19				19/1 8	20/1 9
SB Expenditure (1+2+3)	15,268	16,997	18,172	11.3	6.9	56,372	55,265	56,037	-2.0	1.4
OB Expenditure (1+2)	14,764	16,111	16,364	9.1	1.6	50,135	49,623	49,287	-1.0	-0.7
1.Primary OB Expenditure	13,083	13,607	13,807	4.0	1.5	45,459	44,398	44,787	-2.3	0.9
Compensation of employees	4,131	4,552	4,445	10.2	-2.4	13,121	13,247	13,403	1.0	1.2
Social benefits	481	251	43	-47.8	-82.9	1,978	653	134	-67.0	-79.5
Transfers	8,118	8,450	9,029	4.1	6.9	28,179	28,205	27,824	0.1	-1.4
(of which SSFs)	5,656	5,797	5,742	2.5	-0.9	18037	19,243	18,700	6.7	-2.8
Purchase of goods and services	259	222	228	-14.3	2.7	1,532	1,458	1,145	-4.8	-21.5
Subsidies	12	82	9	583.3	-89.0	75	224	89	198.7	-60.3
Other current expenditure	10	26	2	160.0	-92.3	32	50	71	56.3	42.0
Non allocated expenditure	-	-	-	-	-	-	-	1,496	-	-
Purchase of fixed assets	71	23	50	-67.6	117.4	542	562	624	3.7	11.0
2. Interest ¹ (gross basis)	1,681	2,504	2,557	49.0	2.1	4,676 ¹	5,225	4,500	11.7	-13.9
3. PIP Expenditure	504	886	1,808	75.8	104.1	6,237	5,642	6,750	-9.5	19.6

Sources: Explanatory Budget Report 2020, Ministry of Finance, December 2019 and Monthly SB Execution Bulletin April 2020, Ministry of Finance, May 2020.

Payments for social benefits decreased compared to 2019 by 82.9%, as the expenses for family allowances have been transferred to the category "transfers".

The largest category of expenditure, expenditure on transfers, increased in the four months by 6.9% compared to the previous year and reached €9,029 million because it includes the emergency aid to employees, amounting to €720 million. If the necessary adjustments are made, then these payments are reduced by 1.7% compared to the previous year. It is noted that the specific expenses are expected to be burdened in the coming months by the new measures but also by the adjustment of pensions, as most of this category of expenses (68-69% in the four months) concerns grants to Social Security Organizations.. Payments for subsidies decreased and returned to their long-term trend, following the sharp increase in 2019 (Table 2.9).

Finally, as regards interest expenditure, these increased in the four-month period by 2.1% to €2,557 million. They also exceeded the target by €119 million. On an annual basis, these payments were projected to decrease by 13.9% compared to 2019.

In the four-month period many categories of expenditure have been restrained ¹⁴ for addressing emergencies due to the crisis. For this reason, the excess in expenditure is small. The question is whether restraint is possible on an annual basis. It is estimated that in the coming months there will be very high pressure on expenditure due to the continued addition of new categories of beneficiaries for exceptional aid, as well as to the new measures announced at the end of May.

Finally, it is noted that in March ¹⁵ the overdue liabilities of the State to its suppliers (including outstanding tax refunds) amounted to €2,409 million, increased comparatively to December 2019 by €413 million. The full repayment of these debts, which is a contractual obligation under the Third Program (memorandum) and should have been concluded by August 2018, will also cause upward pressure on expenditures in the rest of the year.

^{*} In adjusted cash-based accounting. According to the new classification of expenditure, in effect since 01/01/2019.

¹⁴ Ministry of Finance, Press Release of 25 May 2020.

¹⁵ There is currently no data for April.

Public Investment Programme (PIP)

The PIP also contributed significantly to the deterioration of the State Budget result, as payments for public investments far exceeded both the four-month target and the corresponding payments for 2019. Although the revenue course was positive, this was not enough to prevent the deficit from widening. Thus, while the PIP was expected to present a very small deficit in the four months, of about €36 million, it presented a deficit of €541 million (Table 2.7).

In more detail, the revenue of the PIP increased by 41.9% compared to the very low receipts of 2019 and reached €1.267 million, while also recording an excess against the target (€1.114 million). The excess is detected in the withdrawals from the European Union Funds (Table 2.7).

Investment costs doubled compared to 2019, while they exceeded forecasts by €658 million. The acceleration of investment is a very positive development, especially in terms of fixed capital formation, as public investment has fallen sharply in the last five years. Moreover, due to the recession this year, it is very important to accelerate the formation of fixed capital, in order to help the recovery of the economy. This eventuality is reinforced by the recent expansion of PIP expenditure by €1.25 billion, according to the supplementary budget approved at the end of May. The increase was made in order to take emergency financial measures to deal with the health crisis and it is included in the Greek Stability Program 2020 - 2021. The increase in the spending ceiling will come by €250 million from the national part and by €1.0 billion from the co-financed part.



C. Financial developments

- The new economic crisis due to the coronavirus pandemic increases challenges for banks, especially in relation to their profitability and asset quality.
- Liquidity support measures open up Greek banks' access to cheap financing while pushing for a recovery in loans to the private sector.
- The gradual implementation of the banks' asset protection plan has started, a tool that will allow the faster reduction of NPLs.
- Over time minimum cost of new borrowing for businesses, but the difference remains compared to other countries in the 'south' of the euro area.
- The 10-year government bond yield was reversed from declining to stable, around 2%.

The sharp spread of the health crisis, coupled with unprecedented restrictions on economic activity, as well as uncertainty about the evolution and risk of a recurrence of the pandemic in the coming period create a new framework of challenges that directly affect the international and domestic financial system. The expected deep recession for this year raises the need to revise banks' business plans, especially in relation to the reduction of "red" loans, the recovery of their profitability and credit capacity. Following the sharp deterioration of the investment climate in March and the sharp decline in securities ratings, including Greek banks by 60%, the relatively effective management of the health crisis by the Greek authorities stabilized with a slight increase in stock prices in the period April - July.

In order to shield the robustness and stability of the financial system, a series of policy measures were announced by the European Central Bank aimed at boosting the liquidity of the economy and banks. Especially with regard to Greece, the ECB has for the first time given the country access to a programme for the purchase of government and corporate bonds, within the Pandemic Emergency Purchase Programme, with a total initial budget of €750 billion¹⁶, by derogating (waiver) of its rules for the eligibility of government securities. In addition, Greek banks' securities were reinstated in the eligible collateral of the ECB, while the valuation haircuts in the eligible collateral were reduced. The possibility of long-term low-cost refinancing for banks through the ECB's TLTRO III program became particularly important during the lockdown period, with Greek banks quadrupling their relative liquidity source within three months, totalling over €28 billion in May.

At national level, emergency fiscal measures were implemented to support borrowers, such as the temporary rent subsidy from the state and for up-to-date business loans, as well as the temporary suspension of up-to-date loan instalments by banks for three months in the case of "borrowers who are proven to be affected by the crisis ". Indicatively, by the end of May the up-to-date loans for which applications had been submitted by mainly small businesses and households for inclusion in the instalment suspension measures amounted to approximately €15 billion.

Among the inherent weaknesses of the Greek banking system that need attention, stand out its weak quality assets and equity, combined with the far higher stock of Non-Performing Loans (NSRs) in Europe, which acts as a deterrent to both the credit capacity of banks and their profitability prospects. With regard to the impact of banks on the real economy, credit contraction to households continues unabated and the cost of private sector banking financing, although at historically low levels, remains higher than European partners.

On the opposite side of the challenges, fundamental trends were also recorded with significant positive elements. In the midst of the revision of the ambitious targets for the reduction of NPLs, the

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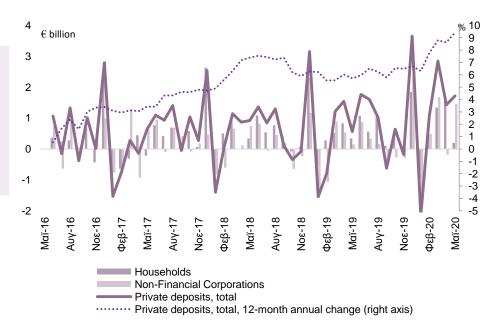
¹⁶ At the beginning of June, the programme's budget was extended by €600 billion.

gradual implementation of more effective tools has begun, such as the "Hercules" program for the protection of assets for banks (Asset Protection Scheme), through the completion of sales and securitization of loans for one of the four systemic banks, Eurobank. In addition, the rate of return of private deposits to the banking system has increased. Historically low interest rates on new corporate lending were recorded, while for the first time since 2010 there was a marginal credit expansion for the entire private sector as a result of new business credit, largely under the influence of liquidity support policy measures.

Figure 2.7

Monthly net flow of private deposits in Greek banks

The positive net deposit flows of the private sector were higher in the March-May 2020 period, compared to a year ago



Source: Bank of Greece

On the liabilities side of banks, the recovery rate of private sector deposits increased significantly between March and May 2020, compared to a year earlier. Thus, a net inflow of €6.0 billion was recorded, due to an inflow of €2.9 billion from non-financial corporations (MFIs) and €3.1 billion from households. In the same period of 2019, the net inflow of private deposits was lower, amounting to €3.3 billion. On a rolling 12-month basis, the average monthly trend of return on private deposits was recorded at € 1064 million in May 2020, which is the highest since October 2009.

From August 2015 to February 2020, private sector deposits expanded by €34.2 billion, of which €20.5 billion came from households and €13.2 billion from non-financial corporations. Nevertheless, the stock of total private deposits is still below the level of 2014 (November), by €10.2 billion, of which a lag of €13.4 billion comes from households, while non-financial corporations show an increase compared to of that level, by €5.1 billion.

A slowdown in the positive trend in private deposits is expected for the rest of 2020, as households and businesses face the effects of the pandemic, which means a reduction in disposable income as well as a significant increase in uncertainty. Conversely, the decline in consumption and imports, increase domestic savings - acting as a deterrent to a complete reversal.

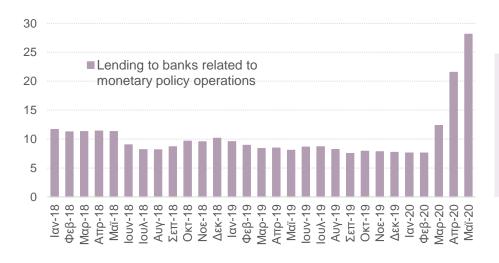
The second part of banks' liabilities concerns Eurosystem financing. Two years after the elimination of funding from the ECB's liquidity facility (ELA), banks are expanding their sources of funding. The ECB's recent emergency liquidity package to strengthen banks' liquidity, temporarily relaxing the criteria on the basis of which collateral obtained under quantitative easing programmes is assessed as eligible, now also offers Greek banks the possibility of obtaining liquidity from the Eurosystem and



the interbank market at a cost much lower than that involved in the emergency liquidity mechanisms during the adjustment programmes. Indicative is the increase in Eurosystem financing recorded over the last three months, with low-cost loans through long-term monetary policy operations, such as the ECB TLTRO III (Chart 2.8).

Figure 2.8

Long-term refinancing of Greeks banks from the Eurosystem (in € billion)



The recent ECB package increases the liquidity of banks from the Eurosystem to the highest levels since their release by the ELA in early 2018

Source: Bank of Greece

On the banks' assets side, the recovery of loans to non-financial corporations accelerated since the beginning of 2019, while the credit contraction to households continued unabated, for ten years up today. Both supply and demand factors for loans contribute to these trends. On the demand side, the uncertainty of the outcome of the pandemic spread has a negative effect, partially offsetting the positive effect of the activation of pre-existing credit lines implemented by some large companies. On the supply side, the high stock of Non-performing Loans (NPLs) has a deterrent effect on banks' lending activity, while a positive effect has the activation of emergency liquidity stimulus measures through the Hellenic Development Bank such as TEPIX II, with the contribution of which, loans amounting to €1.29 billion were concluded in the period April - May.

Private sector financing, excluding loan write-offs, recovered in March-May 2020 by 0.4% in terms of annual change, for the first time since 2010 (Chart 2.8). At the same time, the annual expansion of credit to the private sector came from their 3.9% increase to the Non-Financial Institutions/compagnies (NFIs), which offset the credit contraction of 2.9% to households and 2.4% to the self-employed (Table 2.10). The largest credit expansion to NFIs was recorded in the economic sectors of Industry, Energy, Real Estate Management, Professionals, Trade, Tourism Transport, and Agriculture. On the contrary, there was a contraction in Shipping and Construction.

Table 2.9

Domestic Banking Finance per sector (annual % change of flows*)

Quarter / Year	2/19	3/19	4/19	1/20	Apr.20	May.20
Total private sector	-0.2	-0.2	-0.3	-0.4	0.3	0.7
Households & NPIs	-2.4	-2.8	-2.9	-2.9	-3.0	-2.8
Sole proprietors and unincorporated partnerships	-1.8	-2.3	-2.0	-2.4	-2.4	-2.3
Non-financial corporations	2.6	2.7	2.2	2.0	3.8	4.6
Agriculture	0.7	0.0	2.2	-0.5	1.6	2.0

THE GREEK ECONOMY VOL. 2/20						
Industry	0.1	-0.8	0.7	1.7	6.2	8.7
Trade	-0.3	-0.3	-0.1	0.8	3.4	3.2
Tourism	5.5	4.2	3.8	3.6	3.1	1.7
Shipping	2.2	1.7	1.1	-1.0	-4.9	-4.5
Construction	-0.1	0.5	-1.7	-4.4	-3.2	-3.1
Electricity-gas-water supply	18.4	24.0	11.5	8.0	4.7	5.6
Transport and logistics	50.5	48.5	50.4	19.5	1.9	3.6
Interest rates on new loans (period average. %)						
Consumer credit	9.49	9.68	9.59	9.70	9.24	10.80
Mortgage credit	3.16	3.17	2.93	2.84	2.70	2.93
Loans to non-financial corporations	4.06	3.87	3.62	3.43	3.26	3.08

Source: Bank of Greece

On the demand side, the Bank of Greece's survey on bank lending in the first quarter of 2020 recorded an increase in demand for loans, while its further strengthening is expected in the short term. Credit criteria remained stagnant, without being expected to change in the short term. The driving force of increased demand is short-term loans, on behalf of both small-medium enterprises and large ones.

Non-performing loans (NPLs) declined significantly in the first quarter of 2020, under the influence of the gradual implementation of sales through securitizations, by 9.3% or €7.6 billion, significantly faster than in the previous quarter (- €2.7 billion)¹⁷. The total amount of NPLs in March 2020 was €60.9 billion or 37.4% of total loans, approximately € 46.3 billion or 43.2% lower than the maximum level of March 2016. In business credit, the percentages of NPLs decreased to 34.2% of loans in the first quarter of the year, from 38.4% in the fourth quarter (43.9% in the same quarter of 2019), while a smaller decrease, from 48.6 % to 47.9%, was recorded in the consumer (54% in the same quarter of 2019), as well as in the mortgage portfolios, from 42.4% to 40.4% (44.7 in the same quarter of 2019). ¹⁸

Figure 2.9

Domestic private sector bank financing 2011-2020 (annual% change in flows *)

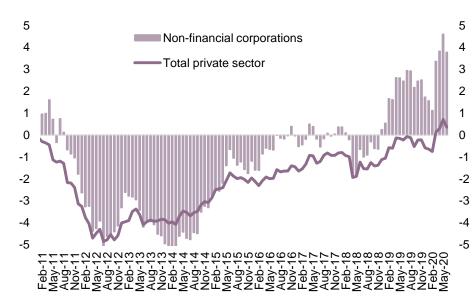
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^{*} The flows result from changes of outstanding balances corrected for loan write-offs. re-evaluation of securities. foreign exchange differences and reclassification/transfer of loans.

 $^{^{17}}$ Data are presented for NPLs that include only the items on the balance sheet

¹⁸ The quarterly edition of the Bank of Greece entitled "Operational Targets of NPLs" has been discontinued, which is why quantitative statistics on the evolution of NPLs such as the cure rate and the default rate for 2020 are not available.





Bank financing to businesses increased significantly during the lockdown under the influence of emergency liquidity support measures by the government, while the credit contraction to households continues unabated

Source: Bank of Greece

*Flows arise from changes in balances adjusted for loan write-offs, debt securities impairments, exchange rate differences and loan reclassifications/transfers.

Following the gradual change in the qualitative characteristics of the limitation of NPLs during the period 2016-2019, in the first quarter of 2020 the decrease of NPLs was based mainly on sales through securitizations and less on write-offs (only €0.6 billion). However, despite progress in the qualitative characteristics of declining NPLs, some possibilities for limiting them are still underexploited, such as auction receipts and collateral liquidation. Also, the coverage rate of NPLs from provisions for impaired exposures is quite low, close to 43.6% in the first quarter of the year.

During 2020, and as a consequence of the new financial crisis, banks will agree with the European Single Supervisory Mechanism SSM on revised operational targets for reducing NPLs by the end of 2022. Under the agreement to date, the goal was to reduce NPLs to less than 20% of total loans by the end of 2021, with the largest contribution coming from loan sales, next rank the contribution from collateral liquidations and only thirdly from deletions. It was also expected the larger contribution to come from the business loan portfolio, followed by mortgages and less from consumer loans.

It is particularly positive that the Greek Government's guarantee program for securitised NPLs portfolios (Project "Hercules", Law 4649/2019) has gradually begun to be implemented. The plan makes it easier for banks to securitize NPLs and remove them from their balance sheets, while at the same time the state will be able to provide the State guarantee for lower risk securities, receiving in return a fee in accordance with market conditions. The remuneration of the government is based on a benchmark which will increase as the level of risk and the duration of the guarantee increase. Specifically regarding implementation, it is expected that the State will provide in total guarantees of €12 billion, for the securitization of NPLs of up to €36 billion within a period of 18 months from October 2019, with the possibility of extension. The management of securitized NPLs will be undertaken by receivables management companies.

At the same time, it is appropriate to consider the implementation of other complementary systemic solutions, such as the Bank of Greece's proposal to improve the capital structure of banks, as in addition to NPLs, also a part of banks' deferred tax claims are proposed to be securitised and sold to third parties through special purpose vehicles. The creation of an Asset Management Company has also been put on the table, which will be linked to the deferred tax claim (DTC) issue. The rapid settlement of NPLs is crucial for banks' lending capacity.

In the short to medium term, the accounting of NSOs will be affected by emergency liquidity, temporary supervisory easing and facility measures for affected borrowers, thus underestimating the real fundamental trends in relation to loan repayment difficulties. Subsequently, a further decline in NPLs is likely, especially to the extent that the Hercules toolbox will be implemented more extensively, albeit at a slower pace, due to the effects of the pandemic crisis. The projected economic downturn for the current year and the uncertainty for the medium term are likely to have a deterrent effect on the recovery of bank credit for productive investments, while the credit contraction in consumer and housing portfolios will continue. On the other side, unprecedented liquidity-enhancing measures and the expected demand for short-term borrowing will act as a boost to credit growth, especially for businesses, with the result that credit contraction is likely to be prevented this year.

Interest rates on new deposits fell to historic lows in the two months of April-May 2020 for Non-Financial Enterprises (NFIs) and households, to 0.13%, from 0.15% in the first quarter of the year and 0.25% in 2019. Interest rates on new lending also fell to 4.1% in the same two months this year, compared with 4.6% in the previous year, mainly due to lower lending costs to NFIs at historically low levels, which offset the increase in lending rates to private individuals for consumer purposes (Table 2.10).

The average cost of bank financing for private sector NFIs reached 3.2% in May 2020, which is the lowest cost of new borrowing since the country joined the Eurozone. However, these costs remain significantly higher than in the rest of the Eurozone. For example, according to the ECB's weighted bank lending cost index (Figure 2.10), the cost to non-financial enterprises in May 2020 stood at 1.5% in the euro area, 1.6% in Germany, and 2.0% in the countries of the "South" of the eurozone (Portugal, Italy, Cyprus, Spain). Then, the spread of borrowing costs for Greek companies in relation to the average of the Eurozone and the average of the "South" decreased, around 170 bp. and 118 bp. respectively). Comparing it with the pre-crisis level, the spread of borrowing costs for Greek companies in relation to the average of other countries in the "South" of the Eurozone, remains significantly higher.

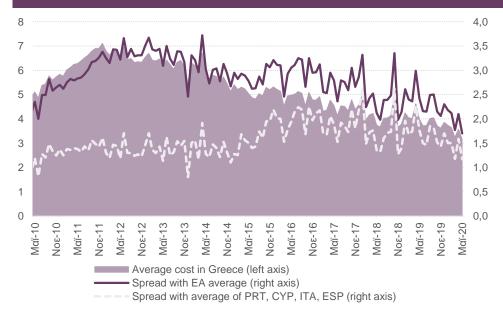
The spread of the health crisis halted the trend of sharp de-escalation in government bond yields observed at the beginning of the year, which for the 10-year bond stabilized at levels close to 2% in March-May, after the minimum monthly average level over time, below 1.1% recorded last February (Chart 2.11). The additional burden on the new borrowing costs for the Greek State from the markets in relation to the rest of the Eurozone countries, expanded in relation to the German ten-year bond (to 245 points from 172 at the end of 2019), while it converged slightly relatively to the average of the countries of the "south" of the Eurozone (at 68 bp from 73 bp at the end of 2019).

The relatively effective management of the pandemic by the Greek authorities improved the investment climate in June, where there was again a decline in the 10-year yield to levels below 1.5%. As a result, following the raising of €2.5 billion by the Greek State in January 2020 with the issuance of a 15-year bond which was over-absorbed by particularly high demand and a market interest rate of less than 2%, in June the Greek State succeeded to raise €3.0 billion from the markets, by issuing a 10-year bond at a market interest rate slightly lower than 1.6%. In the qualitative characteristics of the most recent issue, demand far outweighed supply again, while there was considerable interest from long-term foreign institutional investors. The systematic reduction of the additional cost of new borrowing in Greece compared to other countries will signal the degree of recovery of international investors' confidence in the Greek economy and the prospects for a gradual upgrade of the country's credit rating by international rating agencies.

Figure 2.10

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



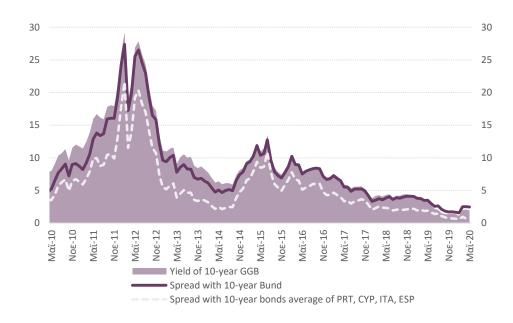


The cost of new business borrowing fell below 3.2%, which is a historically low level, but remained at 118 bp. higher than the average of the "South" of the Eurozone

Source: ECB

Figure 2.11
Yield and spread of a 10-year Greek Government bond (%)

Yields on Greek bonds remained at approximately 2%, converging slightly compared to the countries of southern Europe



Source: ECB



3 PERFORMANCE AND OUTLOOK

3.1 Macroeconomic Developments

- Recession in Greece in the first quarter 2020, for the first time since the second quarter of 2016, by 0.9%, compared to GDP growth of 1.6% in the corresponding quarter last year.
- Contraction of GDP from the decline in investment (-5.1% from +12.3% in the first quarter of 2019).
- Reduction of domestic product, also due to falling consumption of households, in contrast to the strengthening last year (-0.7%, from + 1.3%). Restraining effect on the expansion of public sector consumption (+ 2.0%, + 0.4% a year ago).
- Improvement in the external sector balance, as exports rose slightly (+2.5%, compared with +4.8%), but faster than imports (+0.2%, compared with +9.7%).

Recent Macroeconomic Developments in Greece

Greece's domestic product shrank in the first quarter of this year, for the first time since the second quarter of 2016, by 0.9%. A year earlier it increased by 1,6%. Focusing on components trends in the initial quarter this year, the decline in domestic product is primarily due to a decrease in investment, which in turn stemmed from a decrease in fixed capital formation, not from the difference in the stock trend compared to the corresponding quarter of 2018. The recession was also caused by the decline in household consumption, while the expansion of public consumption had a restraining effect on the fall in GDP. The decline in domestic product was also mitigated by an improvement in the external sector balance, as exports rose slightly, but faster than imports.

Regarding the precise developments in GDP components in the first quarter, domestic consumption was virtually unchanged from a year earlier (+0.1%), when in that period it had strengthened marginally, by 0.3%. Stability is solely due to 2.0% higher public consumption, due to fiscal interventions to tackle the effects of the new coronavirus. A year earlier it also strengthened marginally, by 0.4%. Household consumption decreased by 0.7% in the January-March quarter, in contrast to its significant increase of 1.3% in the corresponding period of 2019. Investments declined at the beginning of 2020 for the third consecutive quarter, with intensity similar to the previous two (-



5.1%), while in the first quarter last year they showed significant growth (+14.4%). However, unlike in previous quarters, their fall did not come from a lesser stocks accumulation or their decrease compared to the same period last year, since their rise widened slightly in the first quarter of this year, by €58m, to €381m. The contraction of investments is due exclusively to the smaller - compared to last year - fixed capital formation by 6.4%, while a year earlier it was expanding by 8.8%.

Almost all fixed capital formation classes decreased in the January-March quarter this year. Exceptions were Housing, with a strong increase of 22.6%, the largest in this quarter of the last three years and much stronger than the corresponding one in 2019 (+6.6%), as well as investments in other products, which were slightly more than that a year ago (+0.7%), a period in which they had marked a slight decline (-1.0%). On the other side, the formation of fixed capital in transport equipment was particularly limited (-44.6%), more than offsetting last year's significant strengthening (+21.9%). Next rank Investments in ICT equipment (-9.4%) and those in mechanical equipment (-6.2%) which are declining, while at the beginning of 2019 both showed an increase of 3.3% and 4.9% respectively. The smallest decline in the initial quarter of this year was in investment in other construction (-4.0%) and agricultural products (+3.3%). For the first category, the decrease was close to the increase a year earlier (+3.6%), while in the second category, last year's mild decline continued and strengthened, by 1.0%.

On the external balance of the economy, exports remained on an upward trajectory at the beginning of this year, albeit at a slower pace than in the corresponding period last year, 2.5% versus 4.8%. In contrast to the initial quarter of 2019, growth this year came exclusively from additional product exports, by 4.7%, when a year earlier they were marginally down (-0.4%). Exports of services, which was the determining factor in the expansion of total exports last year, were unchanged in the quarter January-March this year compared to the same period last year, which amounted to 10.3%. Subsequently, their continuous rise since 2017 till the beginning of this, year was stopped.

At the same time, imports increased marginally, by 0.2%, however in this period last year their growth rate was almost double digits, 9.7%. Both imports of products and imports of services moved sluggishly, recording an increase of 0.2% and 0.3% respectively, while in the first quarter of 2019 the former strengthened more, by 10.0% compared to 6.3%. The larger increase in exports compared to the increase in imports improved the external balance, the deficit of which, in national accounting terms, was further reduced to €549 million (-41.7% compared to 2018) or just 1.2% of GDP).

Approaching GDP on the production side, domestic gross value added was 1.5% lower in the initial quarter than in the same period in 2019, when it strengthened slightly, by 0.8%. Its biggest decline compared to the decline in GDP in terms of demand mentioned earlier is due to the significant increase in tax revenues on products, by 1.9%, which are part of the GDP paid to the state. In six of the ten main sectors of the Greek economy, the activity weakened during the period January-March, in one it essentially remained at last year's level, while it fell to other three. The largest drop in product, in relative terms, was presented by Arts - entertainment, by 12.3% (€191 million), following the small decrease a year earlier, by 1.1%. However, in absolute terms, the decline was more pronounced in Wholesale - retail trade, transport - storage, hotels - restaurants, by €517 or 5.1%, offsetting their increase at the beginning of 2019 by 3.3%. This is followed - as in a percentage contraction of activity - by financial and insurance activities (-4.8% or -€68 million) and the Primary sector (4.6% or -€86 million). This development in the first sector is a continuation of last year's decline, which was much stronger (-8.9%), while in the other sector, stabilising trends (+0.1%) had prevailed at the beginning of 2019. In industry and Professional - scientific - technical - administrative activities, the smallest losses were recorded, -1.4% (-€71 million) and -1.8% (-€39 million) respectively, when a year ago, the production in the first sector was essentially unchanged compared to 2018 (+0.2%) and in the other it increased by 3.3%.

Virtually, the added value in Real Estate Management was unchanged in the initial quarter this year compared to 2019, since its increase did not exceed 0.2% (+€19 million), as in the previous two years. Among the sectors with activity support, the largest increase was recorded in Construction (+15.2% or +€235 million), due to the significant increase in housing construction, as mentioned above. However, their increase was milder than in the corresponding period last year (+30.8%). The product of the



Information - Communication sector was 4.4% (+ €56 million) higher than last year, when it was shrinking by 1.9%. Public administration - Defense - Social Security showed the smallest increase (+0.7% or +€61 million), in contrast to its small recession in the first guarter of last year (-1.1%).

The change in the GDP trend is not currently reflected in unemployment. Some factors are considered to have contributed to this development, mainly the measures to protect jobs from the effects of the pandemic received by the government, the time lag of 2-3 months that has been observed in the developments in the labor market relatively to those in economic activity, as well as the fact that there was a strong decline in the number of unemployed in March compared to the previous month (-106.2 thousand), which was attributed primarily (2/3) to their exit from the workforce, no to the increase in employment. Specifically, according to the relevant press release of EL.STAT., "Several job seekers stated that they are not immediately available to work and therefore, according to the definitions of the relevant European Regulation, are classified as economically inactive." If these people had been considered unemployed, the non-seasonal unemployment rate would have been 16.2% in March, instead of 14.9%. At the sectoral level, the significant increase in consumer demand in the first two months of the year, the continued growth in the same period of exports of products, which stimulated the related activities (transport), but also the emergencies in health services, contributed mainly in increasing employment.

In particular, employment expanded in the January-March quarter this year by 1.0% or 38.6 thousand people which was the mildest in the last five years since the second quarter of 2015. However, the further weakening of unemployment in this period compared to the corresponding one last year, by three percentage points, to 16.2%, came mainly (76.2%) from the reduction of the labor force, by 123.4 thousand. This unemployment rate is the lowest since the second quarter of 2011. Most jobs compared to the first quarter last year were created primarily in the sectors Wholesale - Retail (+29.9 thousand or +4.4%), Transport - Warehousing (+21.4 thousand or +10.9%) and Human Health Activities (+16.2 or +6.6%). The sectors of Manufacturing (+12.2 thousand or +3.4%) and Education (+10.9 thousand or +3.4%) followed with an increase in employment. On the other hand, employment decline was mainly in the primary sector, where it was particularly strong (-41.9 thousand or -9.0%), in public administration - defense (-16.2 thousand or -4.6%) and Construction (-5.1 thousand or -3.5). However, given the sharp rise in investment in housing and the slight decline in other construction, the latest drop is considered misinterpreted.

Deflationary pressures from indirect taxation, from the fall in VAT last May, and the almost neutral role of energy prices were the main factors in the slowdown in inflation during the first quarter of this year compared to the corresponding quarter of 2019, to 0.4% from 0.7%. Therefore, the increase in the Consumer Price Index came from the strengthening of consumer demand in the two months January -February, as well as it also weakened in March from the effects of the pandemic, the disposition of households and the operation of retail businesses, with the rate of change CPI to fall to 0%. The strengthening effect of consumer demand on prices is mainly reflected in their increase in Clothing-Footwear by 4.3%, which was the highest among the categories of products and services included in the CPI, as well as in Transport (+2.3%), due to the prices of airline tickets and motor vehicles, capturing the travel demand. Next rank Health services which are on the rise (+1.5%), a development related to their increased demand due to the new coronavirus. Just in two more categories of the 12 ones of the CPI products and services, there were also an increase in prices (Education and Hotels -Cafes - Restaurants). In one category prices were virtually unchanged from last year and in six they fell. The biggest price falls were housing (-1.3%), leisure, cultural activities (-1.2%), which was one of the first sectors to be suspended due to the pandemic and Durable goods, household goods, as well as Other goods – services (-0.8% both).

To sum up, as early as the end of the first quarter, the evolution of certain macroeconomic variables is influenced by the effects of the new coronavirus pandemic. A more typical example is the large increase of the inactive population in March, due to the increase of those who do not work, but also do not actively seek work.

In addition to this, other short-term developments due to the pandemic and are initial manifestations of its negative effects which will escalate during the second quarter and continue in the following, there



were trends in other macroeconomic variables that are considered not exclusively related to the new coronavirus and are wary of its prospects in the medium term, even if the pandemic weakens significantly and no new outbreaks occur in Europe and domestically.

