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IOBE

The **Foundation for Economic and Industrial Research (IOBE)** is a private, non-profit, public benefit research organisation. Its purpose is to promote research on current problems and prospects of the Greek Economy and its sectors and to generate reliable information, analysis and proposals for action that can be of value to policy makers.

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Foreword

IOBE publishes its first bulletin 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, due to the pandemic of the new coronavirus that spread in a very short time from China, mainly to Europe and North America. The duration and severity of the current health crisis, as well as whether the virus will have a similar outbreak in the future, cannot be assessed for the time being. The vast majority of governments have taken unprecedented measures to curb its spread, which have a strong impact on economic activity. As every IOBE quarterly bulletin, this report includes four chapters and an appendix with key structural indicators. The bulletin starts with a text which examines the challenges for the Greek economy amid the COVID-19 crisis. The rest of the report is structured as follows:

The **first section** is a brief overview of the report, which presents its key points, which are analysed in detail in the following sections. The **second section** focuses on the general conditions, including: i) an analysis of the global economic environment in the final quarter of 2019, and its outlook for 2020, based on the latest reports of the OECD and of the International Monetary Fund (IMF); ii) an outline of the economic climate in Greece in the first quarter of 2020, based on data from the latest IOBE business and consumer surveys; iii) an assessment of the execution of the State Budget in 2019, as well as in the first two months of 2020; iv) an outline of the developments in the domestic financial system between November 2019 and February 2020.

The **third section** focuses on the performance of the Greek economy mainly in the final quarter and overall in 2019. First, the macroeconomic environment is mapped in the same quarter and forecasts are made for 2020, taking into account the rapid developments due to the pandemic. Developments in key production sectors in 2019 are also recorded, depending on the data availability; then the export performance of the Greek economy is presented over the previous year. Next come the developments in the labour market in the last quarter of 2019. Then, the trends in inflation are analysed for the first two months of this year (2020), and finally the section concludes with the valuation of the balance of payments for the whole of last year.

The **fourth** section of the report presents a study on the possibilities of mobile and broadband communications to contribute to the new growth model of the Greek economy.

At a methodological level, the report refers to and is based on data available until 10/04/2020.

IOBE's next quarterly bulletin on the Greek economy will be published in early July 2020.

THE CHALLENGES FOR THE GREEK ECONOMY AMID THE COVID-19 CRISIS

The current situation finds the Greek economy, after a decade of challenges and adjustment, in a very intense crisis again but this time with unprecedented features. The health problem caused worldwide by the new COVID-19 virus and the measures to deal with it, hamper the ability to travel and thus consume and work for many people. It is therefore a direct blow to both aggregate demand and aggregate supply of the economy, leading the global economy into recession. Even if the problem progresses according to the central scenario, i.e. if it is significantly alleviated in the larger economies before the summer, the losses will follow for many months, albeit very differently between countries and sectors.

A strong blow to both aggregate demand and aggregate supply

Such a direct blow at the same time to global demand and supply is unprecedented and indeed it resembles the economic impact of wars. In fact, it changes the way people operate and it is expected to overturn what we thought as normal on many aspects of the economy. Of course, one may hope that the problem will be tackled, or at least significantly reduced, soon, and then, unlike war situations, the productive forces will be to a great extent back in place. So we can expect that the recovery to follow would be strong on a global level, but its timing and characteristics will depend on the implemented policies.

Inevitable and very deep recession

For the Greek economy, the initial recession is inevitable and is expected to be very deep, overall for the year 2020, close to the levels of the first years of the adjustment programmes. Moreover, to use a timely metaphor, our economy enters the crisis as a patient with "underlying conditions", as it has lower productivity and international competitiveness than most European ones. The weakness and delay in managing the previous crisis for almost a decade and the complacency that simply through international recovery and the reduction of the cost of money our own problems will be solved, place us in a more difficult position at the beginning of this new challenge. In any case, strong growth after the intense initial recession is certainly possible, but it requires substantial changes in how the state and the production system operate in the country.

The global economy is not as prepared as it could have been

But even the global economy is not entering the new crisis on good terms. Quite the opposite is true, as in previous years a tendency to postpone the solution of important problems prevailed. This was happening through increased borrowing mainly but also with inertia in the face of necessary structural changes. Central banks were obliged to implement unconventional policy measures, reinforcing the economy with new money for an extremely long period, in order to address the weak appetite for investment and to boost growth. Additionally, these policies have buoyed much of the recent dynamics in the financial markets. Certainly, however, they are not without limits, as they borrow growth from the future and must be applied primarily in times of crisis. Now that a new crisis has come, the global economy is not as prepared as it could have been.

Similarly, in Europe, the previous crisis led to significant changes after 2008. But the intention to strengthen institutions and the economy weakened as soon as the crisis wave passed and core countries found themselves on a growth trajectory. Important interventions are still pending, such as banking integration and fiscal policy coordination. Italy, and other countries, will find themselves in a disadvantage if they are called upon to deal with deficits and accumulated debts alone and without adequate assistance from the fiscal and monetary policy in the euro area. The disagreements between the most and least powerful economies regarding the conditions for the provision of liquidity should not create any doubt that the integrity of the EU will be maintained and the appropriate policies will be implemented. Otherwise, there will be a secondary economic crisis centred on public deficits and debts when the health problem passes.

Returning to the Greek economy, the recession according to the calculations in this report will be deep, from a minimum of 5% up to 10%. Therefore, a significant cost to businesses and households for this year cannot be avoided despite borrowing that will smooth the situation. Overall, the recession will test corporate profitability, bank loans and budgetary balance, which are, after all, communicating vessels. Proper decisions will be needed at all three levels. Incoming tourism has systematically supported the Greek economy in recent years. Much of the summer economic season is now expected to be lost, but pressures may also surge in the future. Looking forward, the question will be to what extent the Greek companies, without exceptions, will be restructured to produce competitive products and services, in view of the reduced global demand. If this is not achieved to a significant extent, the trade balance will be under strong pressure and along with it, also, the prospects for economic growth. The banking system will be able to take advantage of the window of opportunity and safety net that certainly will be offered across Europe. However, there must be a balance between the need to finance those businesses with positive prospects and the provision to avoid a new burgeoning wave of non-performing loans.

Incoming tourism has systematically supported the Greek economy in recent years

The choice to support those structures necessary to tackle the health problem and to support a large part of businesses, and through these the working people, so that they do not face a problem of survival, is certainly right. In fact, there is no choice. The effective treatment of the health problem does not contradict that of the economic one, but it is a precondition for restarting the economy. However, there will be also a critical impact from developments in other countries through tourism and other exports. It is positive that in the country, in Europe and internationally, economic policy is determined to support the solution to the health problem. Large increase in public deficits and debt is a reasonable response to an immediate shock that is treated as unique. However, there must be no illusion that it would be possible to have costless and limitless public funding. The opposite is true, especially for an economy that will once again be under the microscope of international markets, and therefore must give convincing answers. It is crucial to prepare for the "next day" of the economy.

There should not be an illusion that there is a possibility of costless and limitless public funding

In particular for the tourism sector, it should be emphasised that travel will be difficult in the period following the lifting of the special restrictive measures, and therefore reasonably tourism will be hurt more than other sectors. As our economy depends more on incoming tourism than any other European economy, it is estimated that its recession will be greater and last longer. Last year, about 34 million tourists arrived in the country, providing receipts of €18 billion. As a measure of comparison, Greeks themselves spent less than €2 billion on domestic tourism and around €3

Effective coordination and common rules among EU countries billion abroad. For the final impact on the economy, multiplier effects should be taken into account, as well as imported inputs. In any case though, the contraction will be particularly large and a key factor in the overall recession. Tourism should also be supported by improving infrastructure, mainly for travel, communication and health services. For the tourism sector's survival in the short term and its consolidation in the medium term, domestic infrastructure (mainly in travel, communications, health) and interconnection with other sectors of the economy, such as food and culture, should strengthen and the overall quality should improve. Effective coordination, common rules and regulations are also required at EU level to enhance credibility and cost allocation of structures and processes between countries.