One such development that is troubling is the three-quarter reduction in investment. The fact that the first two of these are solely due to the change in stocks, indicates that the strengthening of fixed capital formation in this period was sluggish or insufficient to offset the restraining role of stocks in investment activity. In addition, the significant increase in fixed capital formation in the last quarter of 2019, by 14.4%, is largely due to the favorable "base result" from its low level a year earlier. This development of investment over three quarters was unexpected, in particular following the completion of successive election cycles at the beginning of the third quarter last year, the clarification by the new government from October about fiscal interventions to support businesses (reduction of the profit tax rate from 28% to 24% for 2019 income, reduction of a corporate income tax advance to 95% of income tax in 2018, a tax rate of 10% for agricultural cooperative schemes) and investments (new investment law - Law 4635/2019) and continuous credit growth to non-financial enterprises throughout 2019, which significantly reduced uncertainty about the characteristics of the economic environment and the possibilities of raising investment capital. An additional factor that was estimated to substantially improve the credibility of the Greek economy for investment implementation was the complete lifting of capital controls from September. Despite all these positive developments, investment activity did not show the expected, steadily upward trend, with high speed.

From the above it seems that, regardless of the policy interventions in the field of investments to address the effects of the COVID-19 pandemic (financial instrument "repayable advance" for SMEs, simplification of the Entrepreneurship Fund (TEPIX II), establishment of a Guarantee Fund 19 etc.), some others are required for the reheating of investments. Given that the majority of them are "horizontal", relating to all the activities of measures, which were implemented before the outbreak of the new coronavirus, the necessary additional interventions may need to be sector-oriented or relate to specific value chains in which specific sectors are involved. An important recent change in the regulatory framework for investments, which because it took place at the beginning of May has not yet been evaluated in practice, is the changes in environmental licensing with law 4685/2020.

Table 3.1

Trends in key macroeconomic figures – National Accounts (seasonally adjusted data, constant 2010 prices)

Quarter	GD	P	Fina Consum		Invest	ment	Ехр	orts	lmp	orts
	million €	Annual rate of change	million €	Annual rate of change	million €	Annual rate of change	million €	Annual rate of change	million €	Annual rate of change
2010	226,115	-5.4%	206,975	-5.9%	38,613	-10.6%	49,959	4.5%	69,241	-3.4%
2011	205,352	-9.2%	188,228	-9.1%	30,201	-21.8%	49,998	0.1%	63,428	-8.4%
2012	190,326	-7.3%	173,936	-7.6%	22,965	-24.0%	50,577	1.2%	57,492	-9.4%
2013*	184,277	-3.2%	167,797	-3.5%	20,700	-9.9%	51,387	1.6%	55,589	-3.3%
2014*	185,700	0.8%	168,386	0.4%	22,065	6.6%	55,351	7.7%	59,873	7.7%
2015*	184,769	-0.5%	168,478	0.1%	19,383	-12.2%	56,914	2.8%	60,115	0.4%
2016*	184,291	-0.3%	168,172	-0.2%	20,536	5.9%	55,811	-1.9%	60,802	1.1%
2017*	186,959	1.4%	169,286	0.7%	22,485	9.5%	59,638	6.9%	65,297	7.4%
2018	190,565	1.9%	169,753	0.3%	22,842	1.6%	64,818	8.7%	67,239	3.0%
Q1 2019	48,156	1.6%	42,705	0.3%	5,895	12.3%	16,529	4.8%	17,471	9.7%
Q2 2019	48,651	2.8%	43,005	1.9%	5,710	2.6%	16,922	5.2%	17,375	3.9%
Q3 2019	48,851	2.3%	42,799	0.6%	5,969	-4.7%	17,611	9.1%	17,463	-2.7%
Q4 2019	48,515	1.0%	42,913	1.1%	5,435	-5.6%	16,934	0.7%	16,605	-0.3%
2019	194,172	1.9%	171,422	1.0%	23,009	0.7%	67,996	4.9%	68,913	2.5%
Q1 2020	47,739	-0.9%	42,727	0.1%	5,596	-5.1%	16,949	2.5%	17,498	0.2%

^{*} provisional data



Source: Quarterly National Accounts, ELSTAT, March 2020

The external sector of the economy had a positive contribution to GDP for another quarter at the beginning of 2020, by 0.2 percentage points and was the only one of the three components with this effect, as domestic demand (consumption and fixed capital formation) and stocks, had a negative (-1.1%) and neutral effect respectively. On the other hand, it should be noted that although domestic demand fell by 0.7%, imports widened, milder, with the absolute value of the relative elasticity reaching 0.22. The small increase in imports is due in part to the increase in exports of products, which are characterized by a relatively high content of imported raw materials, such as petroleum products. Therefore, a strong weakening of domestic demand, a development that is the most likely scenario for the next two quarters, will have a proportionally much smaller impact on imports. Moreover, if exports of products do not decline sharply in the second quarter, which is not likely to be the case, as restrictions on the operation of compagnies to prevent the spread of COVID-19, domestically and internationally, mainly concerned service sectors, then the import of raw materials will continue accordingly. However, all Greek exports will be under more pressure than exports of goods in this period, as well as in the third quarter, because the proportion of exports of services, which suffered severe restrictions, in exports is higher than in the first quarter. Combined with the much lower share of imports of services in total imports, import demand is estimated to be significantly less affected than demand for domestic exports leading to a deterioration in the external sector balance. In the next subsection all the medium-term macroeconomic forecasts are carried out.

Medium-term outlook

- The duration of the coronavirus pandemic and the restrictive measures to address its effects, as well
 as those to strengthen businesses and households, remain the main determinants of GDP growth in
 the current year.
- Making forecasts for all macroeconomic variables based on alternative sets of assumptions (scenarios)
 for parameters that affect them (e.g. duration of health crisis, magnitude of recession in the Eurozone
 economy, degree of support measures, multiplier of measures)
- Recession of at least 7.5% this year. If domestic and global health conditions worsen during the third quarter or a major new outbreak of the virus occurs in the fall, the recession will reach 10.5%.
- Decline in GDP mainly due to a decline in private consumption (7.5% in the baseline scenario) and investment (area 25%).
- The strong contraction of exports (-20% to -25% in the baseline scenario), mainly due to a sharp decline in tourism, will largely be offset by the weakening demand for imports (-20% to 25%).

The health crisis that began in China at the beginning of this year and spread to Europe from mid-February and to Greece since the beginning of March, the developments it has caused (measures to protect public health, support for businesses and citizens) and those that will come in the medium term, continue to be the main determinants of political and economic developments domestically and internationally.

As foreseen in the previous IOBE report on the Greek economy, the global coronavirus protection measures had a strong impact. The impact was initially felt upon the consumer demand in each country, due to the suspension of operation in many sectors, as well as to the cross-border passenger- movements bans. The lockdown directly affected international trade and the export industries, while side effects were caused by the decline in employment and income in the suspended activities, but also in the wider value chain to which they belong. Pressures on domestic demand and international trade are also exerted by the weakening of the investment appetite, due to the uncertainty about the duration and intensity of the effects of the coronavirus. The negative effects of these and other interconnections between the components of GDP are reflected in the newer, more



unfavourable forecasts of international organisations for the GDP of major economic regions, which are presented below.

The strong economic impact of the pandemic in Greece has already been reflected in short-term indicators of economic activity and in the evolution of macroeconomic aggregates. These trends are presented in detail below in the current section. Pressures on business and household expectations are also intense. The Economic Climate and Consumer Confidence indices of the European Commission fell in Greece in the period March-June by 25.6 and 22.9 points respectively. Among the key sectors, the largest deterioration occurred in the same period in Services, by 65.2 points, and Retail, by 34.1 points, with Construction following a short distance in a decline in expectations (-33.4 points). The smallest drop was presented by the Industry sector, however it reached 26.4 points. Equally strong was the weakening of expectations at European level, with the Economic Sentiment Indicator falling by 28.2 points in the EU and 27.7 points in the Eurozone.

At international level, in addition to the evolution of short-term figures and expectations, the negative economic effects of the new coronavirus, both those manifested and expected, are reflected in the change in forecasts for the world economy and the major economic regions and regions. In its recent forecasts, the IMF predicted a recession for the global economy this year of 4.9%, when in April it predicted a recession of 3.0% and in January, before the onset of the health crisis, growth of 3.3%. For the Eurozone, the main destination of Greek exports, the corresponding development of the IMF forecast is a recession of 10.2%, from a recession of 7.5% and growth of 1.3% at the beginning of the year, while for the US a recession of 8,0%, from 5.9% recession and 2.0% growth.

The forecast for the US and the Eurozone worsened despite the weakening of the pandemic in these regions in May and June, with a significant decline in the number of new cases and casualties. The deterioration of forecasts was not prevented by the phasing out of public health protection measures, nor by the announcement and implementation in the EU of additional interventions in support of governments and financial institutions following previous forecasts. For example, the European Commission announced the Support Initiative for Mitigation of Emergency Risk Unemployment (SURE), to provide up to €100 billion in soft loans for expenditure related to national work systems by the end of 2022, with the possibility of extension. The Initiative is implemented in Greece through the CO-WORK (SYN-WORK/SYNERGASIA)) programme. The ECB has temporarily relaxed the criteria for collateral provided by banks, when they apply for financing. As a out of this development, Greek banks gained access to cheap liquidity up to (around) €13 billion. It is noted that the Recovery Fund proposed by the Commission (Next Generation EU), with available financial resources of €500 billion in grants and €250 billion in loans, will be activated in the framework of the Programming Period 2021-2027Therefore, the new initiative will not provide support in the coming period, but its announcement clearly improves the expectations for the European economy.

The ongoing revision of the IMF forecast is due to the largest initially estimated lockdown impact on economic activity in the first and second quarters of this year, extending to the smooth operation of value chains and supply forecasts public health in the second half and the impact on productivity from the process of business adaptation to new health rules and broader safety protocols.

The rapid developments due to the coronavirus pandemic completely overshadow other developments in the international environment, which affect, to a much lesser extent than the health crisis, the Greek and European economies. These include geopolitical issues in the south-eastern Mediterranean, the migration and refugee crisis and the consensual Brexit by the European Union.

From the previous IOBE bulletin on the Greek economy, the two factors related to the new coronavirus pandemic and considered to be the most decisive of its effects on macroeconomic variables were its duration, domestically and internationally, as well as the intensity of measures for addressing its effects. A number of other factors related to the health crisis have emerged as determinants of macroeconomic developments in the medium term: the intensity and time profiling of its economic impact on the euro area, the size of policy interventions at EU level to address the effects of the pandemic. The trend in energy costs, approached by the price of oil, whose production has fluctuated significantly this year, was also among the determinants of the forecasts.



These parameters are still considered to be the most important for economic developments at least in the second half of this year. Given the significant uncertainty about the mid-term development of the health crisis-related factors by the end of 2020, it remains impossible for them to make specific assumptions that will be used to make forecasts. For this reason, as in the previous IOBE bulletin on the Greek economy, forecasts for the macroeconomic variables will be made with alternative assumptions. The forecasts resulting from the different assumptions will form a forecast period for GDP, its components and other macroeconomic variables.

Under this approach to macroeconomic forecasts, the factors whose changes are expected to affect the macroeconomic forecasts for the Greek economy are as follows::

Box 3.1

Assumptions on the factors whose changes will affect macroeconomic forecasts of IOBE

- Duration of main phase (exacerbation stabilization) of the coronavirus pandemic
- Time profiling of economic impacts in the Eurozone (Greece's main trading partner))
- Size and duration of domestic policy interventions to deal with the effects of the crisis
- Oil prices
- Size and duration of policy interventions at EU level to address the effects of the crisis

In detail, with regard to recent developments in the intensity of the pandemic domestically, new cases and victims have steadily declined since the end of April. Following the gradual lifting of restrictions on the movement of citizens since 4 May, which ended on 18 May, only cases have increased, sparingly and in specific areas. These trends also allowed the removal of most restrictions on business operations during May. On June 1, the 12-month-operation hotels and summer-cinemas opened. On June 15, gyms, seasonal and short-stay hotels, museums, archeological and historical sites, amusement parks and theme parks, amusement activities that had not been allowed to operate and beyond, resumed operations, as well as industries and activities that were still suspended, with the necessary public health protection measures. On the same date, restrictions were lifted on direct international flights to Athens Airport for flights from Italy, Spain and the Netherlands and for all international flights from Thessaloniki airport, with the exception of those from Italy, Spain, the Netherlands, Great Britain, Turkey, Albania and Northern Macedonia. In addition, land arrivals from Bulgaria were allowed, while the land borders with Turkey, Albania and Northern Macedonia remained closed (except for absolutely necessary business travel).

From 1 July direct flights to 27 airports from all countries were allowed, with the exception of only the United Kingdom and Sweden. Visitors from Schengen and Algeria, Australia, Georgia, Japan, Canada, Morocco, Montenegro, New Zealand, South Korea, Rwanda, Serbia, Uruguay, Thailand, Tunisia and China (on the basis of reciprocity) were also admitted. Also from the same date the ports of Patras and Igoumenitsa accept ships from Italy, which was last year the third country on the number of tourists arrivals and the fifth on tourist revenues. As for international land travel, only the Promachonas border station remains open. Therefore, the entry ban on visitors from Great Britain, Sweden, USA, Russia, Turkey, Israel, Qatar, United Arab Emirates, Saudi Arabia, Northern Macedonia continued. These countries include some with a particularly high contribution to international tourism revenues in 2019, such as the United Kingdom (2nd place) and the USA (3rd place). Therefore, the provision of international tourist services actually started domestically on 1 July, resulting in a significant contraction of the tourist season compared to previous years. In addition, the remaining restrictions on international arrivals mean the non-realization of tourist receipts from countries with a significant contribution to them in the previous years, probably throughout the whole

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¹⁹ The list of countries outside the Schengen Treaty will be updated every 2 weeks and in order to include a country in it, its epidemiological data must be equivalent to or below the EU average. A deterioration of this data in countries on the list, thus above the EU average, will lead to its exception to this.



summer period, as the epidemiological data in them either fluctuate at unsatisfactory levels, either at times present worsening.

Developments concerning the other key determinant of macroeconomic developments related to the health crisis, interventions to support companies in suspension and the general population affected by the pandemic, as well as their employees, were extended in May; and in June almost all budgetary measures taken for the period March - April (deferral of tax arrears, arrangements for secured debts, insurance contributions, collection of overdue debts, special purpose compensation, payment of 60% of the rent of a business / home residence). Also, the suspension of insurance contributions for self-employed professionals (liberal professions) was extended for the two months of May-June. However, no additional aid was paid to the affected freelance scientists beyond €600 for the period March to May. It is reminded that from mid-March, the banks decided to suspend the payment of up-to-date loans until 31/12/2019, which are due until 30/09/2020.

A number of additional fiscal interventions were carried out, the most important of which were: a) reduction of the tax advance for 2021 for companies with a turnover of more than one percent during the quarter March-May²⁰, b) payment of 60% of the rent by companies which reopened in May, as well as in the tourism, catering, culture and sport sectors for the period June - August, c) temporary VAT reduction for the period 01/06-31/10/2020 on passenger transport, coffee, non-alcoholic products, tourism services and cinemas; d) especially for seasonal workers in tourism enterprises in the previous years who will not be hired this year, payment of unemployment benefit and subsidy of insurance contributions for part-time seasonal workers and e) introduction of the CO-WORK (SYNERGASIA) mechanism, in the framework of the European SURE initiative. Businesses that use the mechanism can reduce their weekly working time by up to 50%, either for part or for all of their employees. Those employees who join the scheme are paid a 60% increase in their net salaries which corresponds to the time during which they are not working.

New actions were also announced for the liquidity of companies: a) establishment of the Business Guarantee Fund CoViD-19, which will provide loan guarantees involving working capital up to €2 billion, for a maximum leverage of €7 billion, (b) a second repayable-advance programme for SMEs, with a budget of €1.45 billion. and (c) the approval of additional aid from the European Commission, amounting to €2.7 billion. These and previous financial interventions (e.g. Entrepreneurship Fund (TEPIX II) of the Hellenic Development Bank) will strengthen the liquidity of companies in the current adverse situation due to the health crisis and are expected to contribute to the implementation of part of the investment projects that had been developed before it, but also because of it.

The most important development this year, and probably in recent years in terms of the liquidity potential of the Greek economy, remains Greece's accessibility since the beginning of April to the ECB's Pandemic Emergency Purchase Programme (PEPP), with a budget of €750 billion, as it is the first time that the country has been accepted by the ECB in a securities purchase programme, something that has been sought since 2014. At the beginning of June, the PEPP budget was expanded by €600 billion. The inclusion in the program was achieved with the exception of Greece (waiver) from the securities eligibility rules issued by the central governments of the Eurozone countries and which are the same as those applicable to the ECB Asset Purchase Program²¹. The PEPP will be completed when the ECB considers that the coronavirus pandemic is over and in any case not before the end of 2020. Greece's accession to the PEPP ensures the liquidity of the banking system in the face of a possible increase in demand for capital from the inhabitants of the country, but also against a possible speculative attack.

More broadly, all policy, fiscal and financial interventions will mitigate the impact of coronavirus protection measures, domestic and international, on business activity and household income. Their positive effects will be commensurate with their implementation, which will depend on the conditions

²⁰ The percentage of the discount will be determined in July from the business turnover figures for the March-May period.

²¹ Under these rules, long-term securities must be issued by entities with a credit rating that falls within at least the third Credit Quality Step of the Eurosystem Credit Rating Framework..



for joining them and their utilization by potential beneficiaries. From the available data so far, it appears that in the two months of March-April, almost 206 thousand companies were suspended²². These correspond to 31.3% of the 658.5 thousand companies that were in 2017 in the double-digit sectors according to STAKOD-08 branches that include the activities that were suspended, as well as other activities, in which such restrictions were not imposed. During the same period, employment contracts of approximately EUR 870 million were suspended for some time, with the fiscal expenditure on compensation of €800 reaching €466 million. In the first phase of the repayable advance program with a budget of €1.0 billion, €600 million were credited to approximately 55,000 companies. In addition, 10.15 thousand applications for loans of €1.290 billion were approved through TEPIX II, out of the 10.7 thousand applications for loans of €1.4 billion submitted..²³ Therefore, the degree of implementation of the interventions varies significantly among them. Regarding the liquidity of Greek banks by the Eurosystem, it reached €15.76 billion in the two months of April-May, with the result that their 'dependence' on the ECB more than doubled compared to the end of March (€12.4 billion).

Taking into account the evolution of the new coronavirus pandemic and the progress made in lifting public health protection measures, mainly in Greece but also internationally, in the major trading partners, the size and duration of fiscal-financial interventions domestically and the most recent forecasts for the recession this year in the Eurozone (IMF), the assumptions of the main forecast scenario are as follows: internal public health protection measures concerning the massive suspension of operations in certain sectors and restrictions on the movement of citizens throughout the territory will not return. Exceptions will be any areas with a new outbreak. This hypothesis implies that the health crisis will not recover in much of the country. In addition, it is assumed that restrictions on the international movement of citizens will not be significantly escalated, without excluding changes in the countries from which they will be allowed to enter domestically and in the EU. Therefore, tourism companies will be able to accept international tourism from countries with milder epidemiological characteristics than those from the EU since the beginning of July, slightly later and from much fewer countries than expected in the baseline scenario of the previous IOBE report on the Greek economy (mid-June). However, the current development on this issue was highlighted as an alternative to the previous baseline scenario. As regards emergency budgetary and financial measures, most of them will be completed soon, as businesses have been allowed to operate, but clearly later than expected in the previous baseline scenario (end of May). Exceptions will be the measures whose duration already includes the following months (e.g. COOPERATION program, temporary reduction of VAT, reduction of rent in specific sectors). With regard to the recession in the euro area this year, this is supposed to be close to recent forecasts, so it will be slightly stronger than the assumption in the adverse scenario of the previous IOBE bulletin (twice the Euro area recession in 2009: 2x4.5%).

The alternative, unfavorable scenario, is mainly based on the assumption that the health crisis will recover domestically during the fourth quarter, leading to the resumption of public health protection measures at least until the end of this year. Similar developments will take place in many other countries in Europe, America and Asia. In this case, extensive policy interventions will be carried out again, at national and European level, in order to mitigate the effects on the economy. Nevertheless, the recession in the Eurozone is estimated to be stronger than in the baseline scenario, with an intensity almost three times that of 2009, affecting the demand for Greek exports respectively.

One possible differentiation in this scenario, which is considered quite likely, is the deterioration of the epidemiological situation in many countries during the summer months, resulting in a significant restriction of the countries from which visitors will be admitted to the EU and domestically. In such a case, tourist arrivals will be reduced accordingly, resulting in particularly strong pressures on the activity of tourism enterprises. Another possible differentiation in the adverse scenario is that the health crisis will recover internationally in the autumn, but not in Greece.

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²² Press release EL.STAT. on "Development of turnover of suspended enterprises due to the 2019 coronavirus disease pandemic (COVID-19).

²³ Since the launch of TEPIX II with two actions in March 2019, its budget of €816 million has been fully spent. Source: Press Release, Hellenic Development Bank, 16/06/2020.



While the aid measures implemented mitigate the effects of the health crisis, on the other hand they burden the fiscal balance. However, as it was estimated in the previous IOBE bulletin on the Greek economy, there are significant effects on it from losses of tax revenues, insurance contributions, etc. from the mandatory cessation of activity in certain sectors and the suspension of payments of taxes and levies. In the two months of March-April this year, State Budget expenditures were €1.48 billion more compared to the corresponding period of 2019 (+18.5%), while in the first two months of 2020 they were reduced compared to last year by €281 million (-3.2%). Their expansion came mainly from emergency measures, as current transfers outside the General Government were €1.2 billion in the first two months of the health crisis more than a year earlier, when in the first two months of this year they were marginally reduced by €6 million. The General Government's revenue side saw a decrease in the months of March-April of €1.29 billion (-16,7%) compared to the corresponding period last year, while in the period January-February this year this year it was €245 million less than last year (-3.2%). The decrease is mainly due to lower indirect tax receipts (-23% or - €974 million). Direct tax revenues fell in April alone, but overall along with those in March they were 6.1% more (+€112 million). As a result from the developments on both sides of the fiscal balance in the two months was the deficit of €2.97 billion, compared to a deficit of €196 million in the same period of 2019 and a deficit of €1.1 billion in the first two months of this year.

In addition to the negative effects of the lockdown and the measures to address its effects on the fiscal balance, additional pressure on it will be exerted by the planned reduction in insurance contributions in the 2020 Budget from 01/06/20 by 0.9p.p. This applies to almost all employers and employees (0.48p.p. and 0.42p.p. respectively).

The particularly high overall burden on the state budget from the aforementioned factors is quite likely to lead to the utilization of the cash buffer available to the Greek government, which was mostly concentrated in the period before the completion of Third Economic Policy Program This consists of two parts: the largest comes from the conclusion of loans of the Central Government with the bodies of the General Government, through repos issues, while the rest comes from borrowing under the loan agreement with the ESM. Since the deterioration of the fiscal balance in Greece and other euro area countries is greater than expected, it cannot be ruled out that it will have an impact on the lending conditions of the sovereign sector from capital markets. Moreover, as the IMF points out in its recent forecast report on current financial conditions, "the extent of the recovery in the climate in financial markets seems disconnected from changes in the underlying economic outlook, increasing the likelihood that financial conditions will deteriorate more than in the baseline forecast scenario".

Fiscal measures mitigate the effects of declining consumer demand, not only on corporate liquidity but also on employment. The exceptional financial instruments mentioned above also do afford part of the liquidity that companies need in order to meet their current obligations (in the public sector, banks, their suppliers). However, it is considered that these will have a much smaller direct positive impact on the implementation of investments. The high uncertainty about the development of the new coronavirus until an effective treatment or a way of prevention (vaccine) is found, will have a strong deterrent effect on investment risk.

Unlike other global crises in the past, the current one is not due to an economic cause, such as the financial crisis of 2008 and the oil crises of 1973 and 1979. Therefore, the availability of financial instruments is a sufficient, but not a necessary condition for a significant revival of investment. Probably several companies have made or will make investments to (temporarily) adapt their way of working, production and / or sales to the current conditions (e.g. teleworking, electronic sales). However, the majority of these changes do not constitute the creation of new products and services. Against this background, it is estimated that the health crisis will hit investment more than in the other key components of GDP, in the demand-side approach. An exception to this trend will be investments related to health, from the public and private sectors, e.g. to create appropriate infrastructures to tackle the pandemic, to manufacture medicines and consumables for health protection, for transport safety, etc. But also investments in public projects, as well as in integrated privatizations, which are ongoing.



Trends in the implementation of the Public Investment Programme (PIP), which will remain the most important financial mechanism on the part of the public sector, are in line with the above estimates. According to the supplementary state budget ratified at the end of May, its spending target for the current year has increased by €1.25 billion, to €8.0 billion, in order for the PIP to finance emergency measures. Of the additional costs, the increase by €1.0 billion will concern the co-financed part, while the target for the national part will amount to €250 million. In the five months of January - May, the program 's expenditures reached €3.36 billion, a level more than double the relevant target in the 2020 Budget (€1.6 billion). In addition, they were almost three times their level in the same period of 2019 (€1.17 billion), but in this year there was a significant under-execution of the PIP. On the other hand, as stated in the accompanying text of the State Budget implementation bulletin for May, the increased outflows of the PIP are mainly due to the special-purpose allowances of enterprises and the selfemployed and to the costs of subsidizing the interest on loans from small and medium-sized enterprises due to the COVID-19 pandemic. Therefore, a large part of the additional payments does not concern investment support. As no data is provided on the exact level of expenditure for the above purposes, it is not possible to determine the amount of the remaining expenditure of the PIP, which relates to the purposes covered over time. The aid through the program is expected to be more than last year and in the rest of 2020, but their impact on investment activity will depend on their composition.

The extraordinary measures of March included the immediate payment of all outstanding obligations of the State to citizens and businesses for cases amounting up to €30 thousand. At the end of last February, overdue liabilities (excluding tax refunds) amounted to €1.56 billion. Although €218 million were paid in such cases from the end of the same month to mid-March, at the end of March the overdue liabilities reached €1.79 billion, i.e. they increased by 14.7%. In addition, according to the latest data, at the end of April they were virtually unchanged, at €1.77 billion. Although €218 million were paid in such cases from the end of the same month to mid-March, at the end of March the overdue liabilities reached €1.79 billion, i.e. they increased by 14.7%. In addition, according to the latest data, at the end of April they were virtually unchanged, at €1.77 billion. Although €218 million were paid in such cases from the end of the same month to mid-March, at the end of March the overdue liabilities reached €1.79 billion, i.e. they increased by 14.7%. In addition, according to the latest data, at the end of April they were virtually unchanged, at €1.77 billion. End of the data of the context of the latest data in the end of April they were virtually unchanged, at €1.77 billion.

The particularly unfavorable environment is considered to be an important deterrent to the implementation of structural changes through concessions and privatizations. As mentioned in previous IOBE reports on the Greek economy, the HRADF/TAIPED 2020 revenue target in the Budget is €2.45 billion, of which €2.07 billion is expected to come from tenders to be completed in this year and €376 million either from tenders for which binding offers have been submitted and the expected first disbursement will be made this year, or from installments of completed transactions of previous years. The 2020 Budget clarified the sources of only €376 million, with the most important being the first installment of the price from the sale of Hellenic SA, which is currently not completed (€300 million). The remaining €2.07 billion was reported to come from actions that are in the process of being prepared or matured, without specifying which of them are expected to be completed in 2020 and what is the expected revenue from each. These actions include the sale of 30% of the shares of AIA SA, 65% of the shares of DEPA SA, the concession of Egnatia Odos for 35 years, the concession of regional ports and marinas (e.g. Itea and Aretsos Thessaloniki) and other real estate included in the HRADF/TAIPED portfolio.

As the revenue target for this year is 77.4% higher than the maximum revenue in a year so far (€1.38 billion in 2017), it was considered ambitious from the beginning. Under the circumstances created by the pandemic, it was assessed by the previous report as the most probable possibility that it will not be achieved. The progress of HRADF's work during the first half is an indication of this development. By March, the investment schemes were pre-selected for the second phase of the tender (binding offers) for the acquisition of 30% of the share capital of AIA SA, the concession of the marina of Chios was completed, with the one-time part of the price at € 600 thousand, and an investment group submitted an expression of interest for the marina of Itea. Recently, in June, six investment schemes went through the second phase of the tender for the acquisition of 100% of DEPA Infrastructure SA and seven investment schemes were in the second phase of the tender for 65% of DEPA Marketing SA, while the concession contract of Alimos Marina was signed for 40 years for a price of €57.5 million. (in terms of net present value). Finally, the international competition for the concession of the

²⁴ Source: General Government Monthly Data Bulletin – April 2020, Treasury of the State, June 2020



underground natural gas field "South Kavala" as a natural gas storage area was launched. Therefore, the revenue from tenders in the current year currently reaches around €60m.

Regarding the withdrawal of liquidity from the banking system and the capital markets, as mentioned above, the banks in Greece are rushing to take advantage of the new opportunities offered by the ECB, primarily the Pandemic Securities Purchase Program. In addition, the ECB's TLTRO III programme is a recent feature, where banks gain access to additional funds at a negative interest rate (-1% for the first year and -0.50% for the next), and they can also transfer into it, their lending from other ECB programmes.. While these developments are an incentive for credit expansion, on the other hand, caution about the duration and severity of the health crisis will have a deterrent effect on lending. After all, the suspension of activity in many sectors from two to three and a half months and the remaining restrictions on international passenger travel, which primarily affects the tourism industry, but also those associated with it, will put significant pressure on business activity and household incomes. Subsequently, default on banks is quite likely to recover, leading to a further expansion of non-performing loans (NPLs). As mentioned above, uncertainty for the same reasons will be the reason why the demand for capital from businesses, but also households, will be subdued. Only if these sources of uncertainty recede significantly, both supply and demand for bank credit will recover.

However, NPLs were on a downward trajectory by the end of March. At this point in time they had fallen to €60.9 billion (37.4% of total loans), €7.6 billion lower than in December 2019 and about €46.3 billion below their level in March 2016. Their shrinking in the first quarter of this year is mainly due to Eurobank's transfer of NPLs within a group in view of the completion of a sale transaction through securitisation of loans, for €2.4 billion. This agreement is the first action taken by the Guarantee Programme in Securitisations of Credit Institutions ('Hercules'). Excluding this intragroup transaction, NPLs decreased by €1.1 billion in the first quarter of this year, mainly due to write-offs of €0.6 billion. Therefore, in contrast to 2019, the reduction of non-performing loans was achieved at the beginning of this year through active management 25 .

The revised targets for the reduction of NPLs set by the banks for the period until the end of 2021, when they should have been reduced below 20% of loans, but also the eventuality of increasing nonperforming loans (NPLs) due to the health crisis, highlight the need for immediate, greater use of the potential of the "Hercules" program. It is reminded that this program provides guarantees from the Greek government up to €12 billion, for the securitization of loans over €30 billion, within a period of 18 months from 10/10/2019. In addition, according to the law related to the program (Law 4649/2019), by decision of the Minister of Finance, following a relevant decision of the European Commission, the maximum amount and the period providing guarantees can be extended. If the trend in new red loans changes sharply due to the health crisis, this possibility will probably be exploited. Moreover, in Italy, which has been hit much more hard by the pandemic, the corresponding programme has also been approved with an initial duration of 18 months, but has been repeatedly extended and remains in force. However, according to the Bank of Greece, other systemic solutions should be considered, such as the creation of an Asset Management Company, which will be linked to addressing the issue of deferred tax asset (DTC). The rapid settlement of NPLs, combined with the ECB 's financing instruments, will allow the strengthening of funding and credit expansion - at least to businesses - over a long period of time, when the concern for a new spread of COVID-19 weakens significantly.

Despite the current, particularly unfavorable situation, with concerns about developments around the health crisis being particularly high, the domestic banking system seems to have significantly escalated lending to businesses, resulting in credit expansion to the private sector as a whole. In the March-May quarter, the positive rate of change in loans to non-financial corporations from the end of 2018 amounted to 4.0%, from 1.4% in the first two months of this year and 2.3% in the corresponding period of 2019. However, the boost in corporate lending largely comes from emergency liquidity programs to address the effects of the pandemic, such as TEPIX II, which contributed by €1.29 billion

²⁵ Source: Monetary Policy 2019-2020, Bank of Greece, June 2020



in loans in April-May. Therefore, if these policy interventions are completed soon, as is the case in the baseline scenario due to the removal of the lockdown, the credit expansion will also weaken. On the other hand, the credit contraction towards households continues with undiminished intensity compared to the beginning of the year, by 2.9%, while it is slightly stronger than that one year earlier (2.3%). Then, in the private sector as a whole, lending from the banking system expanded slightly in March-May, for the first time since the last quarter of 2010, at a rate of 0.4%, compared to a slight credit contraction of 0.7% in January -February and 0.3% a year earlier.

The increased supply of liquidity to companies is done on very favorable terms, reflecting the respective lending terms from the ECB. In the two months March-April, despite the lockdown, the average interest rate on new loans to non-financial corporations stood at 3.12%, from 3.45% in the first two months of this year and 3.78% on average in 2019. The recent level is the lowest at least since 2010. The interest rate of the same category of new loans to freelancers was 5.29%, from 5.16% in the previous two months and 5.52% on average last year. This interest rate is very close to the minimum at least since 2010, that of the beginning of this year. For all new loans to households, the average interest rate in March-April was 4.75%, lower than the average level last year (4.94%). In contrast to the interest rates on new loans to businesses and the self-employed at the beginning of 2020, these to households are not the lowest in the last decade, with their lowest level in this period being recorded in the first quarter of 2015 (4.5 %).

The rather low bank lending rates of companies and freelancers in the first five months of this year are also related to the sharp de-escalation of lending rates of the Greek government from the second half of 2019. Last February, the average interest rate on a 10-year Greek government bond stood at 1.07%, the lowest level since at least 1993.²⁶ Contributing to this development was the upgrade by the Fitch rating agency of Greece's credit rating from BB- to BB, as well as the issuance in the same month of a long-term bond (15-year), with particularly high demand, as offers exceeded by 7.5 times the size of the issue (€18.8 billion), while its interest rate was just 1.875%. Despite international uncertainty about the development of the pandemic and the strong impact of the protection measures on public finances, capital markets for Greece's public sector remained very affordable in the March-May quarter. Thus, the average interest rate on the 10-year bond did not fluctuate sharply and stood at 1.98%. At the beginning of June, the Greek government rushed again to take advantage of these favorable conditions and borrowed €3 billion for ten years, at an interest rate of 1.55%. However, as mentioned above, the recovery in the climate in the financial markets is not compatible with the economic outlook under the influence of the new coronavirus and the difficulty in dealing with it so far, increasing the likelihood that international financial conditions will change sharply and worsen. Therefore, favorable access to the capital markets in the medium term, by the Greek state, banks and large companies should not be considered for granted.

Especially for the largest non-financial corporations, the effects of the health crisis on the assessment of their outlook and the difficulties of accessing financing outside the banking system, from the capital markets, are reflected in the fact that the General Index (GI) of the Athens Stock Exchange at the end of June was around 277 points or 30% lower than its level on February 20, when it began to fall. However, earlier, by the beginning of April, the GI had shown a stronger weakening, by 376 points (-41%). Since then it has been steadily strengthening, so its initial decline was probably inconsistent with the changes due to the pandemic in the future dynamics of listed companies on the Athens Stock Exchange. These developments in the domestic capital market are opposite to those before the health crisis, last year and until this year in February. During this period, the GI strengthened by about 350 points or 57.8%. In addition, since last September, following the election cycle, the activity in issuing bond loans had recovered, with the usual feature of these procedures being the over-coverage of the fundraising target, a fact that reflected the investors' confidence. Indicative examples of companies before the health crisis that took advantage of this opportunity to raise funds are Ellactor (five-year €70 million), Mytilineos (five-year €500 million), TERNA energy (seven-year €150 million) and WIND Greece (five years €525 million). During the months of March-May no company carried out such an action. At the end of June, GEK TERNA proceeded with the first issuance of a bond loan after the

²⁶ Source: ESB



health crisis, lasting seven years, up to €500 million, with an interest rate of 2.5-3.0% in the bid book process. During the same period, the Board of Directors of Lamda Development decided to issue a joint bond loan through a public offering of up to €320 million, with a minimum amount of €270 million. During the same period, the Board of Directors of Lamda Development decided to issue a joint bond loan through a public offering of up to €320 million, with a minimum amount of €270 million.

While investment is likely to be hit hardest by the health crisis this year, export pressures from restrictions or bans on cross-border passenger traffic and wider shrinking international trade are projected to exert the strongest domestic and domestic pressure. their share of GDP is much larger than investment (35.0% compared to 11.9% of GDP last year). As shown in the previous IOBE bulletin on the Greek economy, five countries in which the outbreak of the new coronavirus was among the strongest in the world (USA, UK, Italy, France, Spain), were in 2019 in the top-10 of export destinations, with Italy in first place and far behind second Germany (€3.63 billion vs. €2.25 billion). The decline in exports of products will be restrained by the fact that no restrictions have been placed on their electronic trade. Previously in the current section were presented the characteristics of the current tourist season, which make it much shorter than in previous years, both in terms of duration and in terms of the countries of origin of visitors, due to the current ban on entry in some countries from which came from a significant part of the tourist receipts of recent years. Of course, imports of products will also weaken, although their elasticity in the event of a decline in domestic demand is low.

The above expected trends due to the pandemic in the export and import flows of key categories of products and services, are largely reflected in the hitherto available balance of payments data of the Bank of Greece. According to them, exports of products, at current prices, fell in the two months March-April by 20.9% (-€1.15 billion), while in the first two months this year amounted to 5.1%. The contraction comes mainly from the lower fuel exports, by 48.2% (-€795.9 million), which, however, were declining, much milder than at the beginning of the year (-7.5%). The lower exports of non-fuel products - ships in the first two months of the health crisis are the second reason for the decrease in exports of products, however their decline is much smaller than that of fuel exports, 8.9% (-€342.5 million). It is pointed out that at the beginning of the year they showed a marginal double-digit increase (+10.0%). Ship exports show the strongest proportional decline (-75.2%), however their weight in total exports is very small, as highlighted by their absolute decline (-€17.8 million). However, the same proportionate decrease with the exports of most in absolute terms of imports of products in the period March-April (-20.6% or - €1.93 billion), mainly due to the lower imports of products other than fuels - ships (-16,3% or -€1.15 billion), led to a reduction of the goods deficit by 20.1% or €773.6 million, to €3.07 billion.

The decline in the goods balance deficit in the Period March-April was partially offset by a decrease in the surplus of the service balance. Their exports were 22.7% lower in this period (-€971.4 million), when in the first two months of 2020 they expanded, albeit slightly (+2.9%). As expected, the decline came mostly (78.5%) from travel receipts, which collapsed (-88.5% or -€762.4 million), when in the period January - February this year they increased by 22.9%. The rest of the decrease in revenues came from the provision of transport services abroad (-8.1% or -€218.4 million), since the provision of other services showed a marginal increase in the specific period (+1.3% or +€9.4 million). The trend was also down in the demand for imported services in the first period of the pandemic, but less intense than in the exports of services (-16.3% or -€498.1 million). The decrease is due exclusively to domestic demand for travel services, which also collapsed (-89.4% or -€520.3 million). Consisting of changes in the two main components of the services balance in March-April was the reduction of its surplus by 38.9% or €473 million, to €742.1 million. In the first four months of 2020 it was a surplus of €1.51 billion, compared to a surplus of €2.15 billion a year ago.

Restrictions on productive activity worldwide due to the health crisis, as well as restrictions on international transport, have significantly reduced the demand for oil and other energy goods. Russia's announcement in March that it does not intend to extend the restriction on daily oil production beyond April 1 under the relevant OPEC+ agreement put pressure on supply-side oil prices because of the "price war" launched by the organization's other countries. On 12 April 2020, OPEC and its partner countries, together with Russia, agreed to reduce production till April 2022. Nevertheless, the price of



Brent oil last April stood at \$18.4/barrel, down 74.2% from the same month last year, while in May it reached \$29.4/barrel, falling by 58,8% compared to a year ago. Therefore, this specific reduction in the supply of oil does not seem to have a strengthening effect on prices.

Subsequently, the cost of oil during the current six months is estimated to be primarily affected by the impact on the economic activity of the COVID-19 pandemic and the uncertainty surrounding it relatively to its development and treatment (finding a cure and vaccine). According to the latest IMF forecasts, the recession due to the health crisis was stronger in the first and second quarters than expected. At the same time, the recovery of the world economy seems to be slower and more gradual than originally estimated. Subsequently, the Fund's forecasts for GDP change were clearly revised on hand, in a global economic downturn of 4.9%, from 3.0% in last April's report. According to these data, the average oil price in 2020 is estimated to be at \$38/ barrel, about 39% lower than the previous year.

The very strong, unexpected outbreak of the new coronavirus in Europe in the middle of the first quarter and the inability to agree by mid-March in the Eurozone on the fiscal policy measures that need to be taken jointly by its members to address the needs it has created in in the field of health, as well as to address its economic impact, led to the depreciation of the euro against the dollar in February, from 1.11 to 1.07, a level which is the lowest since May 2017. The sharp rise of the virus in the US in the second half of March, changed the trend in the exchange rate, which rose to 1.12 by the end of the same month. A subsequent announcement by the US president of the \$2 trillion economic support package significantly restored confidence in the country's economic outlook, leading to a fall in the euro exchange rate from early April to 1.09. This level fluctuated around the second ten days of May, while the health crisis had escalated sharply in the US and the EU was in the process of negotiations for a multi-year investment support initiative. Since the announcement of the EU Generation Fund (Next Generation EU) and its announcement until the first ten days of June, the euro has strengthened against the dollar, from 1.089 to 1.138, a development that is considered to highlight the importance of this policy intervention in EU level. Since then, the exchange rate has been slightly lower, at 1.125.

From the effects of policy actions so far or their lack, it is clear that the dynamics for the Eurozone economy this year will be sensitive to them, probably more than in previous years. Therefore, vigilance is required from its political leaders to take action whenever and however necessary to address developments on the coronavirus. If they lag behind the prevailing conditions and problems, the attractiveness and credibility of the Eurozone economy will lag behind that of the US economy. In this context, the launch of the Recovery Fund has strengthened the European Union's solvency as for its ability to formulate policies for exiting the current crisis and its medium-term development. At the same time, fluctuations in the health crisis in the US, with a large increase in cases in recent times, have damaged the credibility of the health measures implemented there. If there is substantial progress in shaping the Recovery Fund this semester and there is no recurrence of the new coronavirus pandemic in the EU or in a few countries, the euro / dollar exchange rate is expected to rise to the rest of 2020, in the region of 1.13- 1.135. This trend will be temporarily halted during the US presidential election, which will improve the expectations for the new government that will emerge from them. Subsequently, the exchange rate will be higher than a year earlier, resulting in a further decline in oil energy costs. Its impact on the competitiveness of Eurozone products and services will be mild.

Recent developments in domestic economic activity as well as short-term economic indicators during the second quarter all reflect the effects of restrictive economic activity on COVID-19 pandemic protection measures, with the exception of those in the construction activity, which, at least temporarily, continued to rise. In detail, on the supply side of the economy, industrial production fell in April by 9.9%, compared with a slight decline in the initial quarter this year, by 1.2%, and an increase in the same month last year by 2.3%. Therefore, the decline in April is not due to any baseline effect and fully reflects the negative impact of the pandemic. At the level of key industrial sectors, the decline was mainly due to Manufacturing, whose product decreased by 11.3%, in contrast to its increase by 1.5% in the period January - March. The second significant factor of the decline in production in Industry was its vertical decline in Mining - Quarries, by 19.5%, in contrast to its strengthening by 5.9% in the first quarter of this year. The importance of the decline of the output in the Electricity Supply by 4.7% in April was insignificant for the overall trend in the Industry in the same month, as well as the



2.5% increase in the Water Supply. Besides, the decline in Electricity Supply had started from the beginning of 2020 and was more intense than that of April in January-March (-10.7%). Regarding the latest trends in construction activity, it showed in March a strong increase in terms of surface (+42.0%) and volume (+55.8%) and smaller in the number of permits (+10.2%). Taken together, these figures are indicative of the start of some major projects. These changes are a continuation of the strong rise in the initial two months this year, by 60% in the number of permits, 61.7% in the surface area of new buildings and 58.5% in their volume.

Regarding the measures that reflect the climate and demand side of the domestic economy, the volume index in Retail Trade (seasonally adjusted) showed an unprecedented contraction in April, by 24.6%, much stronger than in March (1,6%), with supermarkets being the only category of stores with an increase in the volume of their activity (+6.2%). On the labor demand side, 48.6 thousand employees were recruited in April and 99.3 thousand in May, numbers 82.8% and 69.3%, respectively, lower than in the same month of 2019. However, employment support interventions significantly reduced layoffs, to 41.3 thousand in April (-75.6%) and 66.3 thousand in May (-69.6%). Nevertheless, the overall balance was strongly negative, at 103.7 thousand and 72.3 thousand jobs respectively.

Taking into account in particular recent and possible future developments and effects of the new coronavirus pandemic, in particular the impact of bans on international passenger transport and business suspension, successive fiscal policy packages domestically to address them, but also trends in GDP and its components in the first quarter of this year, a sharp decline in household consumption is expected. Consumer spending pressures in the second quarter are expected to be unprecedented mainly from the suspension of the operation of physical retail stores, restaurants, etc., hotels and entertainment and leisure businesses, which did not allow consumption, but also from the suspension of employment in them. It is estimated that the decline in household consumption of households from the threat to their health will have a limited effect, especially in this quarter. Private consumption will be cut from the second quarter and the projected significant rise in unemployment. Employment declines are expected mainly in the final products and services sectors to consumers, some of which have led the decline in unemployment in recent years (Hotels-Focus, Wholesale-Retail Trade, Transport — Storage, Professional, Scientific and Technical Activities), but also in other extrovert sectors, with less growth in the past (e.g. Manufacturing). Clearly, the intensity of these effects will depend on whether the pandemic will experience a new outbreak.

The negative effects of the above factors on household consumption expenditures will be mitigated by the escalation of electronic transactions, especially during the lockdown period, the expected decline in prices and income support measures for employed and self-employed workers in suspension of work / operation, as well as of the unemployed, which continued throughout the second quarter. Especially for seasonally employed tourism companies in previous years, the measures continued in the third quarter. Taking into account the above strong, counter-effects, it is estimated that the reduction of household consumption expenditures will have an intensity of at least 7.5% in the basic forecast scenario, while in prolonged adverse conditions, in Greece and internationally, it will exceed 11.0%.

Unlike private consumption, the pandemic of the new coronavirus will lead to a widespread expansion of public consumption. This will come mainly from the extraordinary expenditures for the support of businesses and households, as well as from the expenditures that have already been required and will be needed for the protection of public health (e.g. recruitments of 5.1 thousand medical, nursing and health care staff). Similar to private consumption and other demand-driven components of GDP, the expected upward trend in public spending due to the health crisis will depend primarily on whether it recovers within the year, domestically or internationally, since in both in additional cases additional measures will be applied. The degree of implementation of policy interventions, depending on their conditions and the response of potential beneficiaries, will also have a significant impact on the expansion of public spending. As mentioned above, the degree of implementation varies between certain measures that have already been implemented. The negative "base result" from its high level in the second quarter of last year, due to the electoral cycle, will have a restraining effect on the rise in public spending. Considering that five intervention packages have been announced so far to deal with the effects of the pandemic, it is predicted that the expansion of public consumption will be at least



7.0%, in case the health crisis does not recover, with possible exceptions in some areas of the restrictions on international travel will not be escalated. Otherwise, i.e. if the pandemic returns in the fall, in Greece and internationally, then the required public spending will lead to an increase compared to 2019 by 9.5% or more.

As estimated by the previous IOBE report on the Greek economy, investment is likely to suffer proportionally the strongest blow from the health crisis, as their implementation is decided by assessing possible trends and developments over the medium- to long term and the current very high uncertainty about the prospects of the domestic, European and global economy creates obstacles to this process. The adverse investment environment will continue until the pandemic is eradicated, or at least very limited, in Greece and the vast majority of countries, especially those that absorb a significant proportion of domestic exports. The likelihood of these developments taking place during 2020 is considered small. Therefore, the majority of potential investors will not wish to undertake investment risk.

Given these data, it is estimated that a significant part of the private sector investment plans has been put in place and will remain pending developments regarding the new coronavirus. These are investment projects from extroverted sectors with a continuous, large increase in their activity in recent years, such as Tourism, Transport, Manufacturing, but also from sectors that have benefited from the escalation of domestic demand and structural changes, such as Wholesale - retail trade, as well as some manufacturing sectors and Energy.

The much more liquidity available than a few years ago from the banking system, following the restriction of non-performing loans, the return of deposits, but also thanks to the accessibility of the banking system for the first time to an ECB debt purchase programme, will largely not be exploited by businesses, at least in the short term. Moreover, at least as long as there is no sign of a certain exit from the health crisis and its effects, banks are expected to be more cautious about lending, as there will be a risk of a further escalation of non-performing loans. As mentioned above, the strengthening of credit expansion in the March-May quarter largely stems from emergency liquidity programs to address the effects of the pandemic, such as TEPIX II. Therefore, it is not due to a change in banks' lending policy.

Then, the role of public works and investments in integrated privatizations (Hellenic, PPA, extension of Athens International Airport, regional airports), which have a long-term return horizon, is estimated to be decisive for the level of investment activity. Therefore, the importance of completing the relevant licensing procedures increases significantly. These specific investments will be reflected in the Constructions. On the other hand, they will lose the impetus of recent years from construction projects in Tourism, to hotels, as well as for the renovation of houses, for utilization through Airbnb. If privatizations had been carried out more rapidly in previous years, more investments in infrastructure and large companies, which are usually concerned with privatizations, would now be in progress, limiting the influence of cyclical factors on investment activity..

As far as the Public Investment Program is concerned, its expenditures will be significantly increased this year compared to the previous year, in which they were at the lowest level of the last twenty years. However, a significant part, possibly the majority, of most of the expenditure will be on emergency aid, with EU assistance, to support businesses due to the health crisis, such as some that have already taken place (special purpose compensation for businesses and the self-employed, SME loan interest subsidy). While this type of expenditure is particularly useful in the current context, it does not constitute an investment. Given this, there will be a gap this year between the costs of the PIP and its contribution to investment activity. As, in addition to public projects, the investment projects financed by the PIP are entrepreneurial, it is estimated that many of them will be affected by the uncertainty about the prospects of the domestic and international economy due to the pandemic.

Taking into account the effects of these factors on investments and also considering that their intensity will depend primarily on the evolution of the pandemic and whether it will re-flare up later in the year, the baseline forecast scenario expects investment spending to shrink by around 25%. In the adverse scenario of developments, the recession may exceed 40%.



The greatest uncertainty about the extent of changes in GDP components remains in the external sector of the economy, as they will depend on pandemic developments in each of the countries that are trading partners in Greece, both in terms of exports, as well as on the import side. Given that the Eurozone, which has been particularly affected by the health crisis, is the main export destination of Greek products, its projected strong recession, which - upon the most recent forecasts - will be greater than initially expected, will be reflected respectively in their demand. Exports of products will be hit hard by the shrinking trade worldwide.. According to the latest estimates of the World Trade Organization, its volume fell in the second quarter by 18.5%, compared to a decline of 3.0% in the first quarter this year. This forecast is closer to the basic scenario of the organization for the whole this year (-13%) and is far from the unfavorable scenario (-32%). The IMF forecast a decline in international trade volume of 11.9% at the end of June this year.

Table 3.2

Domestic Expenditure and Gross Domestic Product – European Commission estimates (at constant 2010 market prices)

	2018	2019	2020	2021
Annual Percentago	e Change			
Gross Domestic Product	1.9	1.9	-9.7	7.9
Private Consumption	1.1	0.8	-9.0	7.5
Public Consumption	-2.5	2.1	4.9	-2.4
Gross Fixed Capital Formation	-12.2	4.7	-30	33.0
Exports of Goods and Services	8.7	4.8	-21.4	17.9
Imports of Goods and Services	4.2	2.5	-18.0	15.8
Employment	1.7	2.0	-3.7	3.8
Compensation of Employees per capita	1.3	1.1	-3.6	3.2
Real Unit Labour Cost	0.5	1.7	3.0	-1.3
Harmonised Index of Consumer Prices	0.8	0.5	-0.6	0.5
Contribution to real (GDP growth	'		
Final Domestic Demand	-1.3	1.5	-8.7	7.6
Net Exports	1.5	0.8	-1.3	0.5
Inventories	1.8	-0.4	0.2	-0.2
As a percentage	of GDP	<u>'</u>		
General Government Balance	1.0	1.5	-6.4	-2.1
Current Account Balance	-1.1	-0.3	0.1	-1.2
General Government Gross Debt	181.2	176.6	196.4	182.6
In percentage	terms			
Unemployment (% of the labour force)	19.3	17.3	19.9	16.8

Source: European Economic Forecast, spring 2020, European Commission, May 2020

As the expansion of domestic exports last year and - to a large extent - the previous years came mainly from the largest receipts from international tourism, the fact that the restrictive measures to deal with the pandemic of international passenger transport have been July 1, reducing the international tourist season, will have a strong impact on the relevant receipts. Maintaining the travel exclusion until at least mid-July for some countries with a significant contribution to tourism revenue (UK, USA, Russia, Turkey) will put additional pressure on tourism, especially in areas receiving visitors from those countries, acting deterrents to the operation of part of the companies in them. From the first data on international trade and Greek exports in the second quarter and taking into account when the first major domestic lifting of restrictions on international passenger transport took place, it is predicted that the fall in exports in the baseline scenario will be between 20-25%. If restrictions on

²⁷ Source: https://www.wto.org/english/news e/pres20 e/pr858 e.htm



international tourism escalate during the summer season or the health crisis recovers in the autumn, the fall will exceed 35%.

On the import side, their decline will be determined primarily by the decline in domestic product demand and exports of goods, which, mainly due to petroleum products, are characterized by a relatively high proportion of imported raw materials. The negative effects of public health protection measures on international passenger transport will be much milder in imports than in exports, as the share of travel payments in total imports is much smaller than the travel receipts in exports (3.7% vs. 25.0%). In addition to the pressure on the demand side, there may be restrictions on imports on the supply side, as in some of the countries from which a large part of them originate, activity has been suspended even partly of the industrial activity (e.g. Italy, Spain). For all imports, the negative change in the base forecast scenario is expected to be in the range of 20-25% over the year as a whole, while in the worst case scenario developments may exceed 30-35%.

Table 3.3

Comparison of forecasts for selected economic indicators for the years 2019 – 2020 (at constant market prices, annual % changes)

	IV	linFin	E	IJ		OBE	II	ИF	0	ECD
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
GDP	1.9	-4.7	1.9	-9.7	2.1	-7.5 to - 10.5	1.9	-10.0	1.9	-9.8
Private Consumption	0.8	-4.1	0.8	-9.0	0.7	-7.5 to - 11.0	0.8*	:	0.8	-8.4
Public Consumption	2.1	1.0	2.1	4.9	2.0	7.0 to 9.5	1.9*	:	2.2	1.9
Gross Fixed Capital Formation	4.7	-4.6	4.7	-30.0	2.5	-25 to - 40	7.8*	:	4.5	-17.3
Exports	4.8	-19.2	4.8	-21.4	6.0	>-20 to - 25	4.3*	:	4.9	-13.6
Imports	2.5	-14.2	2.5	-18.0	4.7	>-20 to - 25	4.2*	:	2.8	-10.8
Harmonised Index of Consumer Prices (%)	0.5	-0.3	0.5	-0.6	0.5	-1.6 to - 3.0	0.5	-0.5	0.1	0.0
Unemployment (% of labour force)	17.3	19.9	17.3	19.9	17.4	19.3 - 20.5	17.3	22.3	17.3	19.6
General Government Balance (% GDP)	1.5	-4.7	1.5	-6.4	:	:	0.4	-9.0	1.5	-8.8
Current Account Balance (% GDP)	:	:	-0.3	0.1	:	:	-2.1	-6.5	-1.4	-0.6

^{*2019} Article IV Report, IMF, November 2019

Sources: Stability Programme 2020, Ministry of Finance, April 2020 – European Economic Forecast, Spring 2020, European Commission, May 2020 - The Greek Economy 02/20, IOBE, July 2020 – World Economic Outlook, IMF, April 2020 - Fiscal Monitor, IMF, April 2020 - Economic Outlook 107, OECD, June 2020

The unprecedented uncertainty and concern about the effects of the coronavirus pandemic at all levels of economic activity, which emerged during the analysis of its multifaceted effects on GDP components, implies particular uncertainty for the overall domestic product development this year and the coming ones. As repeatedly stated in the forecasts for the components of GDP, the intensity of the current phase of the pandemic, in Greece and internationally, as well as whether the health crisis will recover within the year, will be the most decisive factors of economic activity.

From the GDP estimates process based on different scenarios for developments in its determinants described above, a forecast period for the change in domestic product this year has been established. According to this, the recession in the Greek economy this year will have intensity in the base forecast scenario of about 7.5%. If conditions in the Greek and international environment deteriorate in the third quarter, resulting in a strong negative impact on passenger transport and tourism or a significant outbreak of the virus in the autumn, it is quite possible that the recession will move in the range of 10.5%. In any case, these forecasts reflect current expectations and are quite likely to be significantly revised in future bulletins.



The suspension of domestic companies, which are mostly active in providing services to final consumers, but also the strong restrictions and bans on international passenger transport until the end of June, as part of pandemic protection measures, have put intense pressure on employment. These are expected to manifest in sectors that have made a significant contribution to the decline in unemployment in recent years, namely in Wholesale - Retail, Catering, Professional - Technical activities, Accommodation and Transport. The measures of cessation of activity, and in fact in very large parts of it, in countries with a large spread of the coronavirus in the population and many losses in human lives, which have a high share in the exports of Greek products (e.g. Italy, Spain, France), as the extensive contraction of international trade, will have a deterrent effect on the employment of the extroverted Manufacturing sectors. An industry with a significant contribution to the decline of unemployment in 2019, Education, is expected to have the opposite effect this year, as it was the first whose operation ceased. In addition, the estimated significant decline in investment will affect the activity of the Construction sector.

On the other hand, the current unfavourable situation has created specific needs for the provision of services, e.g. health, social care, the creation of internet services, land courier services, which, despite the general decline in economic activity, will maintain or even increase jobs in the respective sectors. Indicatively, the 5.1 thousand recruitments of health personnel in the public sector are mentioned. The measures for the protection of employment (shift work, special purpose compensation for companies in suspension of operation, suspension of payment of insurance contributions, SYNERGASIA (COWORK) program will maintain a part of the threatened jobs, as it appears from the data of the ERGANI system up to in May. In addition, due to particularly unfavorable labor market conditions, mainly due to measures to suspend business operations and restrictions on international travel that will prevent seasonal recruitment in tourism, a significant proportion of those who have lost or will lose their jobs may be discouraged from looking for work, at least in the short term. This development occurred in March, according to ELSTAT. The public sector will offer for another year temporary employment through OAED programs, with the most important public service program in local government, with 36.5 thousand beneficiaries for eight months employment, jobs which will exist throughout the second half of the year.

As in all macroeconomic variables, the duration and intensity of the effects of the health crisis on employment will depend on its evolution, in particular on whether it will show a new upswing within the year. Taking into account all the above factors, the unemployment rate in 2020 will be higher from 1.5 to almost 3.0 percentage points, compared to last year (19.3% -20.5%).

Restrictions in oil-production activity, as well as on cross-border passenger transport, have had a sharp decline in demand for oil and other energy goods, and then on their price, in March-April. Shortly after OPEC decided in April along with Russia to cut its daily oil production by two years, Brent prices fall to very low levels below \$20, was halted. After recovering in May part of the losses from the middle of last February, when the price was at \$57, the cost of oil per barrel has stabilized since June slightly higher than \$40. However, this level is clearly far from that of earlier this year (\$68), but also a year before (\$64). As OPEC's output decline will be smaller in the current six months (7.7million barrels) and given the strong uncertainties that remain for the global economy, a further decline in oil costs is now considered likely, at least in the third quarter. Therefore, the impact of energy products on prices will be clearly anti-inflationary this year.

On the side of the effects on prices by domestic operators, the new, temporary measures to reduce VAT from 1 June to 31 October (VAT reduction on all modes of transport, tourist packages, non-alcoholic beverages (coffee, soft drinks, etc.) will act as deflationary. On the other side, the decline in prices was completed in May due to the reductions in indirect taxes a year ago. Therefore, the negative effect of indirect taxation on prices is likely to continue in the second half, perhaps slightly weakened.

The weakening of domestic demand, due to the effects of the pandemic of the new coronavirus on the disposable income of households, from the suspension of employment contracts, the increase of unemployment, the rotating employment, the temporary reduction of its time (SYN-WORK/SYNERGASIA program) etc. a. will significantly mitigate the strengthening effect that this factor had on prices in the previous six months. On the other hand, the relatively rapid lifting of

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restrictive measures to protect public health, without any subsequent outbreak of the pandemic, boosts public expectations and revives private consumption. The gradual launch of international tourism is also expected to have a positive impact on consumer demand. Obviously, the intensity of all these effects will depend on the evolution of the health crisis, but overall an increasing effect of domestic demand is expected this year on prices.

Taking into account developments and expected trends in the main components of the domestic Consumer Price Index, as well as the fact that in the first five months of 2020 there was a anti-inflation of 0.3%, it is projected that the DGTK will fall this year between 1.6-1.8%. If the health crisis recovers within the year, domestically and internationally, further squeezing demand and oil prices, anti-inflation will be in the region of 3.0%.

3.2 Developments and Prospects in Key Sectors of the Economy

- Industrial production declined in the first four-months of 2020 by 3.4% against an increase by 1.7% in 2019
- Decline in Construction in the first quarter Q1 2020 by 10.3% following a decrease of 11.9% a year ago.
- Activity volume declined by 4.9% in the first four months of 2020 in Retail Trade, instead of a milder decline of 1.0% in 2019.
- Improvement in the turnover in eight of the Services' thirteen sub-sectors, in the first quarter of 2020.



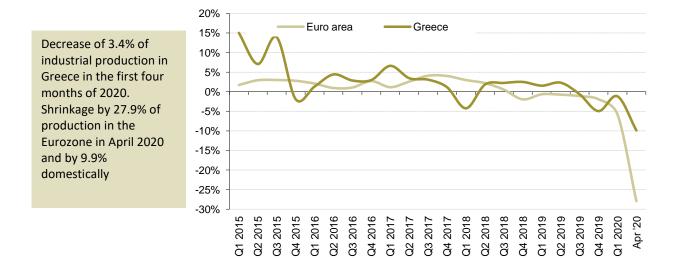
Industry

In the first quarter of 2020, the industrial production index decreased by 1.2% instead of increasing by 1.6% in the corresponding period of 2019. It should be noted that in the first two months of 2020 the index moved 2.2% lower than a year ago. By contrast, in March, the month in which measures to limit the spread of the COVID-19 pandemic began, domestically and internationally, production increased marginally by 0.4%.

Incorporating into the analysis the most recent available data, concerning the first quarter of this year, shows that industrial production in Greece was decreased by 3.4% compared to 2019, when it had increased by 1.7%.

In terms of industrial product prices during the same period of 2020, they were reduced by 5.3% instead of an increase of 2.8% last year. Prices fell more in exported products (-12.5% instead of +3.3% in 2019) and less in those sold in the Greek market (-2.9% instead of +2.6%). Respectively, the turnover of the industry decreased by 11.7%, when in the first four months of 2020 it increased by 3.1%.

Figure 3.1
Industrial Production Index in Greece and the Eurozone, P.M. (%) for the corresponding quarter of the previous year



Sources: ELSTAT, Eurostat

The negative trend in euro area industrial production in 2019 continued into the first months of 2020, even before the outbreak of the pandemic. In more detail, in the first quarter of the year, the relevant index was reduced by 5.8% instead of losses of 0.7% in the same period of 2019. In April 2020, production in the Euro-Zone (EZ) shrank by 27.9%. Over the quarter as a whole, the index is 11.3% lower than last year.

At the level of key sectors of Greek industry, in the initial four months of 2020 an improvement was recorded only in the Water Supply (+0.6% instead of -0.8% last year). In the other sectors, the output in electricity supply fell by 9.4% (instead of +2.3% in 2019), in Manufacturing by 1.9% (instead of +2.1%) and Mining Quarries by 0.6%, but milder than in the first quarter of 2019 (-11.9%).

Among the Mining sectors, production was strongly boosted in Mining (+34.0% instead of a 24.3% drop a year ago). Production in the Coal and Lignite Extraction – Crude Oil and Gas Extraction sector

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was halved (-58.9%), instead of a slight increase (+3.9%). There was a decrease in production in the Other Mines and Quarries (-9.3%, then -6.5% last year).

In Manufacturing, production increased in 8 of the 24 sectors. In sectors with increased weight for the Greek economy, there was an increase in the product of Basic Pharmaceuticals (+15.7%, followed by +27.0% a year earlier) and in food production (+2.9%, from +1.4% in 2019). In contrast, the production of Basic Metals decreased by 9.1%, versus an increasing by 3.3% in the first four months of last year.