A strong second pillar in the economy is needed, focusing on manufacturing

At the same time, it is necessary to bolster a strong second pillar in the economy focusing on manufacturing, which will be based on innovation and will boost exports. Today, the Greek economy has the lowest manufacturing rate and one of the lowest in R&D in the EU. In this regard, there is a risk that large economies will turn to self-sufficiency policies that will reduce the possibility of exports for Greek companies. There is also a risk that large companies in robust economies will be supported with strong state aid and thus, the relative competitiveness of the Greek firms will be reduced, resulting in a further contraction of the manufacturing sector in the country. Coordinated policies will be needed to boost business funding in the overall EU region.

In the public sector, the accelerating process of digital upgrading must be accompanied by a reorganisation of the administration, so that bureaucracy is not "upgraded" in the new digital environment. At the same time, there must be a drastic redesign of the tax policy to support labour and investment. It is also of key importance to re-plan public investments and necessary projects with fast track procedures as well as to redesign NSRF and the Public Investments Programme.

The transformation of the economy is an absolute and urgent necessity

In such a difficult turn, the companies must also, to the fullest extent possible, protect their production capacity, continue their production as long as the conditions allow, and plan their action, from the next day, on new terms. Otherwise, the Greek economy will find itself with significantly lower ability to generate income. In other words, it will not only start from a lower base but it will also fall to a lower growth rate. It will also be necessary to turn branches and businesses towards new activities and production methods. If this does not happen, the economy will not be able to claim the necessary production shares, as the markets will reshuffle and the overall global demand will slow down. Technologically outdated and inefficient companies that do not offer high quality services and products will face hard times much more than in previous years.

During the decade of the previous crisis, three adjustment programs were needed and there was a deep recession. Major macro-economic imbalances have been corrected and progress has been made in some areas, but the basic structure of the economy has not changed. The economy benefited in recent years from the boost in tourism that followed the international recovery. There has also been an increase in exports of goods. However, quantitative and qualitative growth in tourism has been weaker than in competing countries, while the goods account of the balance of payments remains in deficit. Funding costs have been significantly reduced, but with a long delay. Eventually, the international economic growth supported the Greek economy with a delay and to a smaller extent than in other small economies. Delays in crisis management and the small only success in many reforms left a very narrow window of opportunity to recover, until the new crisis emerged.

Considering the past few decades in total, our economy tends to benefit from the positive cycle of the world economy as it evolves, but less than other small economies, and does not take advantage of it to gain strategic positions in the international division of labour. In the negative phase of the cycle, our economy is more affected than others as, with a weaker production base, expectations are more easily derailed. The health crisis will sooner or later pass and many indicators will recover strongly. However, it is crucial for the Greek economy to go through the crisis period with the lowest possible losses, as well as to prepare to claim a share in global growth in the future. The current situation makes it clear that the transformation of the economy in the coming years, with efforts that will begin immediately and systematically, is not a luxury but an absolute and urgent necessity.

1 BRIEF OVERVIEW

Significant slowdown in global economic growth in 2019. A sharp shift in recession this year due to the coronavirus pandemic

According to the latest available data on the evolution of global economic activity, in the fourth quarter of last year its annual growth rate was rather stagnant, compared to the preceding quarter. The GDP growth in the OECD countries averaged 1.6% in October-December, essentially the same as in the third quarter of last year (1.7%), as well as in the previous two quarters. It was at the same level a year earlier. Growth in the most developed economies (G7) slowed in the final quarter (2019) compared to the preceding quarter (1.4%, from 1.6%), while in the G20 countries it did not change (3.0%). Among the developed countries, Japan had by far the biggest negative change in the GDP growth rate, with growth in the third quarter (1.8%) evolving into a mild recession in the next one (-0.4%); a development due to the last October typhoon. Next ranked France, with a slowdown in growth, (0.8% from 1.4%) and Italy (stagnated at 0.5% in both quarters). The US economy was the only one among the G7s to accelerate by 0.2 percentage points, to 2.3%. In the major Asian emerging economies, China's economic growth did not weaken further in the last quarter of last year, for the first time since the second quarter of 2018, and remained at 6.0%. In contrast, the growth of the Indian economy slowed further, to 4.8% (final quarter of 2019) from 5.0% in the preceding quarter and from 5.8% in the same period the year before last (2018). In Latin America, Brazil's growth accelerated slightly for a third consecutive quarter, to 1.7% from 1.2% in the summer, and was higher than a year earlier (1.3%). Over the past year, the growth rate of the world economy was marginally lower than 3.0% (2.9%), from 3.6% a year earlier.