In the other manufacturing sectors, the sharpest decline in the first four months of this year occurred in the Leather and Leather Products industry (-42.3% instead of -0.5%), in the manufacture of Clothing (-33.7%, then -6.5 %) and in the Distillery (-13.9% instead of -0.8%). This was followed by the manufacture of Furniture (-13.8% instead of + 0.8%), the production of Non-Metallic products (-12.6%, then 4.9%), the production of Textiles (-11.3% after -4.5%) and the manufacture of Electrical Equipment (-8.2% then -3.5%). On the other hand, strengthened production was recorded in the construction of Motor Vehicles (+21.7% instead of -11.2%), in the Paper Industry (+ 9.4% instead of -3.2%), in the production of Tobacco Products (+3.7% then +29.2%).

During the same period, the output was limited to all five main groups of industrial products. In detail, non-durable consumer goods production fell by 12.7%, following a 5.3% fall a year earlier. Energy production shrank by 6.9% versus a milder decline by 1.5%, in 2019. Production in Intermediate goods is lower by 4.4% (unchanged since last year), while in consumer goods there was a marginal decrease of 0.5%, in contrast to the increase of 6.1% in the corresponding period last year.

It should be noted that at the end of the current section, in a specific context (Box 3.2), a first record of the effects of the coronavirus pandemic in the sectors of the Greek economy takes place, covering the period March-April 2020.

Construction

In the first quarter of 2020, the manufacturing index in the Construction sector decreased by 10.3%, followed by a slightly stronger decline by 11.9% comparatively to the corresponding period of the previous year. In the sub-indices, the production of Construction projects remained at the level of 2019, while then it had been limited by 1.0%. The Civil Engineering Project Index recorded losses of 17.2%, following a sharp decline of 22.0% in the first quarter of last year.

Monthly building activity figures show a significant increase in the first quarter of 2020, 41.2% in terms of number of permits, instead of a fall of 8.4% last year. In terms of volume, the increase was 38.9%, in contrast to last year's decrease of 18.2%. The largest increase was recorded in surface terms (+ 57.9% instead of -18.6%). It is noted that the above increase in construction activity occurs during all months of the first quarter.

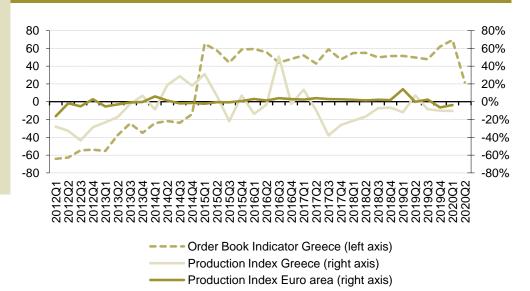
In the Eurozone, the manufacturing index in Construction fell by 3.6% when in the first quarter of last year it strengthened by 14.1%.

Figure 3.2

Production Index in Construction and Work Level Index



Reduction of production in Construction by 10.3% in the first quarter, slightly milder than a year ago (-11.3%). Reduction of production in Construction in the Eurozone by 3.6%



Source: ELSTAT

Retail Trade

The revised Retail Volume index²⁸ in the first four months of 2020 was 4.9% lower than a year earlier, when it was reduced by 1.0%. The downturn is due exclusively to March and April, when measures were imposed to suspend the physical stores of companies in the sector. In the first months of this year (January - February), the volume index in Retail Trade increased by 6.2% and 2.5% respectively, while in the respective months of 2019 the activity in Retail trade was declining. In March the index was 1.5% lower than last year and in April it was down 24.8%.

In the initial four months of this year, the volume of work was boosted in only 2 of the 8 sub-sectors and in particular in the Large Food Stores, where turnover increased by 11.6% instead of a 0.9% decline last year and in Pharmaceuticals – Cosmetics (+10.9% instead of -5.7% last year). Both of these sub-sectors absorbed a large part of the consumption during the suspension of the stores and the restrictions on the movement of the citizens. On the other hand, the sharpest falls were recorded in the Clothing and Footwear sub-sector (-31.2% instead of -5.2%), in Department Stores (-20.2% vs. -13.9%) and in Food-Beverage-Tobacco (-13.9% compared to -3.6%). This was followed by Stationery Books (-13.4% instead of 14.2%) and Fuels and Lubricants (-12.0% instead of + 1.3%).

Figure 3.3

Retail Volume Index (2010 = 100) and Retail Business Expectations Index (1996-2006 = 100)

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²⁸ New Base Year 2015



Retail Trade Volume Index (left axis)Retail Trade Confidence Indicator (right axis)

Retail trade volume decline by 4.9% in the first four months of 2020, as a result of the pandemic protection measures.

Expectations declined in the following quarter

Source: IOBE

At the industry level, the expectations in the Retail sector during the second quarter of 2020, as reflected in the leading indicators of the IOBE Business and Consumer Surveys, in the first half of 2020 deteriorated in all sub-sectors compared to the same half of the previous year. In Vehicles-Spare Parts, the expectations index fell by 37.2 points (instead of a decrease of 4.0 points in 2019) and was followed by a drop in Fabrics-Clothing-Footwear with a decline of 20.4 points, after a decrease of 25.6 points a year earlier. A milder decrease was recorded in Household Equipment (-3.0 units instead of -21.0 a year ago). On the contrary, the expectations improved in the Department Stores (+28.0 instead of +1.8 in 2019) and in the Food-Drinks-Tobacco (+21.8 points compared to an increase of 18.1 points in 2019).

In particular in Spare Parts Vehicles, the effects of the pandemic are fully reflected in the April-June data, with the largest percentage drop recorded in May, with the index falling by 72%. Overall in the second quarter, the current sales balance stood at -61 points, compared with +17 points in 2019. The balance was affected by the extremely high proportion (74%) of the total number of people in work. companies that considered current sales to be reduced due to a pandemic, while the rate deteriorated mainly in May and June, showing that the negative effects on the market are also transferred after the lockdown. In stocks, the percentage of those who consider them increased has doubled, strengthening the relative balance. The balance of orders deteriorated to -59 points due to negative expectations and uncertainty in the market, with around 8 out of 10 companies considering a fall in orders in the next quarter. Similar developments in sales expectations, with the balance falling to -43 points, compared with 45 points in 2019, with about 7 in 10 companies expecting reduced sales. Finally, in the employment sector the balance became clearly negative (-22 points), despite the fact that about 8 out of 10 companies maintained stabilization estimates.

Wholesale Trade

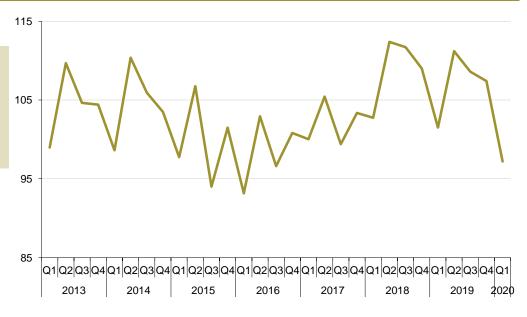
In the first quarter of 2020, the revised Wholesale Turnover Index moved downwards and recorded losses of 4.2%, compared with an increase of 1.2% in 2019.

Figure 3.4

Evolution of the Turnover Index in Wholesale Trade



Wholesale turnover decreased by 4.2% in the first quarter of this year



Source: ELSTAT

Table 3.4Volume Index in Retail Trade, annual changes

Category of Retail Trade Stores	Volume Index (2010=100)							
	Jan April 2018	Jan April. 2019	Jan April 2020	Change 2018/2017	Change 2019/2018			
Overall Index	97.9	97.9	92.2	0.0%	-5.9%			
Overall Index (excluding automotive fuels and lubricants)	98.8	101.5	94.2	2.7%	-7.2%			
Store Cate								
Supermarkets	101.5	100.6	112.2	-0.9%	11.6%			
Department Stores	103.6	87.2	69.5	-15.9%	-20.2%			
Automotive Fuels	94.2	93.5	82.2	-0.8%	-12.0%			
Food – Drink – Tobacco	88.3	81.4	70.1	-7.8%	-13.9%			
Pharmaceuticals – Cosmetics	101.7	93.5	103.7	-8.1%	10.9%			
Clothing – Footwear	109.5	103.9	71.5	-5.2%	-31.2%			
Furniture – Electric Equipment – H. Appliances	97.8	101.0	87.2	3.3%	-13.7%			
Books – Stationary	102.5	117.0	101.4	14.2%	-13.4%			

Source: ELSTAT

Table 3.5Business Expectations Indices in Retail Trade (1996-2006=100)

	Q1 2018	Q1 2019	Q1 2020	% Change 2019/2018	% Change 2020/2019
Food-Drinks-Tobacco	75.9	94.0	115.8	23.8%	23.2%
Textiles - Clothing – Footwear	109.0	83.4	63.0	-23.5%	-24.5%
Household Appliances	95.0	73.9	70.9	-22.2%	-4.1%
Vehicles-Spare Parts	122.0	118.0	80.8	-3.3%	-31.5%
Department Stores	93.9	95.7	123.7	1.9%	29.3%
Total Retail Trade	97.4	98.8	94.7	1.4%	-4.1%



Source: IOBE

Services

In the first quarter of 2020 turnover improved in eight of the thirteen branches of the Services compared to the corresponding period of 2019.

The biggest decline was recorded in the services of Other Professional and Scientific specialties (-20.1%, then -6.5% in 2019), followed by a decline in Business Support services (-10.1% vs. -4.2 %), the services of Publishing Activities (-6.4% versus an increase of 6.4%) and finally the services of Activities related to the Provision of Protection and the Conduct of Research (-4.4%, following a decrease of 3.3%).

On the contrary, the activity strengthened in the cleaning services (18.1% instead of -10.7%), in the IT services (14.7% instead of 1.2%), and in the services of Architects and Engineers; in the latter, it strengthened at the same rate as in 2019 (5.4%). Employment-related services (+2.8% followed with a stronger increase of 21.2% in 2019), as well as Advertising services (1.0%, from 8.1%) and Telecommunications services (3.1% compared to 0.4%).

According to the IOBE's leading economic indicators of business and consumer surveys, for the first half of 2020, there was a decline in expectations in all four sub-sectors of the Services, while the General Services Index declined by 6 points, following a decrease of 8.2 points in the first half of 2019. It is noted that during the second half of this period the indicators incorporated the effect of the pandemic of the new coronavirus.

The relevant sectoral index was reduced, as expected due to the lockdown, by 24.3 points in Hotels – Restaurants following a decline of 19.8 points in 2019, followed by IT services (-13.3 points instead of an improvement of 6.3 points in 2019) and expectations for services to Business (-9.8 points instead of an increase of 13.7 points last year). Much milder pessimism in Banks, related to the positive support of the ECB, which now accepts Greek securities as collateral. That said, the index lost just 1.1 points instead of stronger losses of 8.8 points last year.



Table 3.6

Turnover Indexes (2010=100)

Services branch	% Change Q1 2019	% Change Q1 2020
Publishing activities	6.4%	-6.4%
Architects and Engineers	5.4%	5.4%
Data and Information service activities	-4.4%	11.6%
Security and investigation activities	-3.3%	-4.4%
Telecommunications	3.1%	0.4%
Advertising and market research	8.1%	1.0%
Postal and courier activities	13.0%	-3.4%
Computer programming, consultancy and related activities	1.2%	14.7%
Other professional, scientific and technical activities	-6.5%	-20.1%
Legal, accounting and management consultancy activities	5.8%	6.6%
Office administrative, office support and other business support activities	-4.2%	-10.1%
Employment activities	21.2%	2.8%

Source: ELSTAT

Table 3.7
Sector Indices of Business Sentiment in Services (1996-2006=100)

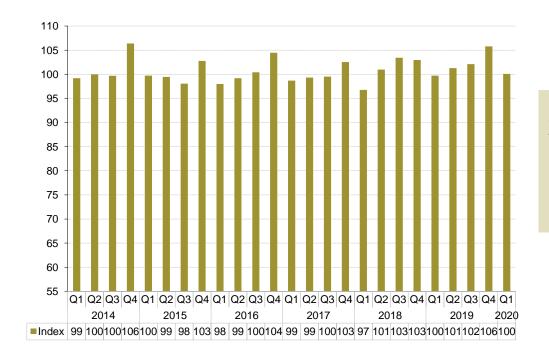
	H1 2018	H1 2019	H1 2020	change '19-'18	change '20-'19	Change. 2019/2018	Change. 2020/2019
Hotels – Restaurants – Travel	107.3	87.5	63.2	-18.5%	-27.8%	-19.8	-24.3
Agencies							
Other Business Services	66.4	80.1	70.3	20.6%	-12.2%	13.7	-9.8
Financial Intermediation	92.6	84.5	83.4	-8.7%	-1.3%	-8.1	-1.1
Information Services	75.3	81.6	68.3	8.4%	-16.3%	6.3	-13.3
Total Services	91.5	83.3	77.3	-9.0%	-7.2%	-8.2	-6

Source: IOBE



Figure 3.5

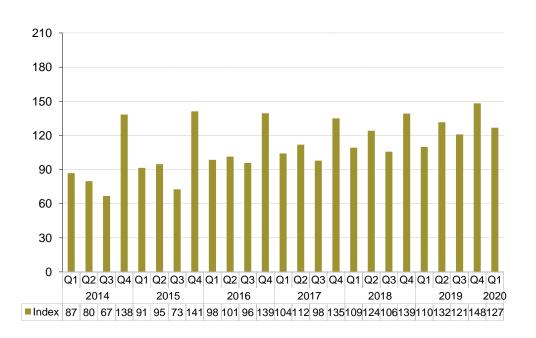
Evolution of Turnover Index in the Telecommunications Services sector (sector 61)



Marginal increase of 0.4% in the first quarter of 2020, against an increase of 3.3% in 2019

Source: ELSTAT

Figure 3.6
Evolution of Turnover Index in the IT Services Sector (sector 62)



Increase by 14.7%, much larger than a year ago (+1.2%)

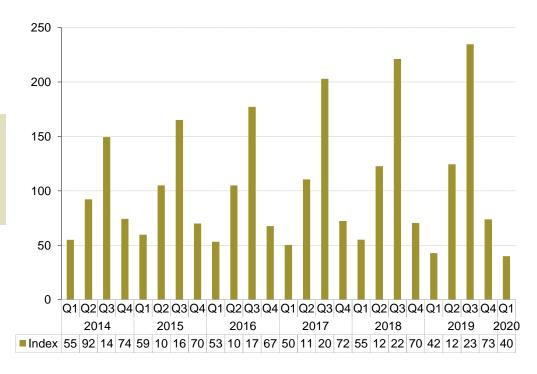
Source: ELSTAT



Figure 3.7

Evolution of the Turnover Index in the Tourism Sector (Accommodation and Catering Services Activities)

(Sectors 55 & 56)



Losses in Tourism are much lower (-6.5% instead of -22.5%)

Source: ELSTAT



Box 3.2

First depiction of the effects of the coronavirus pandemic on the sectors of the Greek economy

The rapid spread of the new coronavirus since last February in Europe has been an unexpected phenomenon in recent years. Unprecedented measures to protect public health have also been taken in our country since mid-March. These included the suspension of business operations, restrictions on the movement of citizens, teleworking and shift work, the observance of safety distances, the closure of land borders, the suspension of international flights, the recommendations of personal hygiene (hands, face). The lifting of these measures gradually began in early May, with the partial abolition of restrictions on the movement of citizens and the suspension of operations. Despite these very positive developments, the lockdown affected several industries, lasting from almost two to about three and a half months. Extraordinary financial and financial interventions were carried out to support companies in them and their employees (e.g. suspension of payment of taxes, insurance contributions, regulated and overdue debts, payment of special purpose compensation). In any case, there have been impacts on the activity of these companies and employees, the extent of which will be seen in the medium term. Then a first depiction is made, for the period March-April, based on data from ELSTAT.

Specifically, the single-digit branches according to NACE Rev.2 which include suspended operations are listed in Table 3.8. These concern eight service sectors.

Table 3.8
Single-digit codes of branches to which activities are suspended

1-digit branch code (STAKOD-08)	Industry description
Z	Wholesale and Retail Trade
Θ	Accommodation and Catering
I	Information and Communication
M	Professional and Scientific Activities
N	Administrative and Support Activities
0	Education
Р	Arts, Entertainment and Entertainment
Σ	Other Activities

Source: ELSTAT

The total number of companies that were suspended for some time during this period was 205.9 thousand, out of approximately 1.4 million companies that operated in 2017, according to the latest Statistical Business Register of ELSTAT. Therefore, they correspond to almost 15% of the total.

Turnover in all sectors of the country fell to €31.3 billion in the two months March-April 2020, having shrunk significantly compared to a year ago, when it had reached €40.1 billion (-22.0%). Regarding the activity in the companies that were suspended, their turnover shrank in the same period to €815 million, from €2.3 billion in the corresponding period of 2019 (-64.6%). Therefore, 22.0% of the decrease in turnover in the Greek economy in the two months of March-April came from the companies in suspension. It is clarified that the turnover of these companies came from secondary activities that are not included in those (KAD) in suspension. It may also have come from e-commerce or home-based e-commerce services, online services, delivery and take-away activities, and reservations.

Table 3.9



Turnover and number of companies domestically and in suspension *

		Size
	Total	1,415,370
Number of businesses	Suspended	205,984
	% suspended operations	15%
	AprMar. 19	40,134,525
Turnover of all companies in the Greek economy (in thousand €)	AprMar. 20	31,287,257
Greek economy (in chousand e)	Change (%)	-22%
	AprMar 19	2,304,921
Turnover of suspended operation companies (in thousand €))	AprMar 20	814,920
companies (in thousand e))	Change (%)	-65%

^{*} The data concerning all the enterprises are based on those that were recorded in the Statistical Register of Enterprises of EL.STAT, for the year 2017. Data on suspended operations were obtained from EL.STAT. from administrative sources

Source: ELSTAT

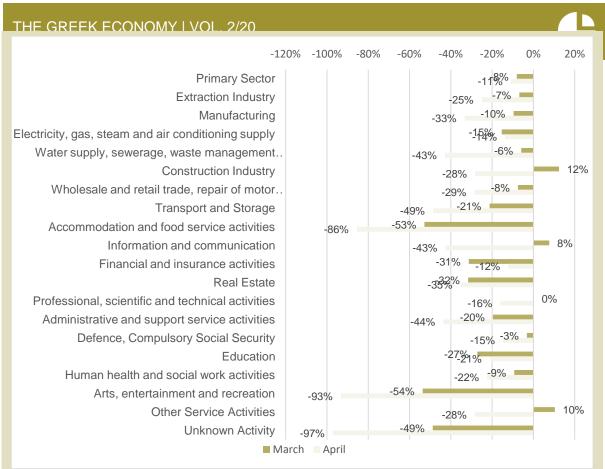
The turnover of all sectors of the Greek economy has suffered a significant decrease in the first two months of the restrictive measures compared to a year ago. The sectors with the highest decline include those with suspended activities. The Accommodation and Catering Activities and the Arts, Entertainment and Recreation Activities saw the sharpest decline in turnover in both March and April. In particular, activity in the first sector was 53% lower in March than last year and in April 86%. The corresponding falls in the Arts, Recreation and Entertainment sector were 54% in March and 93% in April, followed by the Administrative and Support Activities sector (-20% in March, -44% in April), probably due to the sharp decline in activity in Rentals-Leases, due to much lower international tourism (transportation, Airbnb). However, there are sectors that showed a temporary increase in activity at the beginning of the health crisis in March: Construction (+ 12.4%), Information - Communication (+ 7.6%) and Other Service Activities (+10 , 4%). In April, all sectors of the Greek economy showed a significant decrease in their activity compared to the same month last year.

Regarding the degree of importance of companies that have been put into suspension within the larger branches to which they belong, it is to notice that there are significant differences between the branches. In the Education sector, 89% of businesses were suspended, with the Accommodation - Catering (83%) and Arts, Entertainment and Recreation (63%) sectors following in the density of such businesses. In the wholesale-retail sector, only a quarter of businesses were suspended, perhaps because many of the companies in this sector also sell online, while in Administrative-Support activities the figure reached 11%. Therefore, it seems that in the first of the above branches, the power of the suspension was high, almost universal in the first two of them.

As regards the regional structure of suspended enterprises, the highest proportion of suspended enterprises to their total, in the same region, was the south Aegean regions (34.2%) and the south Aegean regions (34.2%). and the Ionian Islands (29.8%). These high rates are due to the many accommodation services businesses in these regions. On the other side, the Peloponnese region has the lowest proportion of suspended operations (10.7%). Based on the percentage of enterprises suspended in the region in all enterprises suspended domestically, as expected, the regions of Attica and Central Macedonia rank first with 27% and 15% respectively, since they concentrate over time most of the enterprises from the other regions. The smallest shares concern the regions of North Aegean and Western Macedonia.

Figure 3.8

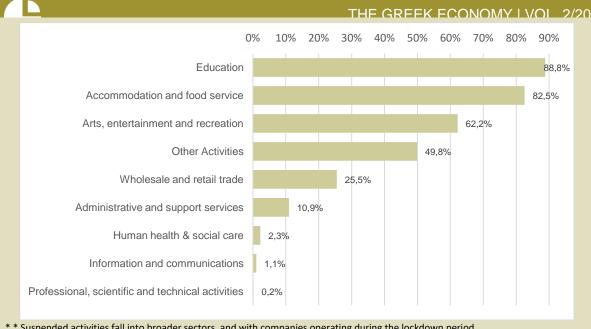
Percentage change in turnover per section of economic activity (March-April, 2019-2020)*



* Suspended activities fall into broader sectors, and with companies operating during the lockdown period Source: ELSTAT

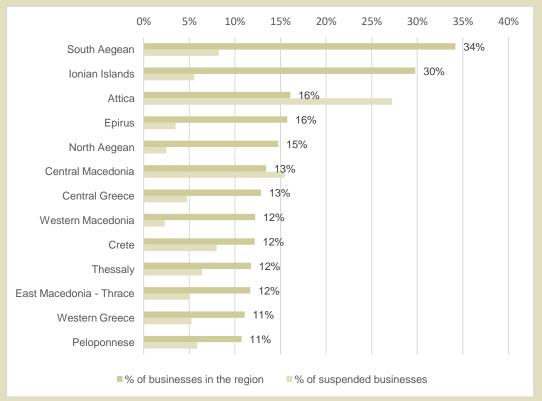
Summarizing the first, indicative data on the effects on the Greek economy of the suspension of operations and in general of the measures for protection of public health, concerning the two months March-April, there is a decline of the activity in all sectors by 22% (- € 8.85 billion). The decline came almost by 2/3 from branches that were suspended. Subsequently, some of them presented the most intense decline in turnover between the sectors of the Greek economy (provision of accommodation and catering, Arts entertainment and Administrative - support activities, due to lower rents). Regarding the effects of the suspension at the regional level, it seems that they were more intense in the regions of the South Aegean and the Ionian Islands, where 34.2% and 29.8% of the companies ceased to operate respectively. These high rates are due to the many companies in the Accommodation Services sector in these areas. The mildest effects were observed in the Peloponnese region.

Businesses under suspension per section of economic activity*



* * Suspended activities fall into broader sectors, and with companies operating during the lockdown period Source: ELSTAT

Figure 3.10
Regional composition of suspended businesses



Source: ELSTAT

3.3 Export Performance of the Greek Economy



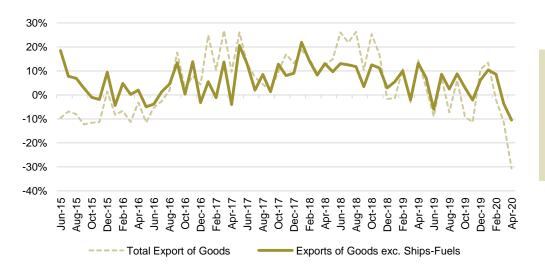
- Decrease in exports of goods in the first quarter of 2020, at a rate of 8.6% and on the contrary a slight increase in exports excluding petroleum products (+0.9%). In the two months of March-April 2020, under the influence of the new coronavirus pandemic, total exports fell by 21.2%, while exports excluding petroleum products fell by 7.0%.
- Reduction of trade deficit 12.2% compared to the first four months of 2019, to €6.0 billion Of this,
 €801.8 million came from the two months March-April.
- · From the product categories, a larger drop in the exports of Fuels and Raw Materials
- Demand declines mainly from the countries of the Middle East and North Africa (-39.0% or -€692.1 million) and Asia (-4.7% or -€31.6 million), but also a boost in demand from EU countries (+1.8% or +€98.7 million).

•

Exports of goods in the first four months of 2020 amounted to \leq 10.0 billion, compared to \leq 10.8 billion in the corresponding period of 2019, recording a decrease of 8.6%. In March-April, under the influence of the new coronavirus pandemic, total exports fell to \leq 4.6 billion from \leq 5.8 billion in the same period last year, that is a decrease of 21.2%. Excluding exports of petroleum products and ships, other exports increased marginally, by 0.9%, to \leq 7.64 billion, from \leq 7.57 billion in the four months of 2019, while in March-April this year they amounted to \leq 3.6 billion, from \leq 3.9 in 2019, reduced by 7.0% (Figure 3.11). Imports decreased by 10.0% in the January-April period and amounted to \leq 15.9 billion, from \leq 17.7 billion in the same period last year, while during the health crisis they declined to \leq 7.3 billion, from \leq 9.4 billion (-21,9%). As a result of the above trends in the key components of the external balance, the trade deficit in the four months of this year amounted to \leq 843.6 million lower than last year (-12.2%), to \leq 6.0 billion, from \leq 6.9 billion. This improvement is due almost exclusively to the two months March-April, by \leq 801.8 million. Subsequently, the value of exports of products of the Greek economy in the first four months corresponded to 62.0% of its imports, while a year earlier it reached 61.1%.

Figure 3.11

Total exports of products and exports of products without fuel-ships (current prices)



Exports besides oil & ships in January-April this year amounted to €7.64 billion, 0.9% higher than a year ago

Sources: ELSTAT, IOBE

Analytically, exports of Agricultural Products increased by 15.7% in the four months of January-April 2020, to €2.1 billion, from €1.9 billion a year earlier, while Fuel exports decreased by 31.5%, mainly as a result of the fall in oil prices, resulting in €2.4 billion, from €3.4 billion last year (Table 3.8). Exports of the two specific categories correspond this year to 45.5% of domestic product exports, from 48.9% a year earlier. The increase in Agricultural Products came mainly from the 49.2% increase in demand for Oils or Fats of Animal or Plant Origin, the value of which amounted to €221.8 million, from €148.7 million in 2019, with as a result, their share in total exports increased from 1.4% last year to 2.2% this



year. In the Food - Live Animals category, which accounts for about 77.9% of Agricultural Products exports, exports increased by 13.5%, to €1.473 billion. In Beverages and Tobacco Products, which account for 11.7% of Agricultural Products exports, demand stood at €251.7 million in January - April 2020, 8.8% higher than in the same period of 2019 (€231.4 million).

Exports of Industrial Products fell marginally in the first four months of this year, by 0.2%, with their value reaching €4.84 billion, from €4.85 billion last year. This decrease is mainly explained by the decline in international demand for Various Industrial Goods, by 15.3%, with their value amounting to €731.2 million. There was also a decrease in exports of Machinery and Transport Material, of the order of 7.5%, to €912.1 million from €985.8 million, while Industrial Goods Sorted by Raw Material also moved downwards, by 3.3% (€1.63 billion from €1.68 billion). There was a significant increase in exports of Chemicals and related, by 19.1%, resulting in €1.3 billion to reach €1.6 billion. Finally, exports of Raw Materials decreased by 23.8%, falling to €409.2 million from €537.1 million last year, while on the contrary, exports of Items and Transactions of Unclassified by Categories expanded by 0.6%, from €154.7 million in the four months of 2019 to €155.6 million in the same period this year.

Regarding export trends by geographical area, they fell marginally towards the euro area countries by 0.3%, reaching €4.20 billion this year from €4.22 billion in the same four first four months of 2019, resulting in the almost 42.4% of the Greek exports directing towards them, this year. In contrast, towards the EU-27 there was an increase of 1.8% or €98.7 million, with exports to them reaching €5.6 billion, from €5.5 billion a year earlier. Among the Eurozone countries that absorb the largest share of Greek exports, exports expanded to France, by 28.1%, from €397.8 million to €509.5 million, and to Germany by 18.3%, from €669.6 million to €792.5 million. Exports to the most important trading partner, Italy, decreased by 3.0%, amounting to €1.1 billion. The largest percentage increase in exports in the first four months of 2020 to the Eurozone was recorded towards Latvia, by 122.8%, from €5.7 million last year to €12.7 million this year.

Among the rest of the European Union, to which total exports increased by 8.7% or €111.1 million, reaching €1.4 billion, Bulgaria remains the main export destination, with an increase of product outflows to it compared to last year by 8.4% or by €39.4 million. At the same time, positive developments took place to two other countries from this group which absorb a significant share of Greek exports: Romania and Poland, to which exports increased by 7.4% or €24 million, to €349.4 million; and by 13.6% or €21.6 million, to €180.2 million, respectively. The largest percentage increase, of 51.0%, was recorded in Hungary, to which Greek exports increased by €30.4 million, from €59.6 million last year to €90.0 million this year.

The rest of Europe showed a decrease in demand for Greek exports by 12.4%, from €1.9 billion last year to €1.7 billion this year. It manifested primarily in Turkey, by 18.2%, from €573.2 million to €469.1 million and secondarily in the United Kingdom by 8.3% from €390.0 million in the first four months of 2019 to €357.7 million in the corresponding period of 2020.

Exports to North American countries rose by 3.4%, from €481.3 million in 2019 to €497.6 million a year later, mainly due to the increase in exports to the US by 4.2%, from €381.2 million last year to €397.3 million this year, and to Canada by 10.6% or 4.5 million. On the contrary, exports to Mexico decreased (-7.6%).

Table 3.10

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

Product	Val	ue	% Change	% SI	hare
Floudet	2020*	2019*	20*/19*	2020*	2019*
AGRICULTURAL PRODUCTS	2,145.3	1,853.6	15.7%	21.6%	17.1%
Food and Live Animals	1,671.7	1,473.4	13.5%	16.9%	13.6%
Beverages and Tobacco	251.7	231.4	8.8%	2.5%	2.1%
Animal and vegetable oils and fats	221.8	148.7	49.2%	2.2%	1.4%
RAW MATERIALS	409.2	537.1	-23.8%	4.1%	5.0%
Non-edible Raw Materials excluding Fuels	409.2	537.1	-23.8%	4.1%	5.0%
FUELS	2,362.8	3,448.1	-31.5%	23.8%	31.8%
Mineral fuels, lubricants, etc	2,362.8	3,448.1	-31.5%	23.8%	31.8%

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INDUSTRIAL PRODUCTS	4,838.3	4,849.3	-0.2%	48.8%	44.7%
Chemicals and Related Products	1,566.3	1,315.5	19.1%	15.8%	12.1%
Manufactured goods classified chiefly by raw material	1,628.6	1,684.3	-3.3%	16.4%	15.5%
Machinery and transport equipment	912.1	985.8	-7.5%	9.2%	9.1%
Miscellaneous manufactured articles	731.2	863.7	-15.3%	7.4%	8.0%
OTHER	155.6	154.7	0.6%	1.6%	1.4%
Commodities and transactions not classified by category	155.6	154.7	0.6%	1.6%	1.4%
TOTAL EXPORTS	9,911.2	10,842.9	-8.6%	100.0%	100.0%

^{*} Provisional Data

Sources: ELSTAT, PSE-KEEM

Exports to the Middle East and North Africa fell sharply, by 39.0%, to €1.0 billion from €1.8 billion, mainly due to reduced exports to Egypt (-40.9%), where exports amounted to €174.2 million in the first four months of 2020, compared to €294 billion a year ago but also to Lebanon (-53.9%), recording a decrease of €263.3 million in 2020 compared to 2019 (Table 3.11, Figure 3.12). Similarly, in a major export destination in the Middle East, Saudi Arabia, exports fell sharply, by 63.1%, to €745.4 million, while in contrast to the United Arab Emirates, they increased by 6.3%, to €4.9 million

Increased by 7.3% was the flow of exports of Greek products to Oceania, with their value in the period January - April of this year amounting to €71.4 million from €66.5 million a year earlier. The rise stemmed from a similar trend towards Australia at a rate of 3.9%, to which exports amounted to €63.7 million in 2020, from €61.3 million in 2019. There was also an increase to New Zealand (+47.3%).

Strong decline, approximately 52.2%, in the first four months of 2020, on the exports to the markets of Central and Latin American countries; these exports stood at €70.4 million from €147.2 million a year ago. The decrease in export performance to the countries of this region is mainly due to the sharp drop in demand for Greek products from Brazil by 85.0%, which shaped their value to €9.1 million from €60.6 million to €60.6 million a year earlier.

International demand for Greek goods fell also to Asian countries, to which exports fell by 4.7% to €644.8 million from €676.5 million last year. This development is mainly due to the decline in demand from China (-26.6%, to €246.0 million from €335.1 million last year) and Singapore (-12.0%, to €36.9 million from €41.9 million in 2019). On the contrary, an extended increase, by 508.9%, was recorded towards Taiwan from €4.8 million in 2019 to €29.4 million this year, as well as by 82.8% towards Japan, from €57.6 million last year at €105.4 million this year.