Therefore, the global economy was growing at a slower pace in the second half of 2019 and generally, over the whole of last year comparatively to the year before, with the de-escalation of growth stronger in the most developed economies. This trend was particularly strong in the United Kingdom, Germany and France. In the first country this is seen as largely driven by uncertainty over

Brexit, which has put pressure on investment, as well as by prolonged political processes that have led to a change of government and weakened public consumption. In the other two countries, the aforementioned trend is mainly related to adaptation processes in their industry.

The new coronavirus, which appeared in China and spread shortly to European countries at first, evolving into a pandemic, has caused unexpected, rapid chain effects in the world economy. In order to limit its spread and protect the population, but also the health systems that would be tackling it in the event of an exponentially increasing number of patients, unprecedented restrictive administrative measures were taken. These concern the interruption of passenger transport, restriction of domestic traffic and closure of businesses in sectors that are active mainly in the provision of final services to consumers (wholesale - retail, food services, accommodation, etc). At the same time, however, measures have been taken to support companies that have been shut down, as well as their employees.

Although the possibility of predicting the size and duration of the health crisis is limited, according to international organisations, the phase in which the pandemic will be on the rise in most countries is expected to last at least until the end of the second quarter (2020), with mitigation measures severely restricting economic activity. Especially for the developed economies that have been severely affected, the crisis is an unprecedented challenge. That said, the governments of the vast majority of these countries are in the position to finance the high, extraordinary expenditures that are necessary, thus worsening greatly their fiscal balance. However, emerging countries appear much weaker to meet the challenges ahead as capital outflows from them are already particularly extensive, making it difficult for them to access capital markets. For this reason, many countries are already seeking assistance for emergency IMF funding, while the World Bank plans to allocate up to $160 billion in funds under a financial support programme. If the pandemic is prolonged, in large and strong economies, it will cause significant problems on the production side, breaking international value chains and threatening the possibility of a short recovery.

Preliminary forecasts for 2020 point to a global recession much more severe than in the global financial crisis of 2008, but recovery is expected from 2021.

Growth rate in 2019 1.9%, unchanged compared to 2018.

The growth of Greece's domestic output slowed further in the final quarter of 2019, to 1.0% from 2.3% in the previous quarter. This rate of change in GDP is the lowest since the second quarter of 2017. Subsequently, in the whole of 2019, GDP was 1.9% higher than in the previous year, an increase of the same extent as that of 2018 compared with 2017.

As to the trends in individual components of last year's GDP (2019), domestic consumption slightly increased by 1.0% than a year before (year over year), when it had risen less, by 0.3%. Following the 1.8% increase in household consumption in the final quarter of the year, its overall increase in 2019 by 0.8% was the main reason for the rise in domestic consumption spending. In 2018, the increase in private consumption was slightly higher (1.0%). Public spending expanded by 2.2%, primarily due to their particularly strong rise in the second quarter of last year because of the elections, a development that nearly offset their cut a year earlier by 2.5%.

Investments remained unchanged last year compared to 2018. Their stagnation is due to a lesser stock accumulation in 2019 compared to the preceding year, by €963 million, which offset the expansion of fixed capital formation last year by 4.6%. For the purposes of comparison, in 2018 investments had increased by 1.6%, while the fixed capital formation had fallen by 12.0%. Fixed capital formation escalated in the final quarter of last year, with its increase reaching 14.4%, a development reflecting the upgrade in the investment climate before the outbreak of the coronavirus pandemic.

Last year, the trend in the majority of the fixed capital formation categories was positive, but the increase differed significantly between them. The strongest increase, in relative and absolute terms took place in investments in Transport Equipment - Weapon Systems, by 29.4% or €798 million, largely offsetting their decrease by 38.6% in 2018. The second largest increase in fixed capital formation was recorded in Housing, by 12.0% or €165.4 million, continuing its expansion since 2018 by 17.3%. The strengthening investments in ICT Equipment and in Machinery was of the same intensity, reaching 2.4%, but much lower than in 2018 in both categories (+17.0% and +15.9% respectively). On the other hand, Other Constructions showed the widest drop in 2019, by 6.2% (-€469 million). However, this was much less than in the previous year (-23.0%).

In the external sector of the economy, the export expansion, in the nine months of January - September last year slowed sharply into the next quarter, from 6.6% to 1.0%. The slowdown is mainly due to the same development in the services exports, with their growth falling from 10.8% in the first nine months to 2.3% towards the end of last year. Overall in 2019, exports increased by 4.9% comparatively to 2018, when their growth rate was 8.7%. The strengthening of export services by 8.1% last year was the main reason for the increase in total exports, as it represented 73.8% of the total growth. The rise in goods exports was much milder, by 2.2%. In 2018, international demand for services had also risen slightly faster than that for products, by 9.2%, compared to 8.4%.

Imports remained on a downward trajectory throughout the second half of last year, for the first time since the first half of 2016. The retreat came solely from the goods side, by 3.8%, in contrast to the extended rise of 7.1% in the first six months of the year (2019). By contrast, the growth of service imports escalated throughout the last six months of July – December, compared to the previous half of the year, with their expansion reaching 9.4%, from 4.3%. In the whole of 2019, imports were 2.5% more than in 2018, when they had increased by 3.0%. Last year's rise came mainly from additional service imports (+6.9%), as in the year before but then, their increase was higher (+14.4%). The rise in product imports remained sluggish for a second year, but higher than in 2018, 1.5% versus 0.7%. The larger increase in exports compared to imports improved the external balance, the deficit of which, in national accounting terms, declined to €857 million (-64.1% compared to 2018) or just 0.4% of GDP.

The prospects of the Greek economy in 2020 were capsized by the health crisis, with the economy returning to a strong recession

In the previous IOBE report on the Greek economy, the developments that were considered the most decisive in the domestic economic environment in the first half of this year were the completion of a cycle of changes in economic and development policy by the new government, through relevant interventions (tax cuts in September 2019 and Budget 2020, new development law, Hercules Programme for the provision of guarantees in the securitisation of non-performing loans). In the international environment, as recent major events for Greece stood the upgrade by the rating agency Fitch and the issuance of a 15-year sovereign bond with particularly good characteristics (oversubscribed by 7.5 times, interest rate at 1.875%), which reflected the confidence in the new government and more broadly, in the good prospects of the Greek economy.

However, the rapid spread of the coronavirus from February from China, where it initially occurred, and at a pace that turned it into a global health crisis, has already changed significantly and will continue to affect the fundamentals - at least in the medium term- not only of the Greek but also the European and the world economy. Its duration and intensity, in the current and eventually in the coming years, cannot be predicted for the time being; nor its consequences at various levels (public health, social relations, education, international relations, production activity, public finances, banking system, etc.). Especially about the economic impact of the pandemic, the fact that it is spreading rapidly, especially in European countries and the US, showing high mortality compared to similar viruses, has led to unprecedented protective measures, which have raised significant obstacles to the smooth functioning of national economies, exerting strong and unprecedented since World War II pressures. The sudden halt in economic activity in developed economies affects their demand from developing and emerging economies that supply key natural resources and/or produce raw materials. Broadly speaking, the longer the crisis lasts and possibly intensifies, the more structural and less conjunctural features it acquires, which significantly exacerbates its effects.

Given the characteristics of the pandemic, mainly the uncertainty about its duration, but also its multidimensional effects, IOBE identified factors whose fluctuations will affect the macroeconomic forecasts. Then, with alternative assumptions about these factors (scenarios), IOBE made forecasts for macroeconomic variables (private and public consumption, investment, unemployment, inflation). Subsequently, the different forecasts formed a forecast range for each macroeconomic variable and then for GDP. The factors whose changes have been taken into account in the macroeconomic forecasts for the Greek economy are the following: a) duration of the current coronavirus pandemic, domestically and internationally, and the possibility of a new outbreak of the virus within the year, b) intensity and time profile of its economic impact on the euro area, c) size and duration of policy interventions, at the domestic and EU level, to address the effects of the crisis and d) the price of oil.