Table 3.11
Exports by destination, January - April (million €)*

ECONOMIC UNIONS – GEOGRAPHIC REGION	EXPORTS		% CHANGE	% SI	HARE
	2019	2018	19/18	2019	2018
World	9,911.2	10,842.9	-8.6%	100.0%	100.0%
OECD	5,777.8	5,771.7	0.1%	58.3%	53.2%
EU	5,592.9	5,494.2	1.8%	56.4%	50.7%
Euro Area	4,206.9	4,219.3	-0.3%	42.4%	38.9%
G7	3,332.0	3,096.3	7.6%	33.6%	28.6%
North America	497.6	481.3	3.4%	5.0%	4.4%
BRICS	347.0	501.5	-30.8%	3.5%	4.6%
Middle East & North Africa	1,081.5	1,773.6	-39.0%	10.9%	16.4%
Rest of Africa	474.9	652.6	-27.2%	4.8%	6.0%
Oceania	71.4	66.5	7.3%	0.7%	0.6%
Latin America	70.4	147.2	-52.2%	0.7%	1.4%
Rest of Asia	644.8	676.5	-4.7%	6.5%	6.2%
OPEC	459.2	681.0	-32.6%	4.6%	6.3%

^{*} Provisional Data

Source: ELSTAT, Processing KEEM

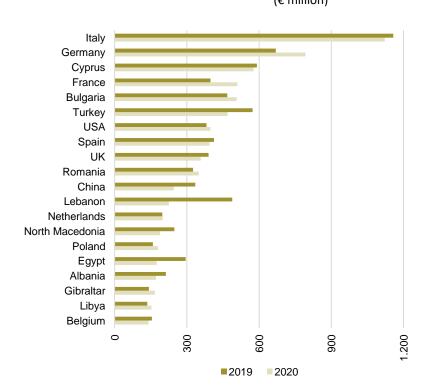


The new coronavirus pandemic (Covid-19) launched in December 2019 by China and extended from the end of February to Europe and beyond to the rest of the world, has unprecedented effects on the world economy, mainly through restrictions on business operations and citizens' movements. Understandably, they have had an unprecedented impact on international commodity trade, an impact reflected in the decline in Greek exports by 21.2% in March-April, compared to 8.6% in the first four months of this year, and excluding petroleum exports, exports which this year have been affected by the fall in their price, the reduction has reached 7.0% in the lockdown period. However, as the conditions due to the health crisis have a negative impact on imports (-21.9% in the two months), the trade balance in this period improved by 22.5% or €801.8 million. Given the recession of the pandemic and the gradual lifting of restrictions in EU countries, a resurgence of trade between them is expected. However, it's possible that there will be a resurgence of the health crisis in the Fall. In any case, the recession in the EU, the most important export destination for Greek products, which according to the most recent forecasts will be close to 8.0%, will severely affect demand for them. Uncertainty regarding the development of Greek exports is greater for countries outside the EU, due to fluctuations in the spread of the health crisis in them, with the most typical examples being the USA and China. This fact makes it particularly difficult to make predictions about the exact change in Greek exports now. Nevertheless, it is now considered likely that exports, excluding petroleum products, will decline by double digits.

Figure 3.12

Countries with the largest share in the exports of Greek products, January - April

(€ million)



The largest increase in exports of products in the period January - April in absolute terms to Germany (+122.8 million). The biggest drop was in the exports to Lebanon (-€263.3 million). Italy is still the largest importer of Greek products

Source: Panhellenic Exporters Association, Processing: IOBE

3.4 Employment – Unemployment

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- Recession of the unemployment rate in the first quarter. of 2020 to 16.2% from 19.2% a year earlier. The lowest since the second quarter of 2011.
- Unemployment falls by 76.2% from a decline in the labour force and by 23.8% from an increase in employment
- Largest job growth in Wholesale-Retail (+29.9 thousand people), Transportation-Storage (+21.4 thousand people), Human Health Activities (+16.2 thousand people) and Manufacturing (+12.2 thousand people)
- The seasonally adjusted wage cost index in the first quarter of 2020 showed an increase of 0.8% compared to the first quarter of 2019, after two consecutive quarters of decline.

According to the ELSTAT Labour Force Survey, in the first quarter of this year the unemployment rate was reduced to 16.2%, three percentage points lower than in the first quarter of 2019 (19.2%) and 0.6 percentage points lower than in the previous quarter (16.8%). The number of unemployed was reduced to 745.1 thousand, showing a decrease of 162.0 thousand people (or 17.9%) compared to their number in the first quarter. of 2019 (907.1 thousand). The number of employees in the first quarter of this year increased by 38.6 thousand people (or by 1.0%), to 3,852.6 thousand. The decrease in the number of unemployed came by 76.2% from the decrease in the labor force (by 123.4 thousand people, from 4,712.1 thousand to 4,597.7 thousand) and by 23.8% from the increase of employment. It is pointed out that the strong decline in the number of unemployed in March compared to the previous month (-106.2 thousand), was primarily attributed (2/3) to their exit from the workforce, not to the increase in employment. According to the relevant press release of EL.STAT, "several job seekers stated that they are not immediately available to work and therefore, according to the definitions of the relevant European Regulation, are classified as economically inactive. This was the main reason for the decline in the unemployment rate in the first quarter of this year, despite the impact of the new coronavirus pandemic in March on employment.

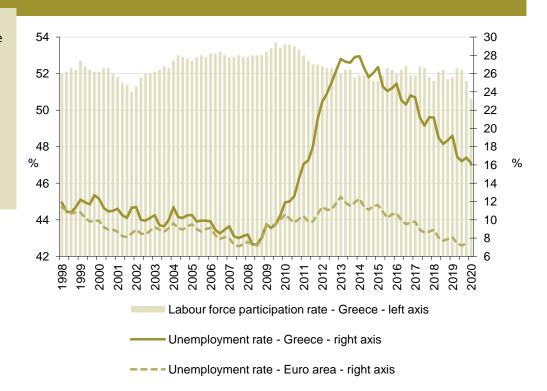
Regarding the development of unemployment in the Eurozone-19, based on the available data, after Greece, the highest unemployment rate concerns Spain, which - in the first quarter of this year- was reduced to 14.4% from 14.7% a year ago. Next rank Italy, where the corresponding figure was reduced to 9.4% from 11.1% and France, where the unemployment rate fell from 9.1% in the first quarter 2019 to 8.1% this year. On the other hand, the lowest unemployment rates in the first quarter this year concerns the Netherlands (3.3% from 3.7%), next Slovenia (4.6% from 4.8%) and Austria (4.7% from 4.8%).

Figure 3.13

Evolution of the labor force participation and unemployment rates



Reduction of the unemployment rate in the first quarter of 2020 to 16.2% from 19.2% in the first quarter of 2019. The lowest since the second trimester of 2011



Source: ELSTAT - Labor Force Survey, Eurostat

Regarding the evolution of gender-based unemployment, in Greece the unemployment rate of women in the first quarter this year was by 5.6 percentage points higher than that of men (19.3% vs. 13.7%). However, in both sexes there is a decrease, when compared to the same period last year. In women the reduction was higher, as in the first quarter 2019 till the first quarter 2020, it was reduced by 4.7 percentage points (24% in the first quarter 2019), while in men it decreased by 1.7 percentage points (from 15.4% in the first quarter 2019).

Regarding the age structure of unemployment, in all age groups there is a decrease in the unemployment rate and its rate decreases as the age increases. The strongest decline occurred in people aged 15-19 years, where it reached 16.0 percentage points (from 50.2% in the first quarter of 2019 to 34.2% in the first quarter of 2020). Much smaller in percentage points was the drop in the unemployment rate of people belonging to the age category 20-24 years, where it stood at 5.2 p.p. (34.5% in the first quarter of this year from 39.7% in the corresponding quarter of 2019). The lowest unemployment rate occurred among those over the age of 65, which was reduced to 8.2% from 11.2% a year earlier, while the smallest drop in the unemployment rate is in the 46-64 age group, 2.1 percentage points (from 15.1% in the first quarter of 2019 to 13.0 in the first quarter of this year).

Relatively to the duration of unemployment, the proportion of the long-term unemployed among the total unemployed in the first quarter this year showed an increase of 5.6 percentage points compared to the corresponding quarter of 2019, rising to 70.5% from 64.9%. However, the number of long-term unemployed decreased by 63.7 thousand or 10.8%, reaching 525.3 thousand from 589.0 thousand.

Regarding the level of unemployment based on the level of education, it decreases as the level increases, while in all categories of education except those who did not go to school at all and those who attended only some primary school classes, it was restrained, during the first quarter of the current year. In detail, the biggest drop in the unemployment rate is found in people with a primary school diploma, where it stood at 4.5 percentage points (from 23.5% in the first quarter of 2019 to 19.0% in the same quarter this year). People with a doctorate or master's degree show the low unemployment rate and its lowest decrease, as it was one percentage point (from 7.9% to 6.9%), followed by people with a higher school degree, where the fall was 1.3 percentage points (from 13.1% to 11.8%). On the other hand, the highest rise in the unemployment rate occurred among those who attended some elementary school classes, reaching 11.2 percentage points (from 30.7% to 41.9%).

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Finally, people who did not go to school at all have the highest unemployment rate which increased from 54.4% to 56.3%.

In relation to the regional dimension of unemployment, in ten regions of the country the unemployment rate decreased in the first quarter of 2020 compared to the first quarter of 2019 and in the rest three regions, it increased. More specifically, the lowest unemployment rate is in the regions of Peloponnese (10.8% from 13.4%), and the Ionian Islands (13.6% from 20.1%), while the highest in Western Greece (20.4% from 25.6%) and Western Macedonia (19.4% from 27.1%). The largest decrease in the unemployment rate occurred in the South Aegean region, where it stood at 12.9 percentage points (from 26.9% in the first quarter of 2019 to 14.0% in the first quarter of 2020), while the largest increase in two regions, Epirus (+0.9 percentage points, from 16.6% to 17.5%) and Central Greece (from 18.4% to 19.3%). Finally, in Attica, the largest region of the country, the unemployment rate was reduced by 4.1 percentage points and stood at 14.3% in the first quarter this year, from 18.4% in the same quarter last year.

In terms of employment at the level of key sectors, the Primary sector shows a significant decrease, as the number of employees in it was reduced from 466.1 thousand in the first quarter of 2019 to 424.2 thousand in the first quarter of 2020 (-41.9 thousand people or less 9.0%).In the other two sectors, the Secondary and the Tertiary, employment increased by 7.4 thousand (from 580.4 thousand to 587.8 thousand) and 73.1 thousand (from 2,767.6 thousand to 2,840.7 thousand) employed, respectively.

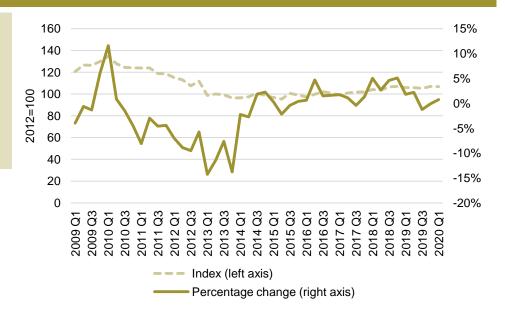
In the sole sectors of economic activity, in ten of them there is a decrease in employment, in ten an increase and in one it was unchanged. The biggest reduction in employment in the first quarter of 2020 compared to the same period in 2019 is located in the primary sector (-41.9 thousand people) and in the sector of Public Administration-Defense (-16.2 thousand employees, from 348.6 thousand to 332.4 thousand). On the other hand, the largest increase in employment occurred in the most populous sector of the Greek economy, Wholesale-Retail, where the number of employees increased from 676.4 thousand to 676.4 thousand at 706.3 thousand (up by 29.9 thousand). This is followed by the Transport and Storage sector, where job growth reached 21.4 thousand (from 195.8 thousand to 217.2). The increase in employment in Manufacturing was significant, by 12.2 thousand employees (from 363.5 thousand to 379.9 thousand). In the Tourism sector, the first quarter of the current year the number of employees amounted to 329.0 thousand from 322.1 thousand in the same quarter of 2019, ie it increased by 6.9 thousand. Finally, in the sectors of Human Health-Social Welfare and Education Activities, employment increased by 16.2 thousand (from 245.1 thousand to 261.3 thousand) and 10.9 thousand (from 319.6 thousand) to 330.5 thousand) employed, respectively.

Figure 3.14

Evolution of seasonally adjusted wage cost index (values and percentage change) (2006-2019)



Increase of the seasonally adjusted wage cost index by 0.8% in the first quarter of 2020 from the first quarter of 2019, the largest of last year



Source: ELSTAT

In conclusion, from the employment data at sectoral level, it appears that its increase in the first quarter of 2020 came mainly from:

- The increase of employment in the Wholesale-Retail trade sector (+29.9 thousand employees), in relation to the increase of the seasonally adjusted turnover index in Retail trade by 3.3% and despite the fall of the seasonally adjusted turnover index in Wholesale by 3.7%
- The rise in the Transport-Storage sector (+21.4 thousand employees)
- The increase in the sector of Human Health and Social Welfare Activities (+16.2 thousand employees), probably due to emergencies due to the pandemic of the new coronavirus

The increase in the Manufacturing sector (+12.2 thousand employees), despite the fall of the Turnover Index in Industry by 2.2% and despite the decline in employment in the Primary sector (-41.9 thousand employees) and in the sector Public Administration-Defense (-16.2 thousand employees).

As for the trend of the seasonally adjusted wage cost index for the Greek economy as a whole, the first quarter of 2020 showed a marginal increase of 0.8% compared to the first quarter of 2019 (106.0 points) after two consecutive quarters of decline.

Table 3.12

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
2008	9,435.1	53.0	4,610.5	92,3	387.9	7,8
2009	9,431.1	53.4	4,556.0	90,4	484.7	9,6
2010	9,399.4	53.5	4,389.8	87,3	639.4	12,7
2011	9,372.9	52.7	4,054.4	82,2	881.8	17,9
2012	9,344.8	52.3	3,695.0	75,6	1,195.1	24,4
2013	9,309.5	52.1	3,513.2	72,5	1,330.4	27,5
2014	9,282.1	51.8	3,536.3	73,5	1,274.4	26,5
2015	9,246.6	52.0	3,610.7	75,1	1,197.0	24,9
Q1 2016	9,226.3	52.0	3,606.3	75,1	1,195.1	24,9
Q2 2016	9,217.2	52.2	3,702.6	76,9	1,112.1	23,1
Q3 2016	9,208.3	52.4	3,736.7	77,4	1,092.6	22,6

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Q4 2016	9,199.4	51.9	3,648.6	76,4	1,124.0	23,6
2016	9,212.8	52.1	3,673.6	76,5	1,130.9	23,5
Q1 2017	9,190.7	51.9	3,659.3	76,7	1,114.7	23,3
Q2 2017	9,181.4	52.4	3,791.4	78,9	1,016.6	21,1
Q3 2017	9,172.3	52.3	3,823.7	79,8	970.1	20,2
Q4 2017	9,163.3	51.8	3,736.3	78,8	1,006.8	21,2
2017	9,176.9	52.1	3,752.7	78,6	1,027.1	21,5
Q1 2018	9,154.0	51.6	3,723.8	78,8	1,001.2	21,2
Q2 2018	9,144.7	52.1	3,860.4	81,0	906.0	19,0
Q3 2018	9,135.5	52.2	3,894.2	81,7	871.8	18,3
Q4 2018	9,126.4	51.7	3,833.7	81,3	881.1	18,7
2018	9,140.2	51.9	3,828.0	80,7	915.0	19,3
Q1 2019	9,117.3	51.8	3,814.0	80,8	907.1	19,2
Q2 2019	9,108.0	52.3	3,956.4	83,1	805.0	16,9
Q3 2019	9,089.9	52.2	3,971.9	83,6	777.0	16,4
Q4 2019	9,089.9	51.6	3,901.8	83,2	786.4	16,8
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

Source: ELSTAT - Labor Force Survey

Medium-term outlook

The satisfactory picture of the first quarter regarding unemployment reflects the fact that in the last quarter of last year and in the first two months of this year, some parts of the economic activity, such as Retail, Wholesale, Construction and Transport were strengthening. Moreover, as already mentioned, the fall in unemployment in March is due, according to ELSTAT, to the fact that a significant part of the unemployed, about 10% of them, headed towards the economically inactive population, as due to the pandemic, they stated that they were not readily available to work.

Despite the significant decline in unemployment in March due to the developments reported and in contrast to the rapid developments due to the pandemic of the new coronavirus, from the second quarter its strong negative effects on employment are expected to be felt. These will be caused mainly by public health protection measures, domestically and internationally, and more broadly, by the uncertainty created by the health crisis.

As for the effects of domestic pandemic interventions, they will come from the suspension of companies, which are mostly active in providing services to final consumers, but also the strong restrictions and bans on international passenger transport until the end of June, as part of pandemic protection measures, have put intense pressures on employment. These are expected to manifest in sectors that have made a significant contribution to the decline of unemployment in recent years, namely in Wholesale - Retail, Catering, Professional - Technical activities, Accommodation and Transport. On the other hand, the gradual lifting of internal restrictions from the beginning of May, which was effectively completed on June 15, will mitigate these effects.

The emergency measures taken by the government in order to support employment will have a deterrent effect on the employment pressures from the above measures. These include the suspension of the employment contract of the employees, the possibility of remote employment of the employees, the possibility of rotation of work, the introduction of the "COOPERATION / SYNERGASIA" program which is a mechanism for strengthening employment in the form of financial support for short-term work, the introduction special purpose compensation for employees, freelancers, the self-employed and owners of sole proprietorships, etc. (see specific box 3.3).

The fact that restrictions on international passenger travel have been significantly lifted since 1 July has significantly reduced the tourist season, which will have a deterrent effect on many businesses operating in the tourism sector this year. In addition, due to the strong impact of the pandemic in countries with a high share of tourism revenues, which allow travelers (e.g. Italy, France, the United



Kingdom), a decline in per capita expenditure is expected, which will further reduce seasonal recruitments.

Strong impact of protection measures abroad will come from the weakening of demand from businesses and households for exported Greek products, which will be reflected primarily in the employment of the export manufacturing sectors of the Greek economy, as well as of the primary one. The latest export data for the first four months of this year show that the highest export losses occurred in the Middle East-North Africa countries (mainly Lebanon, Saudi Arabia, Egypt, Israel), where exports of Greek products declined by 39% or €692.1 million, as well as in other European countries (mainly Turkey, North Macedonia and Albania), to which exports to which exports were reduced by 12.4% or by €242.7 million. Clearly, the duration and intensity of these losses will depend on the evolution of the pandemic in the major trading partners.

Uncertainty about the completion of the life-cycle of the pandemic, domestically, pan-European and in the rest of the world, has a deterrent effect on the implementation of investment plans, and therefore on the jobs created in their construction. Exceptions will be projects in previously completed concessions - privatizations (Greek, regional airports).

On the other hand, the current unfavourable situation has created specific needs for the provision of services, e.g. health, social care, the creation of internet services, land courier services, which, despite the general decline in economic activity, will maintain or even increase jobs in the respective sectors.. Indicatively, it is to notice the 5.1 thousand recruitments of health personnel in the public sector are mentioned. More broadly, the public sector will offer for another year temporary employment through OAED programs, with the most important program being of public character in the local self-government, with 36.5 thousand beneficiaries for eight months of employment, jobs which will exist throughout the second half. Recently, a new program was approved to subsidize companies, institutions and public sector organizations for the employment of 10,000 long-term unemployed aged 55-67. At the same time, the approval of an employer assistance program is expected for the recruitment of 2,000 people who have mobility problems, are addicted to addictive substances, etc.

Finally, due to particularly unfavorable labor market conditions due to the health crisis, a significant proportion of those who have lost or will lose their jobs may be discouraged from seeking work, at least in the short term, as was the case in March.

However, the final impact of these factors on employment still cannot be safely predicted as a new wave of coronavirus outbreaks domestically and/or internationally is likely. This will further burden the economic environment and therefore also unemployment. Taking all of the above into account, the IOBE estimates that unemployment on an annual basis in 2020 will range between 19.3% and 20.5%, i.e. from 2.0 to 3.2 percentage points higher than in 2019.

According to the most recent IOBE Business and Consumer Survey data, in the April-June 2020 quarter compared to the last quarter of the previous year, there is a deterioration in the forecasts for the short-term employment prospects in all sectors except Retail Trade. Compared to the same period last year, there was a marginal increase in Retail trade, a slight decline in Industry, while in Construction and Services the decline was more pronounced. In more detail:

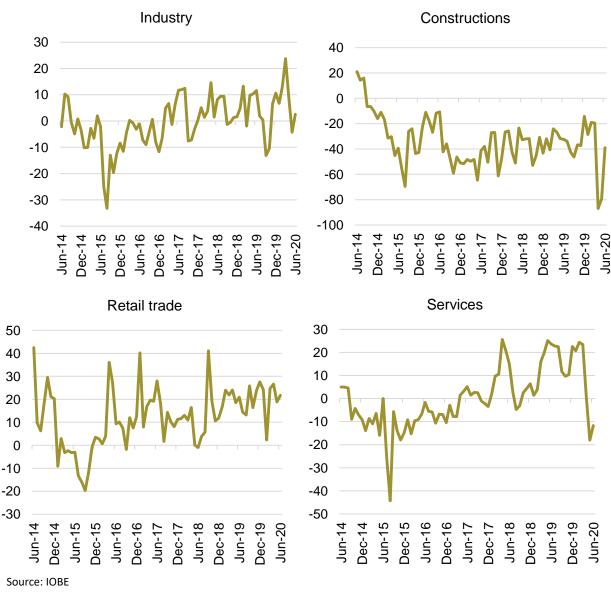
In Industry, the average balance of +14.5 points of the previous quarter decreased by 12 points in the second quarter of 2020. Compared to the corresponding performance last year, the average quarterly index is lower by about 9 points. In the examined quarter, the percentage of industrial enterprises that predicts a drop in their employment in the near future is at 13%, while it decreases to 15% (from 23%) the percentage of those who expect an increase in the number of their jobs. However, the vast majority of companies in the sector (72% out of 68%) predict stability in terms of employment.

In Construction, the relevant forecasts indicate a sharp deterioration in the sector's already low employment balance, which stood at -68 points (from -22 points), at a much lower level compared to the same period in 2019 (-30 points). In the examined quarter, 72% (from 36%) of the companies in the sector provide fewer jobs, while the percentage of the respondents who expect an increase in



employment stands at 4% (from 14%). At the level of individual sectors, the significant deterioration of the relevant index in Public Works (-71 from -21 units) is accompanied by a corresponding decline of the index in Private Construction (-65 from -24 units).

Figure 3.15
Employment forecasts (balance of answers: difference between positive and negative answers)



In the second quarter, a deterioration is recorded in the forecasts for the short-term employment prospects in all sectors except Retail Trade, compared to the first quarter.

The retail employment forecast index strengthened softly in the second quarter of the year compared to the previous quarter, to +22 points (from +17). In addition, this performance is marginally higher, by 1 point, than it was last year. Only 4% (from 3%) of the companies in the sector expect a reduction in jobs, while 26% (from 20%) predict an increase in employment, with those who expect stability to move to 70% (from 79%) of the total. In the sub-sectors examined, there is an increase in the relevant balance in all sectors, except for the sector of Household equipment and Vehicles and Spare Parts, in which there is a significant decrease.



In the Services, the relevant forecasts for the examined quarter indicate a significant decrease compared to the previous quarter, as well as for the corresponding period last year. Thus, the relative balance of +23 points of the previous quarter, was reduced during the examined quarter to -10 points, while in relation to the corresponding period of 2019 it decreased by 33 points. Of the companies in the sector, 21% (from 3% in the previous quarter) expect employment to decline, with the proportion of those predicting growth rising to 11% (from 26% in the previous quarter). At sectoral level, the trend is downward in all the sectors concerned.

Box 3.3

Policy interventions to support jobs from the impact of COVID-19

The emergence of the new COVID-19 coronavirus in Greece led to a series of measures to protect public health (suspension of certain activities, international passenger transport, restrictions on the movement of citizens). In addition to these measures, economic interventions were carried out in order to support enterprises, self-employed persons and workers who were financially hit by the above measures. Some of these were employment support interventions, involving both businesses and employees The purpose of the framework is to summarize the most important measures with this content. The vast majority of these measures were initially enacted through Legislative Acts which were subsequently ratified by passing laws.

Arranging the way employees are employed and working time by companies:

Starting from policy interventions concerning private sector employers affected by COVID-19 crown protection measures, have been given the opportunity to suspend the employment contracts of part or all of their staff in order to adapt their operational needs to the subsequent unfavorable environment. Companies that use this regulation cannot terminate the employment contracts for all their staff, while after the termination of the employment contracts are obliged to maintain the same number of jobs for a period equal to that of the suspension (Law 4683/2020). Especially for fixed-term employment contracts, after the end of the suspension period, the employment contract is extended for the agreed time remaining, when the employer-company reopens (Decision No. 12998/232). Also, the companies were given the opportunity, until 31.07.2020 (decision no. 26308/768) to determine that the work provided by their employees will be carried out with the system of distance working (Law 4682/2020).

In addition, employers who have suspended the employment contracts of part or all of their employees may permanently withdraw the suspension of employment contracts for at least 40% of the employees whose contracts are suspended and if the suspension has been kept for at least fifteen days. The temporary revocation of the suspension of employment contracts for emergencies was also allowed, which upon its expiration continues until the completion of its full period. Employers-companies that have suspended the employment contracts of part or all of their employees, can extend it up to 60% of the contracts that have been suspended, for a maximum period of 30 days and in any case not beyond 30.06 .2020 (Law 4690/2020). However, they undertake not to reduce staff and after the expiration of the extension of the suspension of employment contracts of these employees to maintain the same number of jobs and with the same type of employment contract for 45 days (Law 4690/2020).

In the case of a group of companies, the possibility is provided - for as long as they belong to the KAD that have been determined to be affected by the coronavirus pandemic - of transfer of staff between its companies, by mutual agreement, with the obligation to retain the same number of employees before the transfer (Law 4683/2020).



In addition, compagnies which have exhausted the legally provided overtime ceilings for their employees have been given the opportunity to employ them overtime without a relevant approval decision of the Minister of Labor and Social Affairs, provided that there is still an immediate risk of dispersal of the coronavirus, the lack of which is confirmed by a decision of the Minister of Health. Overtime work may not exceed the maximum daily limits provided by law, and for a period of up to six months (Law 4682/2020). Finally, until 15.06.2020 the obligation of the employer to register in the Information System "ERGANI", any change or modification of the hours or organization of the working time for each employee, as well as his legally overtime work, except in aggregate (Law 4682/2020).

Financial support-facilitation of companies for employment:

In order to provide financial support to undertakings affected by the pandemic, an extension was granted to the deadlines for the payment of insurance contributions, instalments of arrangements or facilities of partial payment of insurance contributions for their employed employees (Law 4682/2020), while the collection of overdue debts has been suspended. In both cases, the extension of the payment deadline is not charged with interest or surcharges.

Recently, for the period from 15.06.2020 to 15.10.2020, the "COOPERATION / SYNERGASIA" program was introduced, in the framework of the European Initiative for the Reduction of Unemployment in an Emergency (SURE). Private sector employers included in the mechanism may reduce weekly working time by up to 50% for either part or all of their employees, but this reduction does not result in a conversion of the workers' employment contract for as long as the companies use the mechanism. Employees of the companies-employers that are part of the program, are paid financial support for short-term work that amounts to 60% of the net salary of their employees which corresponds to the time during which they do not work. Employers' insurance contributions are covered by the employer company (Law 4690/2020), with the exception of the period from 15.06.2020 to 31.07.2020, in which they are covered by 60% from the State Budget. In addition, undertakings making use of the mechanism are obliged not to terminate the employment contracts of its employees (Law 4690/2020).

Finally, companies whose activity was suspended, were given the opportunity to pay the Easter holiday allowance at a time later than specified and in any case not beyond 30.06.2020 (Law 4684/2020).

Financial support - facilitation of freelancers, self-employed, sole proprietors for labor issues:

Especially for the self-employed, the self-employed and the sole proprietors, an extraordinary financial support intervention (special purpose compensation) was carried out. The special purpose compensation is tax free, inalienable and secureδ and its amount ranges between €300 and €534 (Decision No. GDOU 134). As regards the beneficiaries of scientists-freelancers, they received one-off financial assistance-special-purpose compensation amounting to €600 (Decision No 16604/3224). The financial aid is tax-free, inalienable; also it is not subject to any withholding, fee or contribution, is not bound and offset by certified debts and is not calculated at the income limits for the payment of any social or welfare benefits.

At the same time, it was possible to pay insurance contributions for the period February-May in four equal instalments, while the collection of arrears to social security institutions and instalments or facilities for partial payment of insurance contributions was suspended (Law 4683/2020, Law 4684/2020 and Law 4690/2020). In addition, freelancers and self-employed persons are granted a 25% discount on insurance contributions for the period of employment in February, March, April, May of the current year, provided that they pay them on time (Law 4684/2020 and Law 4690/2020).

Arranging employment and financial support for private sector employees:

For the employees of the private sector who are parents, the possibility of obtaining a special purpose permit was legislated (Law 4682/2020), the expiration of which is determined by the expiration of the operation of kindergartens (26.06.2020), primary schools (26.06.2020) and gymnasiums. (12.06.2020). In the case of parents who have children who are enrolled in nurseries and nurseries, the possibility of granting the special purpose permit reaches until 31.07.2020, under certain conditions. In addition, they were given the opportunity, until the end of the 2019-2020 school year, at their request and in agreement



with the employer, to work with a reduction in their daily contractual hours of up to 25%, without a corresponding reduction in their earnings. However, they are obliged to work these hours, working overtime, on other working days and at a time to be agreed between them and the company they work for, without additional overtime and overtime pay (Law 4690/2020).

With regard to the financial support of employees, "special purpose allowance" was introduced, such as for the self-employed and the freelancers. Its beneficiaries are the employees in companies whose operation has been temporarily suspended, but also those whose employment contract was terminated from 01.03.2020 to 20.03.2020, either by termination by the employer or by voluntary resignation by themselves (Law 4683/2020). In any case, it is irrepressible, tax-free and is not set off against any debt. The special-purpose allowance was initially set at €800 for a period of 45 calendar days, i.e. from 15 March to 30 April (Decision No 12998/232). Then, it was extended for May, with its amount being set at €534 (Decision no. 1788888/346). Also, the employees of companies-employers whose business activity has been banned, whose contracts are suspended, are provided full insurance coverage for a period of 45 days (15.03.2020-30.04.2020), which is covered by the state budget (Decision No 12998/232).

In addition, the payment of the regular unemployment subsidy, the long-term unemployed allowance, the unemployment aid independently and independently employed persons of the EFKA for those beneficiaries who expired or would expire in the first four months of 2020 (Law 4684/2020) has been extended for two months from their expiry.

Finally, the granting of a one-time financial aid of €400 was approved by OAED to each non-subsidized long-term unemployed person who acquired the status of long-term unemployed from 01.04.2019 onwards (Decision no. 15687/282). Finally, the regulatory conditions of the Collective Labor Agreements and Arbitration Decisions whose three-month extension expired from 29.02.2020 to 30.04.2020 (Law 4690/2020) were extended until 30.06.2020.

It follows from the above that a number of measures have been taken to support employment from the effects of the health crisis, both on the part of businesses and self-employed persons, as well as on the part of workers, as well as the unemployed. The effectiveness − especially of economic − measures will depend primarily on the number of enterprises that will benefit from them but also on how they manage the resources and arrangements available for their benefit. Indicatively, it is mentioned that, based on the data available so far, in the two months of March-April, the employment contracts of about 870 thousand employees were suspended for some time, with the budget expenditure for special purpose compensations reaching € 466 million. According to data from the ERGANI system, 48.6 thousand employees were recruited in April and 99.3 thousand in May, numbers 82.8% and 69.3% respectively lower than in the same month of 2019. However, employment support interventions significantly reduced the redundancies of employees, to 41.3 thousand in April (-75.6%) and 66.3 thousand in May (-69.6%). Nevertheless, the overall balance was strongly negative, at 103.7 thousand and 72.3 thousand jobs respectively.



3.5 Consumer and Producer Prices

- Deflation of 0.3% in the first five months of 2020, from inflation of 0.6% in the corresponding period of 2019
- Negative impact on prices from indirect taxes, and from energy goods
- Rate of change of the CPI with fixed taxes and without energy 1.9% in the first five months of 2020, from 0.8% a year ago, which reflects the positive effect of domestic demand on prices.
- Following the COVID-19 pandemic and the restrictive measures for the protection of public health, in Greece and internationally, it is predicted for the whole of 2020 a decline of the domestic CPI at least in the area of 1.6-1.8%. It will come mainly from falling energy prices and a negative impact of domestic demand.
- If the health crisis recovers domestically later this year, deflation in the region of 3.0%

Recent Developments

In the period January - May 2020, the price trend is reversed compared to last year, with the average rate of change of the National Consumer Price Index (NCPI) being in the negative price range, for the first time after three consecutive years of growth. Specifically, the national CPI weakened in the first five months of this year compared to the corresponding period of 2019 by 0.3%, from an increase of 0.6% last year compared to 2018. The Harmonized Consumer Price Index (HCPI) was unchanged in the initial five months, from an increase of 0.8% in the same period last year (Chart 3.16). In May this year, the domestic CPI fell by 1.1% compared to a year earlier, when it recorded an increase of 0.2% (Chart 3.17).



Figure 3.16

Annual change of domestic CPI and Harmonized CPI in Greece (January - May)

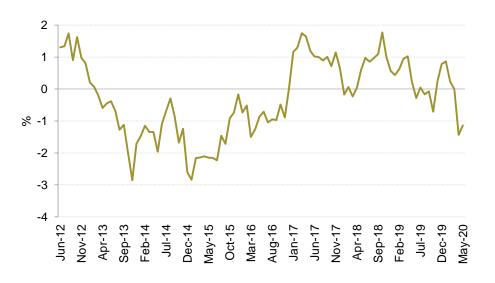


GCPI decline in the first five months of 2020 compared to the corresponding period a year ago, by 0.3%

Source: ELSTAT, processing IOBE

Figure 3.17

Monthly evolution of CPI in Greece (annual percentage changes)



Decline of the domestic CPI in May 2020 (-1.1%) from + 0.2% in the corresponding month of 2019

Source: ELSTAT, processing IOBE

Examining the effects of the General CPI components on its trend, its marginal decline in January-May is due to energy goods and indirect taxes, as the change in the general index with fixed taxes and without energy goods amounted to 1.9%, much higher than the total change in the CPI (Chart 3.18). Therefore, domestic demand has had a strengthening effect on prices. The effect of taxation on consumer price change was negative over the same period. Specifically, the effect of indirect taxes on the annual change of the HICP in the first five months of this year was -1.3 percentage points, from marginally negative in the corresponding period of the previous year (-0.1 percentage points, Chart 3.18).

Regarding the developments in the prices of energy goods, the average international price of oil in January-May this year fell sharply compared to the same period last year. In particular, the average



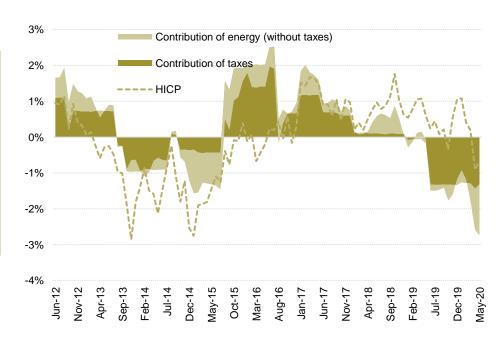
price of Brent crude oil at this period stood at \$40.3/barrel, from \$66.4/barrel in the corresponding period last year, recording a decline of 39.3%²⁹. The simultaneous weakening of the average exchange rate of the euro against the dollar compared to a year ago, by 2.8%, to 1.09 against 1.13, slightly mitigated the decrease in the price of oil in euros. Subsequently, the median price of oil in euros amounted to €36.7/barrel, 37.5% lower than in the first five months of 2019. The sharp decline in oil prices, which is a key component of energy costs, also explains the negative average effect of energy prices on the rate of price change domestically in the first five months of this year, by 0.5% (Chart 3.18).

The price level in Greece based on the HICP in January-May this year was unchanged, a change less than the Eurozone average (0.7%), a development that ranks the country in the penultimate position among the Eurozone countries, higher only than Cyprus (-0.2%). At slightly higher levels than Greece, harmonised inflation moved in Italy, Spain and Portugal (0.1% in all countries). Domestic demand seems to have been the main factor in the rise in prices in the Eurozone, as the price index with fixed taxes and without energy goods increased by 1.4% compared to the corresponding period of 2019, when it was 0.9% (Figure 3.19).

Figure 3.18

Annual rate of change of HCPI in Greece and effect of energy prices and changes in taxation





Source: Eurostat, processing IOBE

Looking at trends in the product and service categories included in the General Price Index, the highest rise in the period January - May this year was recorded by Clothing - footwear, by 2.9%, following a 1.5% decline in the same period last year. Several smaller positive changes were apparent in the categories: Health and Hotels, cafes, restaurants, 1.5% and 0.6% respectively, versus a milder increase by 0.8% and the same rate change respectively, in the corresponding period of 2019. Growth in Education and Nutrition, 0.5% and 0.4%, respectively, moved slightly lower, from a 0.8% decline and a 1.4% rise in the first five months of 2019. Prices of Alcoholic Beverages - Tobacco showed a marginally upward trend, with an increase of 0.1% instead of 1.1% a year ago. On the other hand, the largest decline in prices in the five months this year occurred in Housing, by 2.5%, instead of a rise in prices by 0.9% last year. Price weakening trends are recorded in Transport and Communications, by

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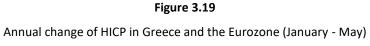
Average period prices based on Europe Brent Spot Price. Source: EIA, US Energy Information Administration https://www.eia.gov/dnav/pet/pet pri spt s1 d.htm

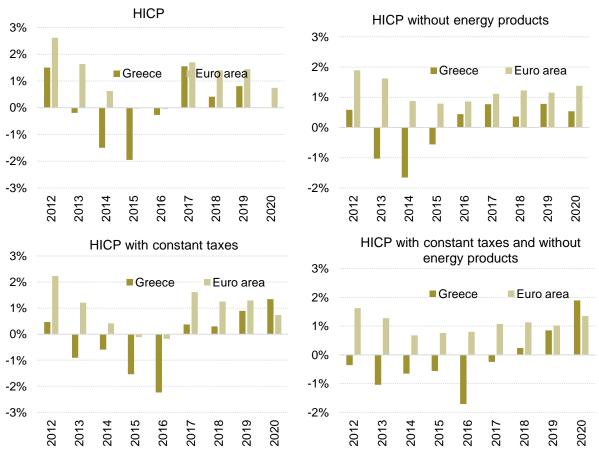


1.2% in both, from an increase of 1.2% and 5.0% respectively, a year ago, while the price weakening was similar in Leisure, following a decline 1 , 6% in the first five months of 2019. The mildest price decline occurred in Durable Goods and Other Goods, -1.0% and -0.8% respectively, following a decrease of 1.7% and 0.9% a year earlier.

In terms of price trends on the production side, in the period January - April 2020 the General Producer Price Index (GCPI), domestic and foreign market as a whole, decreased by 5.3% compared to its level in the same period a year earlier (Figure 3.20). In detail, the energy-free GCPI in the first four months of 2020 recorded a weakening of 0.2%, compared with the same increase in that period in 2019. Regarding the trends in the prices of industrial products, the largest increase was recorded by Electricity - natural gas, with 5.4%, followed by an increase of 6.9% a year ago, while at a lower level of positive change followed the Wood Products, with 3.6%, from a slightly milder strengthening by 0.4% in the corresponding period of 2019. On the other hand, the trend in producer prices in coke and oil refining products was sharply declining, compared to a significant increase in 2019 (-25.9% from 7.1%). Milder but significant was the weakening in Mines and Quarries, 8.1%, compared with a 2.0% increase on the previous year. A decrease in producer prices was also recorded in Minerals, by 2.0%, as well as in Pharmaceuticals, by 1.5%, followed by a decrease of 1.4% and 1.7% respectively, in the first quarter of 2019. Producer prices also decreased for Basic Metals, by 1.8%, and Electrical Equipment (-1.3%), compared to an increase of 1.6% and 6.0%, respectively, a year earlier.







Domestic price increase in the first five months of 2020 exclusively from increased demand, which had an increasing effect of 1.9%, from 0.8% the corresponding period of the previous year

Source: Eurostat, processing IOBE

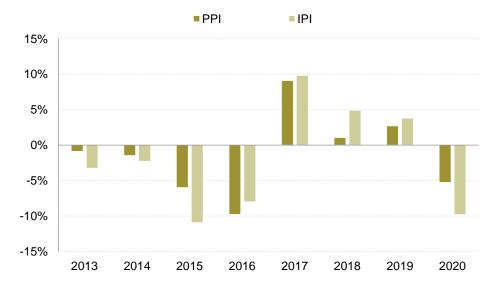
Regarding the developments in the General Import Price Index (GIP), the period January - April 2020 decreased by 9.8%, compared to an increase in the same period of the previous year by 3.8%. The decline of the relevant index in the Eurozone was milder (-4.3%), compared to an increase of 1.6% in the first four months of 2019. The sharp decline in import prices ranks Greece in the first place in terms of lower import prices among ten Eurozone countries for which data are available up today; next ranks Lithuania in decline in (-7.2%). It is worth noting that in all available Eurozone countries there is a decline in import prices in the first four months of 2020 compared to the corresponding period of 2019, a trend which largely reflects the restraining effect of the health crisis on trade.

Among the sub-categories of imported products, the largest decrease in the first quarter of 2020 was in Petroleum Refining Products, by 24.9%, compared with a strengthening of 13.4% in the corresponding period of 2019. Significantly lower was the decline in Base Metals, 5.3%, from stability in the same period of 2019, but also in Electricity and Natural Gas, 4.4% from a sharp rise of 16.1% in the first quarter of last year. Milder was the weakening of prices in Paper Products, by 3.1% and Tobacco Products, by 1.9%, from a rise of 2.2% and 2.3%, respectively in the first quarter of 2019. On the other hand, a slight increase in prices in the first four months of 2020 was recorded in Furniture, by 1.7% and in Food, by 1.3%, followed by a marginal increase of 0.6% and 0.2% respectively, a year earlier.

Figure 3.20



Annual change of GPPI and GIPI in Greece (January - April)



Large decline in import prices (-9.8%), mainly due to the negative impact of energy prices. Reduction of producer prices in the first four months of 2020 (-5.3%)

Source: ELSTAT, processing IOBE

Medium-term outlook

An examination of trends in the main components of the domestic Consumer Price Index in the first five months of 2020 showed that its marginal retreat is the result of offsetting the tonic effect of domestic demand from the negative impact of both energy goods and indirect taxes. For the rest of 2020, the price trend will depend mainly on the intensity of the effects of the health crisis on the prices of energy goods and secondarily on the new indirect tax measures and whether they will offset domestic demand, the effect will remain positive. After all, developments in energy prices and indirect taxes will have a secondary, boosting effect on prices, through domestic demand.

Analytically, regarding the expected effect of indirect taxes on the formation of GCPI in the rest of the current year, the new, temporary measures of indirect taxes decrease from 1 June to 31 October (reduction of VAT on all means of transport, in tourist packages, in cinemas, in durable goods and in non-alcoholic beverages (coffee, soft drinks, etc.)) are expected to exert anti-inflationary pressures on prices. On the contrary, to a much lesser extent, the stimulation of domestic demand is expected to have an effect due to the reduction of indirect taxes. On the other hand, in May the decline in prices was completed due to the reductions in indirect taxes a year ago. Therefore, the negative effect of indirect taxation on prices is likely to continue in the second half, perhaps slightly weakened.

Clearly, the main effect on domestic demand will come from the effects of the new crowning pandemic on household disposable income, due to the suspension of enterprises and subsequent employment contracts in them, but also the reduction in employment from other restrictive measures, e.g. in international tourism domestically, as well as in the operation of enterprises internationally, which will reduce demand for Greek exports. General uncertainty due to pandemic also weakens consumer mood. On the other hand, the relatively rapid lifting of restrictive measures to protect public health, without any subsequent outbreak of the pandemic, boosts public expectations and revives private consumption. From June 15, all hotel units in the country were allowed to operate, while from July 1, international arrivals were allowed at regional airports, with restrictions in the countries of origin of travelers, developments that through tourism are also expected to have a positive impact on consumer demand. The intensity of all these effects will depend on the development of the health crisis, i.e. whether it will remain weakened enough, whether it will retreat further or whether it will recover. Obviously in the latter case domestic demand will be hit harder. In the past, a decline in domestic consumer demand such as the one in the baseline forecast scenario of this report, in the region of 7.0%, was accompanied by a negative impact of demand on prices by one percentage point of the Consumer Price Index.



As for developments in energy costs, it is recalled that in March Russia announced that it did not intend to extend the limit on daily oil production after April 1 under the relevant OPEC + agreement. In response, OPEC increased oil production, leading to a "price war" between Saudi Arabia and Russia. Failure to reach an agreement resulted in an oversupply of oil, which had a negative effect on the price of oil. The suspension of many industries worldwide and restrictive measures due to the health crisis, especially those related to travel, have put intense pressure on global oil demand.

On the one hand due to the large supply, on the other hand due to the very limited demand, the average international oil price was temporarily in a negative price range ³⁰. Although on April 12, 2020, OPEC and its partner countries, together with Russia agreed to gradually reduce production by April 2022³¹, in order to limit the fall in prices, the price of Brent oil in April 2020 stood at just \$18.4/barrel³², weakening by 74.2% compared to the corresponding month of the previous year. Then, the average price of Brent oil in May 2020 touched \$29.4/barrel and was 58.8% lower than in the corresponding month of 2019 (\$71.3/barrel). Therefore, this restriction on oil supply does not appear to have a price-enhancing effects.

On the oil demand side, the particularly high downturn in economic activity and uncertainty due to the COVID-19 pandemic, which was the main cause of the fall in international oil prices in the first half of this year, appear to be largely maintained in the rest of 2020. After all, a global recession is now expected to be greater than originally estimated. According to the IMF's recent forecasts, a fall in global GDP is expected to fall by 4.9% in 2020, 1.9 percentage points stronger than the previous forecast in April, due to the adverse effects of the COVID-19 pandemic, mainly in the first half of this year³³. After all, a new escalation of the health crisis in the autumn is possible. At the same time, the recovery of the global economy appears to be slower and more gradual than initially estimated, with its growth rate in 2021 estimated at 5.4%, 0.4 percentage points lower than last April. It was first predicted in June, that all economies would be in recession by 2020. There are, however, significant differences between economies in the extent and intensity of the pandemic impact, which is related to the effectiveness of measures to reduce the pandemic spread of COVID-19 but also with the structural characteristics of each economy. Widespread contraction in economic activity will continue to hamper oil demand, pushing down prices.

Uncertainty about the outlook for the world economy will continue to some extent when the pandemic is over, so the deal is not expected to have a strong uptrend in oil prices.

In this context of developments, during the first half and expected, many analysts ³⁴ have strongly revised their previous estimates of the average oil price this year, pointing out that this can be even priced at \$35/barrel. Taking into account the latest forecasts of international organizations³⁵, The average price of oil in 2020 is projected to reach \$38/barrel, recording an average decrease of 38% compared to the previous year. The same decline has occurred in the past, in 2009, during the global financial crisis, and in 2015, as noted in the previous IOBE report on the Greek economy. Subsequently, the examination in the same report of the effect of energy goods on the formation of the GCPI domestically in the years concerned showed that this was negative, in the region of one percentage point of the index.

On developments in the exchange rate of the euro against the dollar, may stood at 1.09 as well as the previous month, with the health crisis having escalated sharply in the US and the EU as negotiations on a multi-year investment support initiative are underway. Since the announcement of the EU Recovery Fund (Next Generation EU) and till the first ten days of June, the euro strengthened against

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³⁰ WTI's international price on April 20, 2020, stood at - \$37.0/barrel.

³¹ Reduction of production by 9.7 million barrels / day in the period May - June 2020. Then, from July to December 2020, reduction of production by 7.7 million barrels / day, while for the period from in January 2021 to April 2022 the reduction is projected to reach 5.8 million barrels / day.

Source: https://www.opec.org/opec_web/en/press_room/5891.htm

 $^{^{32}}$ International oil price hovered below \$ 20 / barrel for the first time since February 2002

³³ WEO Update, IMF, June 2020.

WEO Update, ΔΝΤ, Ιούνιος 2020 - European Central Bank, Macroeconomic projections, ECB, June 2020

³⁵ Short-Term Energy Outlook, US Energy Information Administration, April 2010



the dollar, from 1.089 to 1.138, a development which is seen as highlighting the importance of this intervention at EU level. Since then, the exchange rate has been slightly lower, at 1.125. More broadly, taking action to address the current developments, which in this period concern the coronavirus pandemic, seems to determine the dynamics of the Eurozone economy more than in previous years. If these fall short of the prevailing conditions, the credibility of the Eurozone economy will fall short of that of the US economy.

In this context, the enactment of the Recovery Fund strengthened the European Union's solvency concerning its capability in formulating policies for exiting the current crisis. At the same time, the reescalation of the health crisis in the US damaged the credibility of the health measures implemented there. If there is substantial progress in the formation of the Recovery Fund during the current half of the year and there is no recurrence of the pandemic of the new coronavirus in the EU, the euro/dollar exchange rate is expected to rise to the rest of 2020, in the range of 1.13-1.135. This trend will be temporarily halted during the US presidential election, when expectations for the new governance resulting from them will improve. Then the exchange rate will be higher than a year earlier, close to the range of 1.12-1.13 for the whole of the current year, resulting in a further decline in energy costs of oil. Its impact on the competitiveness of Eurozone products and services will be mild.

Taking into account the reported developments and expected trends, their estimated impacts on changes in key components of the GCPI, but also those in periods with similar developments in the past, as well as the fact that in the first five months of 2020 anti-inflation was 0.3%, that the General Consumer Price Index this year will fall between 1.6 -1.8%. If the health crisis recovers later this year, domestically and internationally, further squeezing oil demand and prices, deflation will be nearly 3.0%.

Important information on price developments over the next period also provides the results of the IOBE's monthly business and consumer surveys, which are precursors to price development on the supply side.

Trends in price change forecasts are exclusively downward in the second quarter of 2020 compared to the first quarter, with the relative balance falling slightly in Industry and Retail and significantly in Construction and Services. Compared to the corresponding quarter last year, the expectations for the development of prices also record a negative change in all sectors, with a stronger one in Construction. In more detail:

In Industry, price forecasts for the second quarter of the year were slightly lower than in the previous quarter. Specifically, the index decreased by 11 points in the quarter considered and stood at -9 points, while it moved 9 points lower than the corresponding quarter last year. Of the companies in the sector, 13% consistently expect a fall in prices in the short term, while the percentage of those who predict their rise is around 4% (from 8%), with the remaining 83% (from 85%) expecting stability.

In Retail Trade, the balance of +11 points in the prices of companies in the sector during the previous quarter decreased by 19 points, while at the same time it was 9 points lower compared to the corresponding period of 2019. Of the companies in the sector, 12% (from 4%) expect a fall in prices in the short term, while the percentage of those who predict their rise significantly decreases to 5% (from 15%), with the remaining 83% (from 81%) expecting stability. In the retail sectors, changes in price forecasts in the second quarter of 2020 compared to the previous quarter were marginally declining in Household appliances and Department Stores, slightly declining in Food - Beverages - Tobacco and more pronounced in Textiles - Clothing - Footwear and Vehicles - Spare parts.

The average forecast of the change in prices in Services in the examined quarter was significantly reduced compared to the previous quarter and stood at -23 (from +4) points, while moving to a much lower level compared to its corresponding average performance last year (+2 units). In the current quarter, 27% (from only 5%) of companies in the sector expect price reductions and 4% (from 9%) increase. In the sub-sectors examined, the relevant index decreased sharply in Hotels, Restaurants,

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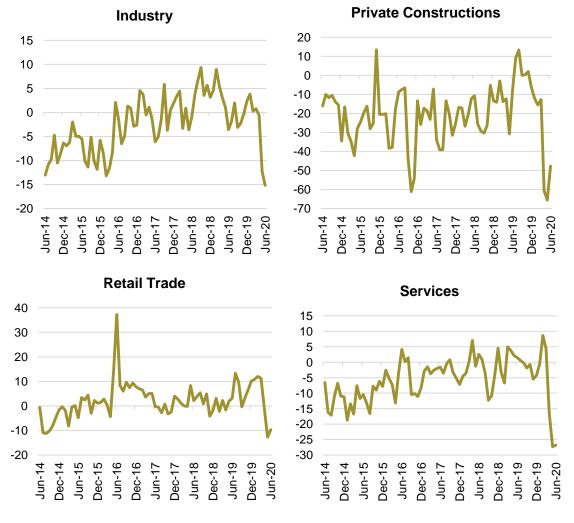
Travel Agencies, Land Transport and Various Business Activities, and more mildly in Financial Intermediaries and Informatics.

Finally, in the sector of Private Construction, the negative balance of -13 points of the previous quarter strengthened sharply to -58 points, having at the same time changed sharply downwards compared to the corresponding level of the previous year (-17 points). In addition, 58% (from just 14%) of companies in the sector predict a decline in industry prices, while the percentage of those expecting an increase is reduced by one unit and is balanced by 41% (from 85%) to predict price stability.



Figure 3.21
Forecasts for price developments in the next quarter

(balance of answers = difference between positive and negative answers)



Source: IOBE

The trends in the forecasts of price changes are exclusively declining in the second quarter of the year compared to the immediately preceding one, with the balance slightly decreasing in Industry and Retail and significantly in Construction and Services.



3.6 Balance of payments

- The current account deficit narrowed in the four months of 2020, with a larger drop in imports compared to exports
- Improvement in the Balances of Goods and Income, while the surplus in the balance of Services deteriorated

Current Account

In the first four months of 2020, the Current Account Balance Sheet (ITS) had a deficit of € 4.7 billion, compared to a deficit of € 5.1 billion in the corresponding period of 2019. The deficit narrowed due to the decline in the Balance of Goods and Balance Sheets and Secondary Income, while on the contrary, the surplus in the Services balance shrank.

In the individual items, the deficit in the Balance of Goods amounted to €6.9 billion, reduced by €859.7 million since last year, due to the stronger fall in imports compared to exports. Exports amounted to €9.6 billion, down €903.3 million, mainly due to falling prices and oil demand, which resulted in a reduction in fuel exports by €901.5 million, while a very small increase of €13.9 million was recorded in other products. Imports of goods were further reduced, to €16.5 billion, (a decrease of €1.8 billion)³⁶, as fuel imports were limited by €819.8 million, and those of other goods by €884.8 million. The deficit in the Balance of Goods excluding fuel and ships amounted to €5.0 billion, reduced by €898.7 million.

The services surplus narrowed significantly in the first four months of this year by €634.6 million to €1.5 billion, with a much larger drop in receipts versus payments. Analytically, total receipts from services amounted to €7.2 billion, reduced by 10.6% compared to 2019, while in particular receipts from travel services amounted to €626.4 million, lower by 51.4%, due to restrictions on international passenger transport due to the coronavirus pandemic and revenues from transport services decreased by 3.2% to €5.1 billion. In a following box, the trends in travel receipts in the last three years are presented in detail. Total service payments stood at €5.7 billion, down €224.2 million from a year ago. Payments for travel services decreased by 52.3% to €436.3 million and payments for transport services increased by 6.1% to €3.6 billion.

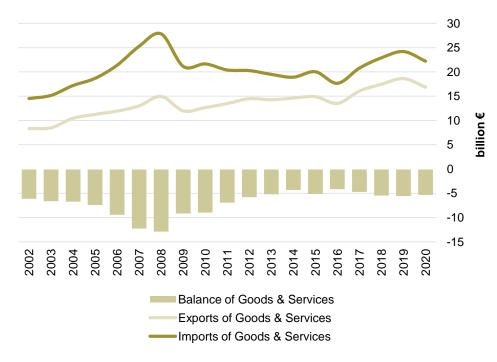
In the Primary Income Balance, the surplus strengthened in the first four months of the year by €56.6 million compared to a year ago, and amounted to €629.3 million. Receipts stood at €2.8 billion, up 3.2%, while a small increase, by 1.4%, was recorded in payments, at €2.1 billion. Analytically, income from work decreased by 23.5%, to €66.6 million, from investments increased by 4.2%, to €923 million, while from other primary incomes (subsidies and taxes on production) were extended by 4.1%, to €1.8 billion. Income payments from work increased to €474.4 million (+2.6%), from investments by 1.9% to €1.5 billion, while other primary incomes decreased by 6.9%, at €130.9 million.

³⁶ The amounts in parentheses reflect the absolute change from the corresponding period of the previous year, unless otherwise stated.



Figure 3.22

Imports-Exports of Goods and Services (January - April) 2002-2020



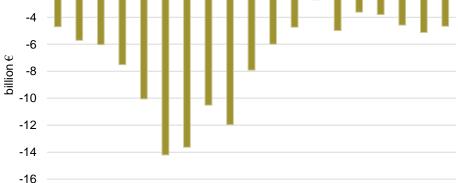
Shrinking of the deficit of Balance of Goods and Services in the four months of January-April this year, to €5.4 billion from €5.6 billion in 2019

Source: Bank of Greece, processing: IOBE

Current Account Balance (January - April) 2002-2020

Figure 3.23





Current account deficit escalation to €4.7 billion, compared to €5.1 billion in 2019

Source: Bank of Greece , processing: IOBE

The Secondary Income Balance showed a small surplus, €49.5 million, with receipts amounting to €1.2 billion, from €1.0 billion last year, and payments stable at €1.2 billion.

2012 2013

2015 2015 2016 2017 2018 2019 2020



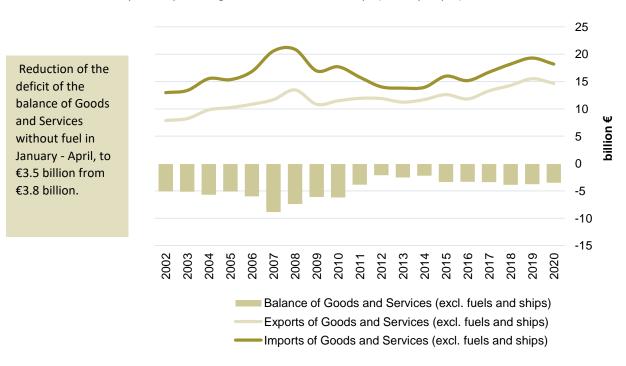
Capital Account

The Capital Account surplus ³⁷ increased, to €391,4m, versus €215,7m in 2019, with an increase in receipts by €83,3m and a reduction in payments by €92,5m.

Finally, the Current and Capital Account, indicative of an economy's position as a lender or a borrower with respect to the rest of the world, recorded a deficit of €4,3 billion, in the first four months, against €4.9 million in 2019.

Figure 3.24

Imports-Exports of goods without fuel and ships (January - April) 2002-2020



Source: Bank of Greece, processing: IOBE

Financial Account

The Financial Account was in a deficit in the first four months of 2020, at €4,2 billion, compared to a deficit of €3,7 billion in 2019.

In the constituent accounts, the net receivables of residents from direct investment abroad increased by \in 82,2 million, while net liabilities to non-residents (investments in Greece by non-residents) increased significantly, by \in 975,7 million.

In the portfolio investment category, the claims of residents vis-à-vis abroad increased significantly, by €10,7 billion, as according to the Bank of Greece, holdings of residents in foreign bonds and treasury bills increased (€10,6 billion) and at the same time there was a decrease in placements of shares and mutual funds of foreign companies (€404 million). Liabilities to non-residents decreased by €5,6 billion

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³⁷ The capital account reflects capital transfers, i.e. ad-hoc receipts and payments between residents and non-residents related to fixed capital formation. Capital transfers include mainly some of the transfers (receipts) from the budget of the EU to the General Government (receipts from the Structural Funds – excluding the European Social Fund - and the Cohesion Fund under the Community Support Framework).



in the period January-April, mainly due to the reduction of non-residents' placements in bonds and interest-bearing bills of the Greek State.

In the category of other investments, the claims of residents to non-residents increased by €2,6 billion, as the deposits and repos of residents (credit institutions and institutional investors) abroad increased by €1,3 billion in net terms. Liabilities increased by €22,5 billion, reflecting the increase in deposits and repos of non-residents in Greece by €13,9 billion (including the TARGET account). Moreover, according to Bank of Greece, public and private sector debt obligations to non-residents increased by €7,2 billion, due to the reclassification of liabilities in respect of securitised systemic bank loans, without affecting the country's International Investment Position.

Finally, the Reserve Assets of the country totalled €8,8 billion, at the end of April 2020, versus €6,4 billion in April 2019.

Box 3.4

Development of tourist receipts in Greece and possible effects from the pandemic of the new coronavirus

The tourism sector is expected to be among the most affected by the new coronavirus pandemic. In addition to the effects on him due to the suspension of operations of his business for almost a quarter, from March 22 to early June for 12-month hotels, and from the same time point until mid-June for seasonal hotels, The sector has been hit by restrictions on international passenger traffic. The opening to international tourism from 1 July significantly limits the tourist season, while there are also restrictions on the countries from which visitors are allowed to enter, as they currently include 46 countries (31 Schengen countries and 15 other countries). These characteristics of the tourist season may have a deterrent effect on the operation of many businesses in the tourism sector. Greece and the EU will update every fortnight the lists of countries from which they will receive travelers, taking into account which countries have better epidemiological characteristics than the EU average. At the same time, some countries issue travel instructions, preventing their residents from going to other countries. Recommended for all these developments will be the strongly downward trend of the activity of the tourism sector domestically in 2020, while its development in the coming years is uncertain at the moment.

In this context, the main trends and structural features of international tourism domestically in recent years present some interest. Specifically, the international tourist traffic was on the rise until 2019, attracting 34 million tourists in the last year. Revenues from international tourism reached € 18.2 billion last year, up 13% from 2018, following a 10% increase this year. Non-resident tourist receipts are important for the Balance of Payments, accounting for 22% of total exports and receipts of the Current Account Balance and for 45% of total receipts from Services, while they corresponded to 9.7% of GDP in 2019. The share of revenues from tourism services in GDP is constantly increasing since 2010, when they corresponded to 4.3% of it. This development is indicative of the fact that international tourism was partly a counterweight to the sharp decline of other components of GDP after the crisis of 2008-2010, such as private consumption and fixed capital formation.

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By group of countries, tourism receipts from EU countries account for 54% of total receipts in the period 2017-2019, while non-EU countries account for an equally significant share, around 43%. The remaining 3% comes from cruises.

The most important country of origin of tourism revenues in the period 2017-2019 is Germany, with an average share of about 17% and 4 million tourists per year.

The United Kingdom ranks in second place, with an average of around 3.1 million visitors from this country paying 13.4% of total tourism revenue over the same period. It is followed by the USA and France, with a share of both 6.2% in total revenues, from an average of 1.0 million and 1.4 million tourists respectively per year in the three years under review. Italy completes the top five most important places, with 5.5% of tourist receipts and a significant number of visitors, about 1.5 million per year. The top ten is completed by the Netherlands (3.7%), cruise revenues, Romania (2.7%), Switzerland (2.5%) and Belgium (2.4%).

With the latest data from the EU and the decisions of the Greek government, from 1 July the possibility of entering Greece is normally allowed for all residents of the "EU+". The EU + category includes the Schengen countries, to which are added Bulgaria, Croatia, Cyprus and Romania, the Schengen associated countries, namely Iceland, Norway, Switzerland, Liechtenstein, as well as Ireland and the United Kingdom. However, there are currently no direct flights from this country to Greece and British tourists can come domestically via third countries. In addition to the list of European countries, the EU has published a list of third countries from which, based on certain epidemiological criteria, each country can receive travelers. This includes Algeria, Australia, Georgia, Japan, Canada, Morocco, Montenegro, New Zealand, South Korea, Rwanda, Serbia, Uruguay, Thailand and Tunisia. The recommendation also applies to those from Andorra, Monaco, San Marino and the Vatican. Finally, for China, the opening of the borders is expected to be determined on the basis of reciprocity, i.e. if China implements the same policy for the people of Europe.

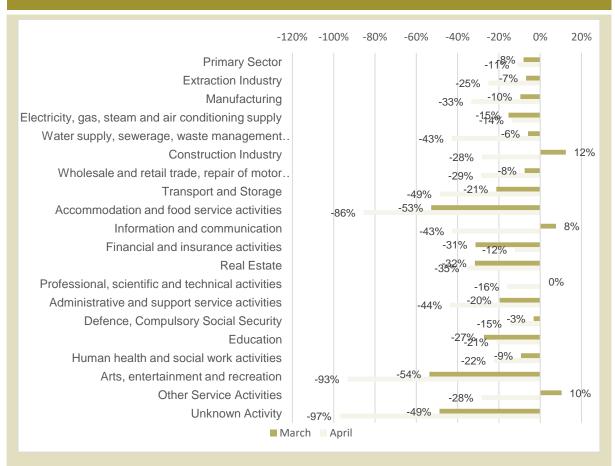
Based on the above, they were excluded from the EU list of countries from which visitors are allowed key tourist partners of Greece, such as the United States, Russia, Turkey and Brazil, primarily due to the many cases recorded in these countries. Apart from the direct negative effects of the remaining restrictions on international passenger traffic in the activity of the tourism sector, the decline in income in the countries from which Greece will receive travelers is expected to reduce tourist flows, but also per capita tourist receipts.