The basic forecast scenario is based on the assumption that most of the internal public health protection measures will be maintained until mid-May and then begin to be phased out; similarly the same will be done by the end of May for international passenger transport, both domestically and internationally. Regarding the state support economic measures for businesses and households, as adopted by the fourth package (30/03/2020), they will be extended until end-May. Therefore, tourism businesses will be able to receive international tourism arrivals during a significant part of the summer tourist season. In terms of economic activity in the Eurozone, a recession is assumed for the whole of 2020, with an intensity equal to one and a half times the recession of 2009 that resulted from the international financial crisis.

In the alternative, unfavourable scenario, it is assumed that the majority of internal measures to protect public health will be maintained until the end of June and then begin to be phased out, while the same will be done for international passenger transport from the end of July, domestically and internationally. As regards state support measures for businesses and households, they will be extended until the end of July. Therefore, tourism businesses will be able to accept international tourism for a small part of the summer tourist season, and many of them will not have an incentive to operate this year. As regards economic activity in the euro area, a recession is assumed for the whole of 2020 with twice the intensity of the 2009 recession. Alternatively, the adverse scenario covers the case where the assumptions about the measures to deal with the current pandemic are the same as in the basic scenario. However, during the fourth quarter, for example from November, it is supposed that there is a new outbreak, leading to the reintroduction of protection measures at least until the end of this year.

In detail, regarding the possible and most expected developments in the above factors affecting the macroeconomic forecasts, the economic effects of the coronavirus protection measures taken so far are many and significant. Restrictions or bans on cross-border travel of passengers and even goods (e.g. US ban on Chinese products) will lead to a sharp decline in international transport and a sharp contraction in international trade. International trade will also be severely affected by restrictions or bans on the operation primarily of commercial enterprises within many countries. Internal administrative measures will put intense pressure on total household consumption directly, due to consumption constraints, but also indirectly, through their impact on employment income, the mandatory cessation of business operations in many sectors, and the decline in the activity of their value chain. These effects will be added to those from the weakening of the intent to consume, due to the general concern about the negative coronavirus effects.

The contraction in activity, coupled with uncertainty about the evolution and duration of the health crisis, as well as the possibility of its recurrence in the future, for example in the autumn, will be a major blow to the intention to invest. On the production side, the sectors that are expected to be hit hardest by the administrative measures both domestically and internationally - in addition to those of Transport and Wholesale - Retail (except supermarkets) mentioned above - are those with high activity in internationally tradable products and services, such as many Manufacturing sectors, Accommodation Services, Food Services, but also the Primary Sector and Entertainment Services. The compulsory closure of enterprises in specific sectors within the country will also put strong pressure on some others, which have not been subject to such measures, such as Professional, scientific and technical services (liberal professions, sole proprietors and unincorporated partnerships) and Construction activities, due to the sharp decline in investment.

The effects of coronavirus protection measures on household demand for both domestically produced and imported products and services are expected to be offset later to some extent; but it is currently not possible determine their strength, due to the fiscal policy interventions, already implemented and those that are to come. In the EU countries, these interventions will probably be financed mainly through national resources, and thus, with a corresponding negative impact on the fiscal balances. The European Commission has facilitated the implementation of national supportive policies through the suspension of the Stability and Growth Pact. So far, four packages of measures have been announced in Greece. According to the Ministry of Finance, the direct support measures of these four packages for the two months of March - April, include suspensions of tax liabilities of more than €2.1 billion, suspensions of social security liabilities and contributions of employees – self-employed (incl. liberal professions, sole proprietors and unincorporated partnerships) amounting to €1.6 billion and exceptional financial support of €1.4 billion for employees, self-employed and unemployed persons from 1/3/2020. Therefore, the total of these measures amounts to €5.1 billion. Adding the emergency expenditure on public health, the aid budget through the financing scheme of the 'repayable advance' for SMEs, the strengthening of the primary sector, the coverage of part of the Easter allowance for workers who have been temporarily suspended from their employment and its payment to public health workers, the budget cost for those interventions amounts to €6.8 billion.