In particular with regard to these effects, as long as the ban on entry to residents of the USA, Russia and Turkey is not lifted, it will not be possible to participate in tourism revenues, as in previous years. It should be noted that the first two of these countries accounted for 5.0% of all travelers in the previous three years, as well as about 8.7% of revenues from international tourism. Adding to the two countries' share of receipts that of Turkey, for which no arrival figures are available, the immediate loss of revenue unless the entry ban from the three countries is lifted reaches 10.6% of their total over the past three years.

Figure 3.25

Country share in international tourism receipts domestically, 2017-2019





Sources: Bank of Greece, Eurostat

The difference in the shares of the total travelers and the total receipts for the USA and Russia, highlights the high average consumption per traveler from these countries. The average cost per trip of tourists from the US is almost twice the average, while in Russia it is 40% higher than the average of all tourists. The average cost per trip will also be a particularly important size for tourism receipts in 2020, as the pressures on the disposable income of the countries from which travelers can come to Greece will have a corresponding effect on their spending during their holidays. In addition, declining disposable income will have a deterrent effect on public holidays in these countries.

Indicative of the trends in the disposable income and travel spending this year in European countries with the largest contribution to international travel revenue, it is stated that, according to the latest European Commission forecasts, Germany's GDP per capita will shrink by 6,7%, while imports of services, which largely relate to tourism spending, are expected to decline this year by 15.5%. Respectively, in the United Kingdom, per capita GDP is expected to decline by 8.8%, and imports of services by 13.3%. France is projected to shrink by 8.5% in 2020, with service imports shrinking by 14.9%, while Italy is expected to see a 9.5% drop in per capita GDP and a 17.0% drop in imports.

In summary, the above analysis showed that the restrictive measures in the operation of tourism businesses until mid-June, as well as in international passenger transport, which to some extent continue, will exert strong pressure on international revenues from travel services. However, they will also be negatively affected by the economic trends in the countries of origin of the tourists, as they will affect their ability to travel, as well as to incur expenses during their trip. The second set of effects has so far not been highlighted in the relevant analyses and, given the expected developments in European countries with a significant share in arrivals and revenues, it is expected to be quite significant.

Figure 3.26

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Table 3.13 Balance of payments (€ million).

Ships Duyning 66.6 117.0 58.6 12.2 10.7 8.5								
CURRENT ACCOUNT (IA + IB + IC + ID)								
GOODS AND SERVICES ACCOUNT (IA-18)								
A	ı							
Oil balance				,				
Trade balance excluding oil -5,5742 -5,987.1 -5,055.8 -1,300.0 -1,421.6 892.8	I.A							
Ships balance excluding ships								
Trade balance excluding ships								
Trade balance excluding oil and ships								
EAST Exports of Goods 19,165.5 10,235.9 9,632.6 2,244.4 2,839.6 1,981.7		= :						
Oil 3,111.2 3,054.3 2,152.8 812.3 999.7 305.5	1 A 1			,				
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Conditional color section 1,000								
Column								
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Ships (Duying)		·						589.2
B Sence secturing oil and ships 12,561.8 13,361.8 12,477.0 3,079.9 3,340.8 2,650.0				,				8.5
IB								2,650.0
Travel	I.B					570.4	653.4	386.3
Transportation	I.B.1	Receipts						1,576.9
Differ services		Travel	1,056.5	1,290.0	626.4	502.6	543.5	7.3
Tarvel		Transportation	4,833.2	5,304.8	5,137.3	1,230.6	1,341.2	1,209.0
Travel		Other services	1,385.9	1,483.7	1,456.1	340.8	333.5	360.6
Transportation	I.B.2	Payments	5,622.1	5,929.5	5,705.3	1,503.6	1,564.7	1,190.7
Other services								2.7
I.C. PRINABY INCOME ACCOUNT (I.C.1-I.C.2) 586.3 572.7 629.3 136.6 222.2 1-127.1		·						
I.C.1 Receipts 2,906.6 2,676.2 2,762.9 315.2 280.3 358.6								344.1
From work (Wages, compensation)								
From investments (interest, dividends, profit) 846.7 886.0 923.0 205.9 210.2 196.8	I.C.1							
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I.C.2 Payments								
From work (wages, compensation)	1.02			,				
From investments (interest, dividends, profit) 1,792.3 1,500.5 1,528.3 345.2 362.5 334.5	1.C.2	·						
Other primary income								
I.D. SECONDARY INCOME ACCOUNT (I.D.1-I.D.2) 292.4 -134.2 49.5 -80.0 -107.6 -125.3 I.D.1 Receipts								
I.D.1 Receipts 1,083.0 1,042.2 1,224.8 111.0 135.4 131.3 General government 666.9 567.7 591.1 31.0 15.7 48.3 1.0 15.7 1.0	I.D							
General government		, ,						
Other sectors		·						48.3
General government		-	416.1	474.5	633.7	80.0		83.0
Other sectors 224.3 379.6 433.3 50.4 101.8 79.8	I.D.2	Payments	790.7	1,176.4	1,175.3	191.0	243.0	256.7
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								494.5
RESERVE ASSETS (\$10CK)*** 6,629 6,423 8,827		RESERVE ASSETS (STOCK)***				6,629	6,423	8,827

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" with the IMF, "Special Drawing Rights" and the claims of the Bank of Greece in foreign currency 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 PHARMACEUTICAL MARKET AND THE SECTOR IN GREECE

- The new coronavirus disease pandemic (COVID-19) is a new major challenge for the Greek economy, as
 it highlighted important issues with economic, social and health implications that will be seen in the
 coming years.
- The transition to a new reality, with recession in many countries, highlights the need to protect public health and ensure the adequacy of medicines, as well as the need to promote research and development of new vaccines, diagnostics and treatments.
- In Greece, public spending on medicines is constantly decreasing. Total outpatient pharmaceutical
 expenditure is estimated to have reached € 3.9 billion in 2019, of which only € 1.945 million was public
 funding.
- Estimates for the total amount of participation of pharmaceutical companies through mandatory returns and discounts (clawback & rebates) reach €2 billion for 2020. This is a significant financial barrier for companies in the sector and an indirect disincentive to attract relevant investment in GREECE.
- The pharmaceutical industry spends significant amounts on R&D, as it represents 5% of total private R&D expenditure in Greece (2017), while by 2019 2,811 clinical studies of independent type and phase were conducted (1,604 completed).
- The total contribution of the pharmaceutical industry in terms of GDP and employment remains significant as it is estimated at around €6.9 billion (3.7% of GDP) and 136 thousand jobs (or 3.6% of total employment) in 2018.

4.1 Introduction

The novel coronavirus pandemic created significant challenges in many countries around the world. In addition to the loss of life, the particularly high number of patients and the stifling pressure on health systems, the cessation or restriction of economic activity in many sectors, they are already causing an economic downturn and rising unemployment. The partial or general lockdown imposed in previous months is expected to plunge most economies for 2020, including the Greek one, with estimates of the recession varying, but suggesting a significant contraction. In any case, the current crisis is expected to have a strong impact on the Greek economy, but also on most countries in the world. At the same time, health systems are being asked to reassess public funding for health spending, as needs multiply, and pressure on the health system will remain intense over the medium term.



The health sector is linked to goods and services that are crucial to effectively tackling the current health crisis, but ultimately anyone in the future. In the pharmaceutical sector – and overall in the health ecosystem – Greece has comparative advantages, as documented in many surveys. The life cycle of a drug involves many stages and usually extends to different countries through global value chains. This need is expected to become more urgent, as one-dimensional dependence, e.g. from production units located in a country, it ultimately seems to pose an increased risk in abnormal situations, such as the current ones. As a result of this development, the global value chain of the sector is being rearranged, which creates a window of opportunity for the domestic sector, which must conditionally take advantage by attracting part of the production and international R&D in the country.³⁸

These developments add to the usual challenges facing the health sector in the domestic environment. The deteriorating demographic data, with the time decrease of births (by 34 thousand people in 2018) and the projected increase of the older population (over 65 years), from 21.9% of the total population in 2019 to 33.0% in 2060, lead to a growing need for pharmaceutical and healthcare. This also implies an increased need for public funding in health costs and pharmaceutical coverage. Private sector involvement has increased significantly, but it is not certain that it can be maintained at a high level in an environment of high long-term unemployment and declining incomes.

In terms of expenditure on pharmaceutical coverage, in Greece the total outpatient pharmaceutical expenditure is estimated to have reached €3.9 billion in 2019, of which only €1.945 million is public funding. At the same time, the burden of coverage shifted to patients and the private sector, with most of it being borne by the pharmaceutical industry, through the mandatory returns and discounts (clawback & rebates) it pays.

Despite the significant impact of the fiscal adjustment on public health funding, the pharmaceutical industry continues to spend significant amounts on R&D, accounting for 5% of total private R&D expenditure in Greece (2017). In 2019, 2,811 clinical studies of independent type and phase were conducted (1,604 completed). Pharmaceutical production approached €1 billion in value in 2018, while the added value of €559 million in 2018 was €559 million (3.0% share in the manufacturing sector). The employees in the production of pharmaceutical products reached 21 thousand people in 2019, with 60.6% of the employees being of university education. The role of the pharmaceutical sector in foreign trade is also important, as the exports of pharmaceutical products amounted to €1.9 billion in 2019 and correspond to 4.4% of all Greek exports of products for 2019. IOBE recently conducted a relevant study, the main points of which are presented below.³⁹

4.2 Demographic Trends and Health Profiles of Greeks

The evolution of technology, the improvement of the provided health services, the contribution of Research & Development with the introduction of new innovative therapies, are some of the most important factors in increasing life expectancy. In Greece, there is a significant increase in life expectancy by 9.4 years in the period 1960-2017, recording a higher life expectancy than the average of OECD countries for the same period (81.4 versus 80.7 years). However, the negative sign of the natural change (births minus deaths) of recent years is estimated to continue and will lead to a gradual reduction of the total population of Greece by 2060 (-15.5% compared to current levels), as reflected in latest revision of relevant Eurostat data. At the same time, the percentage of the population over the age of 65 is expected to increase, from 21.9% of the population in 2019 (19.8% in the EU28) to 33.0% in 2060.

³⁸ See. related article by A. Tsakanika: https://www.economia.gr/gr/journal2/blog/post?journal-blog-post-id=2828

³⁹ This chapter is based on an IOBE study on the pharmaceutical market in Greece in 2019. The full text as well as a presentation of the study are available here: http://iobe.gr/research_dtl.asp?RID=200



These demographic changes also directly affect the population dependency index, with half of the (old) population in Greece being sustained by the rest and this proportion showing increasing trends, predicting deterioration and more intense pressures on insurance systems. The dependency index in Greece in 2020 is 56%, i.e. for every 2 people of active population correspond to a little more than 1 person of inactive population, a level that is on average in the countries of the EU28 (56%) and the countries of the South (55%). According to United Nations estimates, a significant deterioration of the dependency index is expected in our country (% of people aged 0-14 years and people over 65 years of age in the total economically active population 15-64 years) by 2050, the which is estimated to rise to 92% by then.

4.2 Funding for health expenditure

Regarding Greek health expenditure in 2018, total funding amounted to €14.3 billion, of which €8.4 billion is public funding and €5.8 billion private expenditure.

The cumulative change in the period 2011-2018 in total funding for health expenditure was down in Greece, by 34.2%, compared to a marginal decrease of 0.1% in the South, and an average increase of 15.2% in the EU23 over the same period. Similarly, the cumulative change in public funding for health expenditure over the same period decreased by 42.1% in Greece, compared to 5.8% in the South and increased by 15.0% in the EU23 over the same period.

Also, the total per capita health expenditure in Greece amounted to €1,327 in 2018 compared to €2,027 in 2009, while it is now €1,059 lower than the average of the Southern Countries. Public per capita health expenditure in Greece fell by 43.9% between 2009 and 2018, reaching €779 in the last year, compared to an increase of 27.2% in the EU23 and a small increase in the South by 2.0% the same period. Therefore, the decline in per capita expenditure in Greece is rapid, unlike in other countries, particularly the Southern countries, with which it may make more sense to compare our country.

billion euro 25 22,5 21,6 18,8 20 17,0 15,2 14.5 14,4 14.2 14,3 14,0 15 15,4 14,9 12,4 10 11,3 8,8 8,7 8,4 8,1 8,1 5 0 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 Total funding Public funding

Figure 4.1

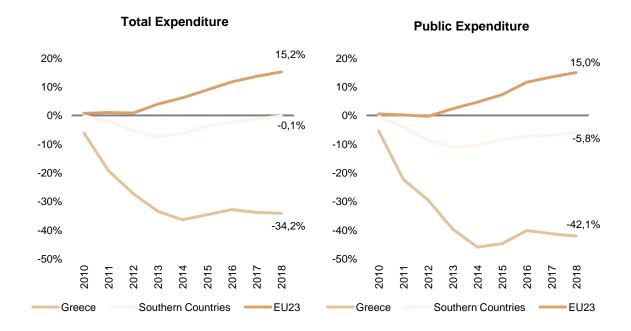
Total & public funding for health expenditure (€ billion)

Sources: System of Health Accounts 2018, ELSTAT, 2019/OECD Health Statistics 2019, processing: IOBE

Figure 4.2

Cumulative change rate in funding for health expenditure (%) Greece-EU27-South*





Sources: System of Health Accounts 2017, ELSTAT, 2018/OECD Health Statistics, 2019, processing: IOBE. *South (Italy, Spain, Portugal). The percentage changes between 2009 and 2018 have been computed with the financing data in constant prices (\$ 2010 PPS, OECD).

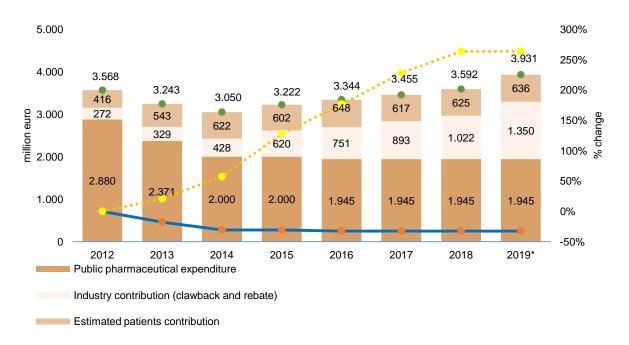


4.2 Pharmaceutical expenditure

As for expenditure on pharmaceutical coverage, which is part of the total health expenditure, the total out-of-hospital public pharmaceutical expenditure, including the estimated participation of patients and the pharmaceutical industry, is estimated to have reached €3.9 billion. in 2019. The rapid decrease in public out-of-hospital funding in 2009-2019, by around 61%, resulted in a significant increase in industry participation over the same period, by 264%. Public hospital spending on NHS("ESY") hospitals was set at €500m for 2019 decreased by 44% compared to 2015 (€764 million), before the imposition of a closed budget. The continuous reduction of public hospital pharmaceutical expenditure resulted in a corresponding increase in the burden on the pharmaceutical industry, through the mechanisms of automatic return and discounts, which for 2019 reached €483 million.

Figure 4.3

Total public and private outpatient pharmaceutical expenditure



Sources: EOPYY 2012-2019 Budget Reports 2014-2019, processing: IOBE-SFEE.

Patient participation: what the patient pays in the reimbursed market (i.e. the statutory 0%, 10%, 25%) and the charge resulting from the difference between Retail Price (RP) and Compensation Price (CP).

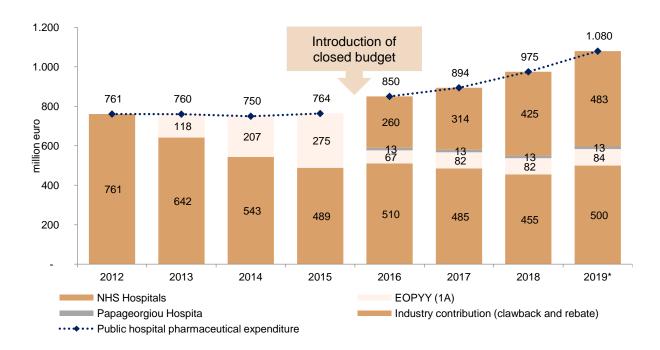
4.3 Pharmaceutical industry and economy

The overall ecosystem, i.e. the production and distribution of pharmaceutical products, is still one of the most dynamic sectors of Greek industry. The supply of pharmaceutical products in Greece is determined by pharmaceutical companies in the sector (productive and commercial) and the chain of storage, and distribution of the drug to the public. More specifically, the drugs, with the exception of those available through hospitals, in the distribution of which the wholesalers do not intervene, start from the pharmaceutical company and through the drugstores end up in the final points of sale, the pharmacies. There are about 106 drug producers and importers in Greece who channel their products to 137 drugstores and pharmacist cooperatives. Of course, the final disposal is made through the approximately 10220 pharmacies, the pharmacies of the hospitals and the 37 pharmacies of EOPYY. In some cases it is possible for doctors to administer medicines or for the direct delivery of medicines from the pharmaceutical company to the patient, subject to approval by the Insurance Fund.

Figure 4.4

Public hospital pharma budget and industry contribution





Source: EOPYY 2012-2019, ESY.net 2012-2015, processing: IOBE-SFEE.

Note: Estimation 2019 of industry participation.

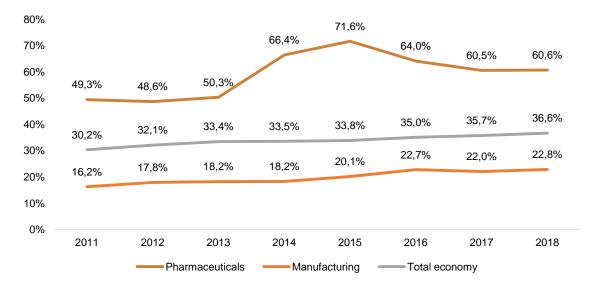
The pharmaceutical industry employs a significant number of workers. In Greece, employment in the narrow core of pharmaceutical production amounted to 21.2 thousand people in 2019. However, the key element that is also a strategic advantage of the sector is the high level of education of workers in the sector. According to the International Standard Classification of Education (ISCED), the educational background of workers in the pharmaceutical industry in 2018 was very high, with 60.6% being university education, when in the manufacturing sector the corresponding figure was 36.6% and in the economy as a whole 22.8%, which highlights the high educational training of workers in the pharmaceutical industry.

According to Prodcom (Eurostat), the production of pharmaceuticals in Greece in value (ex-factory) approached €1.0 billion in 2018, an increase of 4.5% compared to 2017. In terms of value added, the production of pharmaceutical products amounted to € 559 million in 2017, higher by 9.7% compared to 2016, accounting for 3.0% of the total value added of the Manufacturing sector. It is also characteristic that 21% of the drugs are produced in domestic factories, which indicates a large margin for attracting new production capacity in the country.

Figure 4.5

Number of higher education employees in pharmaceuticals production (%)

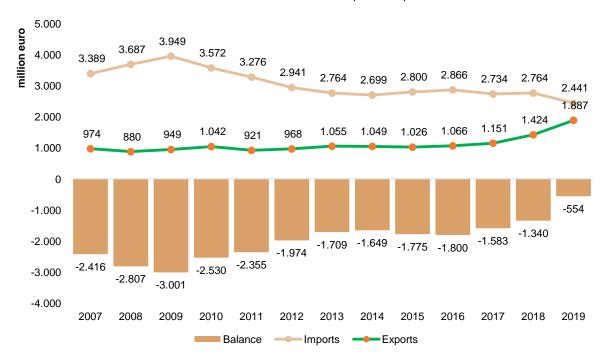




Source: ELSTAT, 2019, Higher education employees as a percentage of total employment, based on the International Standard Classification of Education (ISCED 2011), processing IOBE

Figure 4.6

Trade balance of medicines (€ million)



Source: Eurostat, International trade, EU Trade Since 1988 by CN8, 2020, data processing: IOBE

In another light, the role of the pharmaceutical industry in shaping the overall foreign trade of the country is particularly important, as over time imports of drugs have outstripped exports over time. However, in 2019 the smallest relative deficit was recorded, €554 million: imports of pharmaceutical products in 2019 amounted to €2.4 billion, reduced by 11.7%, while exports recorded a spectacular increase of 32.5%, to €1,9 billion. Exports of pharmaceuticals in terms of total Greek exports of all goods accounted for 5.6% in 2019, due to their significant increase, compared with 5.1% a year earlier. Respectively, imports accounted for about 4.4% of the country's total imports. Regarding the main trading partners in pharmaceuticals in 2019, in the part of imports the largest volume is covered by Germany (28.9%, of the total imports of medicine), Italy (10.5%) and France (10.2%). In terms of



exports, the first destination country of the products is France (21.3%), followed by Germany (15.3%) and the United Kingdom (9.0%).

4.3 The contribution of the pharmaceutical industry to the economy

The assessment of the overall impact of the production and marketing of pharmaceutical products in the Greek economy, in terms of GDP, employment and tax revenues has been done through the use of the input-output method and the corresponding Eurostat table. Through this method, it is possible to calculate not only the direct effect of the above activities on the Greek economy, but also the indirect, as well as their induced effect. The indirect effect of an economic activity on the domestic economy consists of the effect that takes place through the interconnections of that activity with the other economic sectors and in particular with those sectors which are its suppliers of raw materials and intermediate goods. The resulting effect arises from the incomes generated for the employees in the activity under study and from the consequent expenditure for the purchase of products and services by the households. The overall impact, or overall footprint, of an economic activity on the domestic economy is the sum of these three forms of impact.

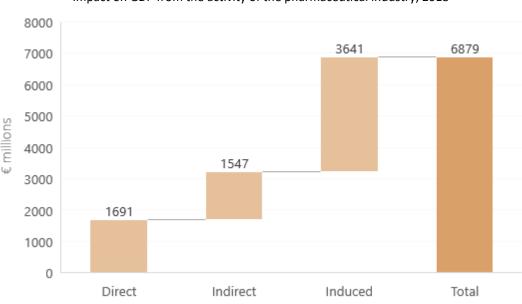


Figure 4.7

Impact on GDP from the activity of the pharmaceutical industry, 2018

Source: IOBE estimates

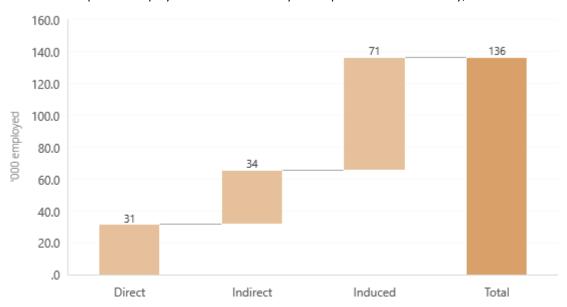
The input-output analysis was conducted jointly for the pharmaceutical industry and the wholesale sector of these products. According to STAKOD 2008, the total sector of pharmaceutical products consists of sectors 21 (Manufacture of basic pharmaceutical products and pharmaceutical preparations) and 46.46 (Wholesale of pharmaceutical products).

The total contribution of the pharmaceutical sector in terms of GDP is estimated at approximately € 6.9 billion (3.7% of GDP) in 2018. For every euro of added value of companies operating in the pharmaceutical sector, another 3.1 euros of GDP is generated. in the Greek economy as a whole (ratio of indirect and induced effect to direct effect).

In terms of employment, the total contribution is estimated at 136 thousand jobs (or 3.6% of total employment). Each job in the pharmaceutical industry supports 3 other jobs in the economy as a whole. In addition, the impact on tax revenues from the activity of the pharmaceutical industry exceeds \in 1.9 billion.



Impact on employment from the activity of the pharmaceutical industry, 2018



Source: IOBE estimates

APPENDIX

Table 1: GDP Rate of Change

			,	Annual Data (%	5)			
	2012	2013	2014	2015	2016	2017	2018	2019
Austria	0.7	0	0.7	1	2.1	2.5	2.4	1.6
Belgium	0.7	0.5	1.6	2	1.5	1.9	1.5	1.4
Bulgaria	0.4	0.3	1.9	4	3.8	3.5	3.1	3.4
France	0.3	0.6	1	1.1	1.1	2.3	1.8	1.5
Germany	0.4	0.4	2.2	1.7	2.2	2.5	1.5	0.6
Denmark	0.2	0.9	1.6	2.3	3.2	2	2.4	2.4
Czech Republic	-0.8	-0.5	2.7	5.3	2.5	4.4	2.8	2.6
EU 27	-0.7	-0.1	1.6	2.4	2.1	2.7	2.1	1.5
Greece	-7.3	-3.2	0.7	-0.4	-0.2	1.5	1.9	1.9
Estonia	3.1	1.3	3	1.8	2.6	5.7	4.8	4.3
Euro area	-0.9	-0.2	1.4	2.1	1.9	2.5	1.9	1.3
Ireland	0.2	1.4	8.6	25.2	3.7	8.1	8.2	5.5
Spain	-3	-1.4	1.4	3.8	3	2.9	2.4	2
Italy	-3	-1.8	0	0.8	1.3	1.7	0.8	0.3
Croatia	-2.2	-0.5	-0.1	2.4	3.5	3.1	2.7	2.9
Cyprus	-3.4	-6.6	-1.9	3.4	6.7	4.4	4.1	3.2
Latvia	4.1	2.3	1.9	3.3	1.8	3.8	4.3	2.2
Lithuania	3.8	3.6	3.5	2	2.6	4.2	3.6	3.9
Luxembourg	-0.4	3.7	4.3	4.3	4.6	1.8	3.1	2.3
Malta	2.8	4.9	9	10.9	5.8	6.5	7.3	4.7
Netherlands	-1	-0.1	1.4	2	2.2	2.9	2.4	1.7
Hungary	-1.5	2	4.2	3.8	2.2	4.3	5.1	4.9
Poland	1.6	1.4	3.3	3.8	3.1	4.9	5.3	4.1
Portugal	-4.1	-0.9	0.8	1.8	2	3.5	2.6	2.2
Romania	2.1	3.5	3.4	3.9	4.8	7.1	4.4	4.1
Slovakia	1.9	0.7	2.8	4.8	2.1	3	3.9	2.4
Slovenia	-2.6	-1	2.8	2.2	3.1	4.8	4.1	2.4
Sweden	-0.6	1.2	2.7	4.5	2.1	2.6	2	1.2
Finland	-1.4	-0.9	-0.4	0.5	2.8	3.3	1.5	1.1

Table 2: General Government Debt as % of GDP

					. , , , , ,			
				Annual Data (%	5)			
	2012	2013	2014	2015	2016	2017	2018	2019
Austria	81.9	81.3	84	84.9	82.9	78.3	74	70.4
Belgium	104.8	105.5	107	105.2	104.9	101.7	99.8	98.6
Bulgaria	16.7	17.1	27.1	26	29.3	25.3	22.3	20.4
France	90.6	93.4	94.9	95.6	98	98.3	98.1	98.1
Germany	81.1	78.7	75.7	72.1	69.2	65.3	61.9	59.8
Denmark	44.9	44	44.3	39.8	37.2	35.8	33.9	33.2
Czech Republic	44.5	44.9	42.2	40	36.8	34.7	32.6	30.8
EU 27	90.7	92.6	92.8	90.9	90	87.8	85.8	84.1
Greece	159.6	177.4	178.9	175.9	178.5	176.2	181.2	176.6
Estonia	9.8	10.2	10.6	10	10.2	9.3	8.4	8.4
Euro area	84.7	86.4	86.6	84.7	84	81.6	79.6	77.8
Ireland	119.9	119.9	104.4	76.7	73.8	67.7	63.5	58.8
Spain	86.3	95.8	100.7	99.3	99.2	98.6	97.6	95.5
Italy	126.5	132.5	135.4	135.3	134.8	134.1	134.8	134.8
Croatia	70.1	81.2	84.7	84.3	80.8	77.8	74.7	73.2
Cyprus	80.3	104	109.2	107.5	103.4	93.9	100.6	95.5
Latvia	42.4	40.3	41.6	37.3	40.9	39.3	37.2	36.9
Lithuania	39.8	38.7	40.6	42.6	39.7	39.1	33.8	36.3
Luxembourg	22	23.7	22.7	22	20.1	22.3	21	22.1
Malta	67.8	68.4	63.4	58	55.5	50.3	45.6	43.1
Netherlands	66.2	67.7	67.8	64.6	61.9	56.9	52.4	48.6
Hungary	78.6	77.4	76.8	76.2	75.5	72.9	70.2	66.3
Poland	54.1	56	50.8	51.3	54.3	50.6	48.8	46
Portugal	129	131.4	132.9	131.2	131.5	126.1	122	117.7
Romania	37	37.6	39.2	37.8	37.3	35.1	34.7	35.2
Slovakia	51.8	54.7	53.5	51.9	52	51.3	49.4	48
Slovenia	53.6	70	80.3	82.6	78.7	74.1	70.4	66.1
Sweden	37.6	40.4	45.1	43.9	42.2	40.8	38.8	35.1
Finland	53.6	56.2	59.8	63.6	63.2	61.3	59.6	59.4

Table 3: General Government Balance as % of GDP

				Annual Data (%	5)			
·	2012	2013	2014	2015	2016	2017	2018	2019
Austria	-2.2	-2.0	-2.7	-1.0	-1.5	-0.8	0.2	0.7
Belgium	-4.3	-3.1	-3.1	-2.4	-2.4	-0.7	-0.8	-1.9
Bulgaria	-0.3	-0.4	-5.4	-1.7	0.1	1.1	2.0	2.1
France	-5.0	-4.1	-3.9	-3.6	-3.6	-2.9	-2.3	-3.0
Germany	0.0	0.0	0.6	0.9	1.2	1.2	1.9	1.4
Denmark	-3.5	-1.2	1.1	-1.2	0.1	1.8	0.7	3.7
Czech Republic	-3.9	-1.2	-2.1	-0.6	0.7	1.5	0.9	0.3
EU 27	-3.6	-2.9	-2.4	-1.9	-1.3	-0.8	-0.4	-0.6
Greece	-8.9	-13.2	-3.6	-5.6	0.5	0.7	1.0	1.5
Estonia	-0.3	0.2	0.7	0.1	-0.5	-0.8	-0.6	-0.3
Euro area	-3.7	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	-0.6
Ireland	-8.1	-6.2	-3.6	-2.0	-0.7	-0.3	0.1	0.4
Spain	-10.7	-7.0	-5.9	-5.2	-4.3	-3.0	-2.5	-2.8
Italy	-2.9	-2.9	-3.0	-2.6	-2.4	-2.4	-2.2	-1.6
Croatia	-5.4	-5.3	-5.3	-3.3	-1.0	0.8	0.2	0.4
Cyprus	-5.6	-5.8	-8.7	-1.0	0.3	2.0	-3.7	1.7
Latvia	-1.4	-1.2	-1.6	-1.4	0.2	-0.8	-0.8	-0.2
Lithuania	-3.1	-2.6	-0.6	-0.3	0.2	0.5	0.6	0.3
Luxembourg	0.5	0.8	1.3	1.3	1.8	1.3	3.1	2.2
Malta	-3.5	-2.4	-1.7	-1.0	1.0	3.3	1.9	0.5
Netherlands	-3.9	-2.9	-2.2	-2.0	0.0	1.3	1.4	1.7
Hungary	-2.3	-2.6	-2.8	-2.0	-1.8	-2.5	-2.1	-2.0
Poland	-3.7	-4.2	-3.6	-2.6	-2.4	-1.5	-0.2	-0.7
Portugal	-6.2	-5.1	-7.4	-4.4	-1.9	-3.0	-0.4	0.2
Romania	-3.7	-2.1	-1.2	-0.6	-2.6	-2.6	-2.9	-4.3
Slovakia	-4.4	-2.9	-3.1	-2.7	-2.5	-1.0	-1.0	-1.3
Slovenia	-4.0	-14.6	-5.5	-2.8	-1.9	0.0	0.7	0.5
Sweden	-1.0	-1.4	-1.5	0.0	1.0	1.4	0.8	0.5
Finland	-2.2	-2.5	-3.0	-2.4	-1.7	-0.7	-0.9	-1.1

Table 4: Percentage of Population in Poverty or Social Exclusion * (see end of section)

				Annual Data (%)			
	2012	2013	2014	2015	2016	2017	2018
Austria	18.5	18.8	19.2	18.3	18.0	18.1	17.5
Belgium	21.6	20.8	21.2	21.1	20.9	20.6	20.0
Bulgaria	49.3	48.0	40.1	41.3	40.4	38.9	32.8
France	19.1	18.1	18.5	17.7	18.2	17.0	17.4
Germany	19.6	20.3	20.6	20.0	19.7	19.0	18.7
Denmark	17.5	18.3	17.9	17.7	16.8	17.2	17.4
Czech Republic	15.4	14.6	14.8	14.0	13.3	12.2	12.2
EU 27	24.9	24.6	24.5	23.8	23.7	22.5	21.6
Greece	34.6	35.7	36.0	35.7	35.6	34.8	31.8
Estonia	23.4	23.5	26.0	24.2	24.4	23.4	24.4
Euro area	23.3	23.1	23.5	23.1	23.1	22.1	21.6
Ireland	30.1	29.9	27.7	26.2	24.4	22.7	21.1
Spain	27.2	27.3	29.2	28.6	27.9	26.6	26.1
Italy	29.9	28.5	28.3	28.7	30.0	28.9	27.3
Croatia	32.6	29.9	29.3	29.1	27.9	26.4	24.8
Cyprus	27.1	27.8	27.4	28.9	27.7	25.2	23.9
Latvia	36.2	35.1	32.7	30.9	28.5	28.2	28.4
Lithuania	32.5	30.8	27.3	29.3	30.1	29.6	28.3
Luxembourg	18.4	19.0	19.0	18.5	19.8	21.5	21.9
Malta	23.1	24.6	23.9	23.0	20.3	19.3	19.0
Netherlands	15.0	15.9	16.5	16.4	16.7	17.0	16.7
Hungary	33.5	34.8	31.8	28.2	26.3	25.6	19.6
Poland	26.7	25.8	24.7	23.4	21.9	19.5	18.9
Portugal	25.3	27.5	27.5	26.6	25.1	23.3	21.6
Romania	43.2	41.9	40.3	37.4	38.8	35.7	32.5
Slovakia	20.5	19.8	18.4	18.4	18.1	16.3	16.3
Slovenia	19.6	20.4	20.4	19.2	18.4	17.1	16.2
Sweden	17.7	18.3	18.2	18.6	18.3	17.7	18.0
Finland	17.2	16.0	17.3	16.8	16.6	15.7	16.5

Table 5: Inflation

		An	nual Data (%)			January - May		Chan	ıge (%)
	2015	2016	2017	2018	2019	2018	2019	2020	2020/19	2019/18
Austria	0.8	1.0	2.2	2.1	1.5	2.0	1.6	1.6	0.0	-0.4
Belgium	0.6	1.8	2.2	2.3	1.2	1.7	1.9	0.5	-1.4	0.2
Bulgaria	-1.1	-1.3	1.2	2.6	2.5	1.7	2.7	2.2	-0.5	0.9
France	0.1	0.3	1.2	2.1	1.3	1.7	1.4	1.0	-0.4	-0.4
Germany	0.7	0.4	1.7	1.9	1.4	1.6	1.6	1.2	-0.4	0.0
Denmark	0.2	0.0	1.1	0.7	0.7	0.6	1.0	0.3	-0.7	0.4
Czech Republic	0.3	0.6	2.4	2.0	2.6	1.8	2.4	3.5	1.1	0.6
EU 27	0.1	0.2	1.7	1.9	1.5	1.5	1.6	1.1	-0.5	0.1
Greece	-1.1	0.0	1.1	0.8	0.5	0.4	0.8	0.0	-0.8	0.4
Estonia	0.1	0.8	3.7	3.4	2.3	3.1	2.6	0.4	-2.3	-0.5
Euro area	0.2	0.2	1.5	1.8	1.2	1.4	1.4	0.7	-0.7	0.0
Ireland	0.0	-0.2	0.3	0.7	0.9	0.4	1.1	0.3	-0.8	0.6
Spain	-0.6	-0.3	2.0	1.7	0.8	1.3	1.2	0.1	-1.1	-0.1
Italy	0.1	-0.1	1.3	1.2	0.6	0.8	1.0	0.1	-0.9	0.2
Croatia	-0.3	-0.6	1.3	1.6	0.8	1.3	0.9	0.5	-0.3	-0.4
Cyprus	-1.5	-1.2	0.7	0.8	0.5	-0.3	1.1	-0.2	-1.2	1.4
Latvia	0.2	0.1	2.9	2.6	2.7	2.1	3.0	1.0	-2.1	0.9
Lithuania	-0.7	0.7	3.7	2.5	2.2	2.9	2.3	1.7	-0.6	-0.6
Luxembourg	0.1	0.0	2.1	2.0	1.6	1.4	2.1	0.5	-1.6	0.7
Malta	1.2	0.9	1.3	1.7	1.5	1.4	1.4	1.1	-0.3	0.0
Netherlands	0.2	0.1	1.3	1.6	2.7	1.3	2.6	1.2	-1.3	1.2
Hungary	0.1	0.4	2.4	2.9	3.4	2.3	3.5	3.6	0.0	1.3
Poland	-0.7	-0.2	1.6	1.2	2.1	1.0	1.6	3.6	2.0	0.6
Portugal	0.5	0.6	1.6	1.2	0.3	0.9	0.7	0.1	-0.6	-0.2
Romania	-0.4	-1.1	1.1	4.1	3.9	4.0	4.1	2.7	-1.4	0.0
Slovakia	-0.3	-0.5	1.4	2.5	2.8	2.6	2.5	2.6	0.1	-0.1
Slovenia	-0.8	-0.2	1.6	1.9	1.7	1.7	1.5	0.5	-1.0	-0.3
Sweden	0.7	1.1	1.9	2.0	1.7	1.8	2.0	0.7	-1.3	0.2
Finland	-0.2	0.4	0.8	1.2	1.1	0.8	1.3	0.5	-0.7	0.5

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

			,	Annual Data (%)				
	2012	2013	2014	2015	2016	2017	2018	2019
Austria	1.11	1.12	1.10	1.10	1.11	1.11	1.12	1.13
Belgium	1.11	1.12	1.11	1.12	1.12	1.11	1.12	1.13
Bulgaria	0.89	0.94	0.94	0.94	0.92	0.94	0.96	0.99
France	1.13	1.13	1.14	1.13	1.13	1.12	1.12	1.12
Germany	1.06	1.06	1.07	1.07	1.07	1.08	1.08	1.08
Denmark	10.03	10.02	10.24	10.20	10.23	10.16	10.20	10.03
Czech Republic	18.06	17.90	18.00	17.72	17.73	18.00	18.11	18.11
EU 27	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Greece	0.95	0.96	0.93	0.88	0.85	0.85	0.85	0.84
Estonia	0.68	0.69	0.71	0.72	0.74	0.75	0.76	0.78
Euro area	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Ireland	1.12	1.12	1.11	1.12	1.14	1.13	1.14	1.16
Spain	0.96	0.96	0.94	0.94	0.92	0.92	0.93	0.92
Italy	1.02	1.02	1.01	1.02	1.03	1.03	1.01	1.00
Croatia	5.12	5.03	4.96	4.96	4.95	4.89	4.87	4.87
Cyprus	0.92	0.94	0.96	0.95	0.95	0.92	0.90	0.90
Latvia	0.64	0.67	0.69	0.69	0.69	0.69	0.70	0.71
Lithuania	0.59	0.61	0.61	0.61	0.62	0.62	0.63	0.65
Luxembourg	1.22	1.21	1.23	1.24	1.23	1.23	1.23	1.24
Malta	0.76	0.77	0.78	0.80	0.82	0.83	0.84	0.85
Netherlands	1.13	1.12	1.12	1.11	1.13	1.13	1.15	1.14
Hungary	167.00	166.71	170.07	173.26	180.63	184.37	190.13	196.61
Poland	2.38	2.42	2.43	2.44	2.47	2.46	2.50	2.54
Portugal	0.82	0.84	0.82	0.81	0.81	0.81	0.82	0.84
Romania	2.03	2.08	2.12	2.23	2.27	2.31	2.30	2.35
Slovakia	0.66	0.68	0.68	0.68	0.68	0.68	0.72	0.74
Slovenia	0.84	0.84	0.82	0.82	0.83	0.83	0.83	0.83
Sweden	11.92	11.86	11.72	11.92	12.18	12.32	12.70	12.76
Finland	1.19	1.20	1.23	1.26	1.27	1.26	1.27	1.26

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

	Annual Data (%)									
	2012	2013	2014	2015	2016	2017	2018	2019		
Austria	117.9	117.3	116.8	117.3	117.5	116.3	116.8	:		
Belgium	130.1	130.2	131.2	131.6	130.7	129.7	129.2	:		
Bulgaria	43.7	42.9	44	44.5	45.7	46	47.1	:		
France	115.4	116.8	116.1	115.7	115.3	114.9	115.7	:		
Germany	105.1	104.3	106.3	105.3	105.9	105.7	104.9	:		
Denmark	114.7	115.5	115.5	114.9	114.8	116	116.6	:		

THE GREEK ECONOMY | VOL. 2/20 76.3 79.9 82.6 Czech Republic 76.8 79.3 79.9 81.4 100 100 100 100 EU 27 100 100 100 86.1 87.2 86.4 83.5 81 5 80.6 80 5 Greece 73.9 73.8 75.4 72.4 74.2 77.2 Estonia 73 Euro area 107.5 107.5 107.6 107.3 107.2 106.9 106.4 Ireland 147.1 143 146.5 188.6 182.3 187 193.7 Spain 103 103.4 103.3 102.2 101.8 101.5 99.6 98.6 Italy 111 109.4 107.7 106.6 108.1 107.4 106.4 : Croatia 72.5 73.5 70.8 70.7 72 71.9 72 Cyprus 88.7 86 84 84.9 87.1 85.5 85.3 83.6 Latvia 63.1 62.6 64.7 64.4 64.8 66.7 68.3 68.7 Lithuania 72.9 74.1 74.4 72.8 71.8 75 75.8 Luxembourg 162.5 163.8 169.7 169.6 170.8 166 164.8 162.3 Malta 90.4 89.7 91.5 95.2 95.9 94.1 93.9 Netherlands 115.4 112.8 113.5 113.5 110.5 110.5 110 108.2 Hungary 73 73.1 71.4 70.9 67.4 67.7 69 74.2 74.1 73.8 74.5 74 74.9 76.8 Poland Portugal 76.8 79.9 79 78.3 77.9 75.8 74.9 Romania 56.2 56.7 58.6 63.1 68.7 55.6 66.1 Slovakia 84.1 83.5 77 75.7 76.4 83.5 84.3 80.8 Slovenia 80.6 81.1 81.5 80.6 81.7 82.1 115.9 112.9 118.4 115.2 116.7 113.4 Sweden 111.8 Finland 109.6 108.3 107.7 107.6 108.1 109 106.7 108

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

		Annual Data (9	%)		Q1(%)		Chai	nge (%)
	2017	2018	2019	2018	2019	2020	2020/19	2019/18
Austria	75.4	76.2	76.8	75.2	75.9	75.5	-0.4	0.7
Belgium	68.5	69.7	70.5	69.3	69.8	70.4	0.6	0.5
Bulgaria	71.3	72.4	75.0	71.1	73.1	73.0	-0.1	2.0
France	70.6	71.3	71.6	70.7	71.2	71.8	0.6	0.5
Germany	79.2	79.9	80.7	79.5	80.2	:	!	0.7
Denmark	76.6	77.5	78.3	76.8	77.6	78.1	0.5	0.8
Czech Republic	78.5	79.9	80.3	79.2	80.1	:	i	0.9
EU 27	71.3	72.3	73.1	71.4	72.4	:	1	1.0
Greece	57.8	59.5	61.2	57.7	59.6	:	!	1.9
Estonia	78.7	79.5	80.2	78.2	79.3	80.1	0.8	1.1
Euro area	70.9	71.9	72.6	71.0	72.0	:	į	1.0
Ireland	73	74.1	75.1	73.5	75.1	75.3	0.2	1.6
Spain	65.5	67	68.1	65.7	67.3	67.4	0.1	1.6
Italy	62.3	63	63.5	62.0	62.6	62.9	0.3	0.6
Croatia	63.6	65.2	66.7	63.6	65.8	:	į	2.2
Cyprus	70.8	73.9	75.7	71.5	74.5	75.1	0.6	3.0
Latvia	74.8	76.8	77.4	75.9	76.4	77.2	0.8	0.5
Lithuania	76	77.8	78.2	76.1	78.0	:	-	1.9
Luxembourg	71.5	72.1	72.8	72.4	72.5	71.7	-0.8	0.1
Malta	73	75.5	77.2	74.0	76.7	:		2.7
Netherlands	78	79.2	80.2	78.5	79.8	80.4	0.6	1.3
Hungary	73.3	74.4	75.3	73.8	75.1	75.0	-0.1	1.3
Poland	70.9	72.2	73.0	71.3	72.0	:	ļ	0.7
Portugal	73.4	75.4	76.2	74.5	75.6	75.5	-0.1	1.1
Romania	68.8	69.9	70.9	68.0	69.2	:	!	1.2
Slovakia	71.1	72.4	73.4	71.9	73.5	73.0	-0.5	1.6
Slovenia	73.4	75.4	76.5	73.9	76.0	76.3	0.3	2.1
Sweden	81.8	82.4	82.1	81.4	81.4	80.8	-0.6	0.0
Finland	74.2	76.3	77.2	74.6	76.0	76.6	0.6	1.4

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

Table 9: Employment Rate for People aged 55-64 (*)

	Annual Da	ita (%)			Q1([%)	Chan	ge (%)
	2017	2018	2019	2018	2019	2020	2020/19	2019/18
Austria	51.3	54.0	54.5	53.4	54.8	54.1	-0.7	1.4
Belgium	48.3	50.3	52.1	49.6	50.8	52.8	2.0	1.2
Bulgaria	58.2	60.7	64.4	58.8	63.0	62.9	-0.1	4.2
France	51.3	52.3	53.0	51.9	52.4	53.8	1.4	0.5
Germany	70.1	71.4	72.7	70.5	71.6	:		1.1
Denmark	68.2	69.2	71.3	67.9	69.5	70.7	1.2	1.6
Czech Republic	62.1	65.1	66.7	64.4	65.7	:		1.3
EU 27	56.1	57.8	59.1	56.8	58.2	:		1.4
Greece	38.3	41.1	43.2	39.5	42.1	:		2.6
Estonia	68.1	68.9	72.5	67.7	70.5	72.7	2.2	2.8
Euro area	57.1	58.8	60.0	57.9	59.2	:		1.3
Ireland	58.4	60.4	61.8	59.4	61.4	62.6	1.2	2.0
Spain	50.5	52.2	53.8	50.9	53.2	55.2	2.0	2.3
Italy	52.2	53.7	54.3	53.0	53.5	54.4	0.9	0.5
Croatia	40.3	42.8	44.0	40.1	42.2	:		2.1
Cyprus	55.3	60.9	61.1	58.7	59.0	59.5	0.5	0.3
Latvia	62.3	65.4	67.3	63.0	66.0	69.4	3.4	3.0
Lithuania	66.1	68.5	68.4	68.2	68.2	:		0.0
Luxembourg	39.8	40.5	43.1	39.1	43.2	44.4	1.2	4.1
Malta	47.2	50.2	51.6	50.2	53.3	:		3.1
Netherlands	65.7	67.7	69.7	66.5	69.3	71.2	1.9	2.8
Hungary	51.7	54.4	56.7	53.6	56.2	58.4	2.2	2.6
Poland	48.3	48.9	49.6	47.6	48.6	:		1.0
Portugal	56.2	59.2	60.4	58.3	59.4	59.9	0.5	1.1
Romania	44.5	46.3	47.8	43.9	46.0	:		2.1
Slovakia	53.0	54.2	57.0	54.0	55.9	56.9	1.0	1.9
Slovenia	42.7	47.0	48.6	44.4	47.8	48.3	0.5	3.4
Sweden	76.4	78.0	77.7	77.2	78.2	76.7	-1.5	1.0
Finland	62.5	65.4	66.8	65.2	65.5	67.7	2.2	0.3

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

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

			Annual Data	a (%)		Q1(%)		
	2015	2016	2017	2018	2019	2018	2019	2020
Austria	0.8	1.8	1.0	1.3	0.9	1.6	1.2	-0.3
Belgium	0.0	0.9	1.0	2.4	1.5	3.1	1.1	1.2
Bulgaria	1.6	-0.6	4.0	-0.1	2.2	1.9	1.3	-1.5
France	0.1	0.5	0.8	0.8	0.2	1.4	0.4	0.6
Germany	0.7	2.5	0.8	0.4	1.0	0.8	0.9	
Denmark	1.7	1.7	1.1	1.5	1.5	1.5	1.5	0.8
Czech Republic	1.0	1.7	1.6	1.0	0.1	1.3	0.8	
EU 27	1.0	1.5	1.4	1.1	0.9	1.3	1.1	
Greece	2.0	1.8	2.0	1.9	2.0	1.6	2.3	
Estonia	2.3	-0.1	2.2	0.7	0.6	0.4	0.9	1.0
Euro area	1.0	1.7	1.3	1.2	1.0	1.4	1.3	
Ireland	3.2	3.6	2.8	2.6	2.7	2.3	3.7	2.0
Spain	2.9	2.6	2.6	2.6	2.3	2.3	3.1	0.9
Italy	0.7	1.2	0.9	0.6	0.4	0.4	0.5	0.0
Croatia	1.1	0.5	2.3	1.7	1.2	4.2	2.6	
Cyprus	-1.4	1.1	4.5	5.4	3.5	5.5	5.3	2.3
Latvia	1.1	-0.6	0.0	1.3	-0.3	1.6	0.0	-0.5
Lithuania	1.0	1.3	-0.9	1.4	0.0	0.1	1.7	
Luxembourg	5.1	1.6	4.0	3.1	3.2	3.6	2.5	0.7
Malta	4.1	5.2	6.0	8.1	5.5	8.1	7.3	
Netherlands	1.1	1.3	1.9	2.0	1.7	1.8	2.2	1.4
Hungary	2.6	3.2	1.5	0.9	0.6	1.4	1.1	-1.0
Poland	1.4	0.6	1.1	0.3	-0.2	0.4	-0.5	
Portugal	1.3	1.4	3.3	2.2	0.8	3.3	1.1	-0.2
Romania	-0.2	-0.8	2.4	0.2	0.3	1.7	0.5	
Slovakia	2.4	2.8	1.2	1.2	0.4	1.1	1.4	-1.6
Slovenia	1.0	0.1	4.5	2.0	0.8	2.7	2.0	0.7
Sweden	1.4	1.6	2.1	1.6	0.6	1.7	0.8	-0.3
Finland	-0.8	0.5	1.0	2.6	0.9	2.6	1.6	0.5

Table 11: Unemployment Rate – Total Population

		Annual Data ((%)		Q1(%)	Change (%)		
	2017	2018	2019	2018	2019	2020	2020/19	2019/18
Austria	5.5	4.9	4.5	5.3	4.9	4.7	-0.2	-0.4
Belgium	7.1	6	5.4	6.2	5.6	5.1	-0.5	-0.6
Bulgaria	6.2	5.2	4.2	5.7	5.0	4.6	-0.4	-0.7
France	9.4	9	8.5	9.6	9.1	8.1	-1.0	-0.5
Germany	3.8	3.4	3.2	3.6	3.4	:		-0.2
Denmark	5.8	5.1	5	5.5	5.5	5.2	-0.3	0.0
Czech Republic	2.9	2.2	2	2.4	2.0	:		-0.4

THE GREEK ECONOMY | VOL. 2/20 8.2 21.5 7.3 19.3 EU 27 -0.7 6.7 7.9 7.2 17.3 19.2 -2.0 Greece 21.2 5.8 4.7 5.0 0.3 Estonia 5.4 4.5 6.8 -2.1 Euro area 9.1 8.2 7.6 8.9 8.1 -0.8 Ireland 4.7 -0.1 6.7 5.8 5 5.7 4.8 -0.9 -0.3 -1.7 Spain 17.2 15.3 14.1 16.8 14.7 14.4 -2.1 Italy 11.2 10.6 11.6 11.1 9.4 -0.5 6.7 Croatia 11 8.4 10.4 7.6 -2.8 -1.5 Cyprus 11.1 8.4 7.1 10.8 8.8 7.3 -2.0 Latvia 8.7 7.4 6.3 8.2 6.9 0.5 -1.3 Lithuania 7.1 6.2 6.3 7.2 6.5 -0.7 Luxembourg 5.6 6.3 0.9 -0.1 Malta 4 3.7 3.8 3.6 Netherlands 4.9 3.8 3.4 4.4 3.7 3.3 -0.7 Hungary 4.2 3.7 3.4 3.9 3.6 3.7 -0.3 Poland 4.9 3.9 3.3 4.2 3.9 -0.3 Portugal 7 6.5 8.0 6.8 6.8 0.0 -1.2 Romania 4.9 4.2 3.9 4.7 4.1 -0.6 Slovakia 6.0 0.2 8.1 6.5 5.8 7.1 5.8 -1.3 Slovenia 6.6 5.1 4.5 6.0 4.8 4.6 -0.2 -1.2 6.7 6.8 6.7 7.3 7.1 0.3 0.6 -1.7 Sweden 6.7

Table 12: Unemployment Rate among Men

8.8

7.6

7.1

0.0

6.3

7.4

8.6

Finland

		Annual Data (%)			Q1(%)		Change (%)		
	2017	2018	2019	2018	2019	2020	2020/19	2019/18	
Austria	5.9	5.0	4.6	5.7	5.2	4.9	-0.3	-0.5	
Belgium	7.1	6.3	5.7	6.5	6.2	5.3	-0.9	-0.3	
Bulgaria	6.4	5.7	4.5	6.3	5.4	4.9	-0.5	-0.9	
France	9.5	9.0	8.5	9.5	9.0	7.9	-1.1	-0.5	
Germany	4.1	3.8	3.5	4.2	3.7	:		-0.5	
Denmark	5.6	4.9	4.8	5.2	5.0	5.0	0.0	-0.2	
Czech Republic	2.3	1.8	1.7	2.0	1.8	:		-0.2	
EU 27	7.9	7.0	6.4	7.6	6.9	:		-0.7	
Greece	17.8	15.4	14.0	17.3	15.4	:		-1.9	
Estonia	6.2	5.4	4.1	7.5	4.5	5.7	1.2	-3.0	
Euro area	8.7	7.9	7.2	8.5	7.7	:		-0.8	
Ireland	7.1	5.8	5.2	5.8	5.1	4.8	-0.3	-0.7	
Spain	15.7	13.7	12.5	15.2	12.9	12.8	-0.1	-2.3	
Italy	10.3	9.7	:	10.7	10.3	8.6	-1.7	-0.4	
Croatia	10.3	7.6	6.2	9.5	6.3	:		-3.2	
Cyprus	10.9	8.1	6.3	10.4	7.8	7.2	-0.6	-2.6	
Latvia	9.8	8.4	7.2	9.0	7.8	8.4	0.6	-1.2	
Lithuania	8.6	6.9	7.1	8.7	7.0	:		-1.7	
Luxembourg	5.6	5.3	5.6	5.0	5.6	6.5	0.9	0.6	
Malta	3.8	3.8	3.3	3.8	3.5	:		-0.3	
Netherlands	4.5	3.7	3.4	4.2	3.6	3.2	-0.4	-0.6	
Hungary	3.8	3.5	3.4	3.5	3.5	3.6	0.1	0.0	
Poland	4.9	3.9	3.0	4.1	3.4	:		-0.7	
Portugal	8.6	6.6	5.9	7.8	6.1	6.2	0.1	-1.7	
Romania	5.6	4.7	4.3	5.3	4.6	:		-0.7	
Slovakia	7.9	6.1	5.6	6.9	5.7	5.8	0.1	-1.2	
Slovenia	5.8	4.6	4.0	5.4	4.2	4.1	-0.1	-1.2	
Sweden	6.9	6.4	6.7	6.9	7.3	7.7	0.4	0.4	
Finland	8.9	7.4	7.2	8.8	7.8	7.6	-0.2	-1.0	

Table 13: Unemployment Rate among Women

		Annual Data (%)				Q1(%)				
	2017	2018	2019	2018	2019	2020	2020/19	2019/18		
Austria	5.0	4.7	4.4	4.8	4.6	4.4	-0.2	-0.2		
Belgium	7.1	5.6	4.9	5.8	5.0	4.9	-0.1	-0.8		
Bulgaria	6.0	4.7	3.9	5.1	4.6	4.2	-0.4	-0.5		
France	9.4	9.1	8.4	9.7	9.1	8.3	-0.8	-0.6		
Germany	3.3	2.9	2.7	3.0	2.9	:		-0.1		
Denmark	6.1	5.4	5.3	5.9	5.9	5.4	-0.5	0.0		
Czech Republic	3.6	2.8	2.4	3.0	2.3	:	i	-0.7		
EU 27	8.5	7.6	7.1	8.2	7.6	:	1	-0.6		
Greece	26.1	24.2	21.5	26.2	24.0	:	!	-2.2		
Estonia	5.3	5.3	4.8	6.1	4.8	4.2	-0.6	-1.3		
Euro area	9.5	8.6	7.9	9.2	8.4	:		-0.8		
Ireland	6.3	5.7	4.7	5.5	4.4	4.5	0.1	-1.1		
Spain	19.0	17.0	16.0	18.6	16.7	16.3	-0.4	-1.9		
Italy	12.4	11.8	:	12.9	12.1	10.6	-1.5	-0.8		
Croatia	11.9	9.3	7.4	11.3	9.1	:	i	-2.2		
Cyprus	11.3	8.8	8.0	11.2	9.9	7.5	-2.4	-1.3		
Latvia	7.7	6.4	5.4	7.4	6.0	6.4	0.4	-1.4		

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Lithuania	5.7	5.4	5.5	5.7	6.0	:		0.3
Luxembourg	5.6	5.7	5.5	6.2	5.2	6.0	0.8	-1.0
Malta	4.3	3.5	3.6	3.8	3.9	:		0.1
Netherlands	5.3	4.0	3.4	4.6	3.8	3.3	-0.5	-0.8
Hungary	4.6	4.0	3.5	4.3	3.6	3.9	0.3	-0.7
Poland	4.9	3.9	3.6	4.3	4.6	:		0.3
Portugal	9.5	7.4	7.2	8.1	7.6	7.3	-0.3	-0.5
Romania	4.0	3.5	3.4	3.8	3.5	:		-0.3
Slovakia	8.4	7.0	6.0	7.4	6.0	6.2	0.2	-1.4
Slovenia	7.5	5.7	5.0	6.6	5.5	5.0	-0.5	-1.1
Sweden	6.4	6.2	6.9	6.5	7.4	7.5	0.1	0.9
Finland	8.4	7.3	6.2	8.8	6.3	6.6	0.3	-2.5

Table 14: Long-Term Unemployment Rate (*)

		Annual Data (%)					Q1(%)	Change (%)		
	2015	2016	2017	2018	2019	2018	2019	2020	2020/19	2019/18	
Austria	29.2	32.2	33.3	28.9	25.2	32.0	24.0	23.9	-0.1	-8.0	
Belgium	51.7	51.6	48.8	48.7	43.5	50.5	43.4	44.8	1.4	-7.1	
Bulgaria	61.1	58.9	54.9	58.3	56.9	52.4	52.9	50.1	-2.8	0.5	
France	44.2	45.7	45.4	42.0	40.2	41.3	40.1	38.0	-2.1	-1.2	
Germany	44.0	41.1	41.9	41.3	37.8	40.6	38.0	:		-2.6	
Denmark	25.7	20.4	20.5	19.1	16.4	19.7	15.4	17.6	2.2	-4.3	
Czech Republic	47.4	42.1	35.0	30.6	30.0	31.8	32.3	:	!	0.5	
EU 27	49.9	48.5	46.7	44.9	41.5	44.3	41.2	:	}	-3.1	
Greece	73.0	71.8	72.6	70.1	70.3	68.4	64.9	:		-3.5	
Estonia	38.8	31.6	33.2	23.7	19.7	24.3	23.1	21.3	-1.8	-1.2	
Euro area	51.5	50.1	48.9	46.9	43.6	46.3	43.1	:	!	-3.2	
Ireland	55.0	52.2	46.4	37.1	32.3	37.7	35.7	27.9	-7.8	-2.0	
Spain	51.6	48.3	44.4	41.7	37.8	41.9	38.4	35.2	-3.2	-3.5	
Italy	58.9	58.3	58.7	59.0	56.1	57.9	54.0	53.2	-0.8	-3.9	
Croatia	63.1	50.6	41.0	40.2	35.6	38.1	42.4	:	;	4.3	
Cyprus	45.6	44.5	40.7	31.6	29.5	29.8	24.9	28.1	3.2	-4.9	
Latvia	45.5	41.5	37.4	42.0	37.8	39.4	43.7	28.6	-15.1	4.3	
Lithuania	42.8	38.2	37.7	32.2	30.7	34.4	28.3	:		-6.1	
Luxembourg	28.4	34.9	38.1	24.7	22.9	26.4	26.9	22.4	-4.5	0.5	
Malta	50.2	50.0	50.8	48.1	33.3	57.3	30.2	:	1	-27.1	
Netherlands	43.2	42.4	40.0	36.8	30.3	36.9	31.6	27.7	-3.9	-5.3	
Hungary	45.5	46.5	40.4	38.6	31.9	40.7	34.9	27.6	-7.3	-5.8	
Poland	39.3	34.9	31.0	26.9	21.5	26.6	22.4	:	:	-4.2	
Portugal	57.2	55.2	49.6	43.4	42.7	45.9	38.8	37.3	-1.5	-7.1	
Romania	43.9	50.0	41.5	44.1	42.4	41.5	49.1	:	<u> </u>	7.6	
Slovakia	65.8	60.2	62.4	61.7	58.2	62.2	60.3	58.8	-1.5	-1.9	
Slovenia	52.3	53.3	47.5	42.9	43.0	44.4	42.6	44.4	1.8	-1.8	
Sweden	20.8	19.4	19.6	18.3	13.7	18.0	14.1	15.4	1.3	-3.9	
Finland	24.6	25.9	24.4	21.9	17.9	22.9	17.2	14.5	-2.7	-5.7	

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

Table 15: Unemployment Rate among Youth 15-24

		Annual Data (%)		Q1(%)	Change (%)			
	2017	2018	2019	2018	2019	2020	2020/19	2019/18
Austria	9.8	9.4	8.5	10.2	7.7	9.9	2.2	-2.5
Belgium	19.3	15.8	14.2	16.9	15.7	12.4	-3.3	-1.2
Bulgaria	12.9	12.7	8.9	11.8	9.8	12.5	2.7	-2.0
France	22.1	20.8	19.6	21.7	20.0	19.2	-0.8	-1.7
Germany	6.8	6.2	5.8	6.4	5.8	:		-0.6
Denmark	12.4	10.5	10.0	11.7	11.3	10.4	-0.9	-0.4
Czech Republic	7.9	6.7	5.6	6.4	5.4	:	¦	-1.0
EU 27	18.0	16.1	15.1	16.8	15.8	:		-1.0
Greece	43.6	39.9	35.5	44.4	40.9	:		-3.5
Estonia	12.1	11.9	11.0	11.9	:	9.8	1	
Euro area	18.8	16.9	15.7	17.7	16.4	:	¦	-1.3
Ireland	14.4	13.8	12.5	12.5	10.9	10.5	-0.4	-1.6
Spain	38.6	34.3	32.5	36.3	35.0	33.0	-2.0	-1.3
Italy	34.7	32.2	:	33.8	33.2	30.2	-3.0	-0.6
Croatia	27.2	23.3	17.0	28.2	20.4	:	;	-7.8
Cyprus	24.7	20.2	16.6	25.3	19.8	14.5	-5.3	-5.5
Latvia	17.0	12.2	12.4	14.7	13.5	13.5	0.0	-1.2
Lithuania	13.3	11.1	11.9	13.9	12.5	:		-1.4
Luxembourg	15.5	14.1	16.9	13.4	13.1	16.5	3.4	-0.3
Malta	10.6	9.1	9.2	7.9	9.9	:	!	2.0
Netherlands	8.9	7.2	6.7	7.8	7.0	6.8	-0.2	-0.8
Hungary	10.7	10.2	11.4	10.4	11.2	11.4	0.2	0.8
Poland	14.8	11.7	9.9	11.8	10.4	:		-1.4
Portugal	23.8	20.3	18.2	21.9	17.6	19.7	2.1	-4.3
Romania	18.3	16.2	16.8	16.8	15.6	:	!	-1.2
Slovakia	18.9	14.9	16.1	17.1	14.2	16.0	1.8	-2.9
Slovenia	11.2	8.8	8.1	10.7	9.8	11.4	1.6	-0.9

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Sweden	17.8	17.4	20.0		18.0	23.3	22.4	-0.9	5.3
Finland	20.1	17.0	17.2	l l	21.1	18.9	21.4	2.5	-2.2

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

http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=DSP_GLOSSARY_NOM_DTL_VIEW&St_rNom=CODED2&StrLanguageCode=EN&IntKey=16664385&RdoSearch=BEGIN&TxtSearch=&CboTheme=3694_0331&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