The number of individuals and businesses who will make use of the above interventions, as well as their duration, will determine their favourable impact, as well as the burden on the budgetary balance. The losses of tax revenues, social security contributions, etc. from the mandatory cessation of business activity, as well as from other sectors affected by this event, will probably have stronger fiscal effects. The particularly high overall burden on the state budget from the costs of supporting the economy, but also from revenue losses, is quite likely to lead to the use of the cash buffer that the Greek government holds.

Initiatives taken by EU institutions, such as the €37 billion Coronavirus Response Investment Initiative (CRII) of the European Commission and the ECB's Pandemic Emergency Purchase Programme with a budget of €750 billion, focus mainly on stimulating liquidity and investment activity. Greece can raise €800 million from the CRII. The Greek government has also announced liquidity and investment programmes as part of its support measures. These include: a) a €6 billion mechanism to provide guarantees to SMEs with EU funds participation to conclude working capital loans, b) liquidity support by the European Investment Bank to banks for business loans totalling up to €2 billion, c) a guarantee mechanism in cooperation with the ECB for investment loans totalling up to €500 million, d) simplification of the Entrepreneurship Fund of the Hellenic Development Bank and an increase of its resources by €250 million, for granting loans to companies affected by the coronavirus pandemic, with a 100% subsidy of the interest payments for two years.

Greece's access to the ECB's Pandemic Emergency Purchase Programme (PEPP) is considered to be the most significant development in the current period and perhaps in recent years related to the liquidity of the Greek economy, because the country's bonds became accepted for the first time in a securities purchase programme by the ECB, something that has been sought since 2014. The inclusion in the programme was achieved with a temporary exemption of Greece (waiver) from the debt eligibility rules issued by the central governments of the Eurozone countries and are the same as those applicable to the ECB's Asset Purchase Programme. The maturity of public sector securities eligible for purchase under the PEPP ranges from 70 days up to 30 years and 364 days. 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 against a possible increase in capital demand, but also against a possible speculative attack.

The Public Investment Programme (PIP) remains the main financing mechanism from the public sector. As PIP expenditures fell to €5.64 billion in 2019, the lowest level since 2000 at least, there is a possibility of an increase this year, given the €6.75 billion target in the 2020 budget, which is unchanged for the fifth year. In the two months period January-February, PIP grants sharply increased compared to last year, reaching €492 million, 82.2% up on their very low level a year before.

Therefore, given the extraordinary financial instruments due to the current pandemic, there are clearly more options for raising liquidity and financing investments, while the amount of available resources is higher than in previous years. However, in the wake of the health crisis, the most important factor for companies regarding the use of the financing options is the duration and intensity of uncertainty about how the crisis will evolve. The investment implementation is decided by assessing possible trends and developments in the medium to long term. Until the protection measures are lifted internationally and it becomes clear that an effective way of treating this particular coronavirus and / or preventing it has been found, the implementation of a very large part of the investment plans will be suspended. Exceptions to this trend will be health-related investments from the public and private sectors, e.g. to create appropriate infrastructure to deal with the pandemic and to prepare medicines and healthcare consumables, together with investments in public works and in finalised or ongoing privatisations.

For the same reasons, businesses will be very cautious when it comes to raising capital from the banking system. After all, also for the above reasons, the banks will be clearly more cautious in granting credits. As long as many of the restrictive measures to protect public health continue in the near future, affecting business and household income, it is quite possible that bank arrears will resurge, leading to a new expansion of non-performing loans (NPLs). To facilitate the borrowers who proved to be affected by the crisis, banks offer them facilities in paying the instalments of their loans if they had not been in arrears. In addition, there is the possibility for the State to subsidize the interest rate on performing business loans from the affected sectors and for which the payment of the principal has been deferred from 17/03/2020 to 30/09/2020.

In the first two months of this year, for which the most recent data of the banking system refer and before the health crisis outbreak, the rate of credit contraction to the private sector as a whole (non-financial companies and households) slightly intensified compared to the end of 2019. This trend is due to the slowdown in the rate of credit expansion to non-financial corporations, to 1.4% from 2.2% in the last quarter of last year, as credit contraction to households and non-profit institutions continued at an unabated rate (2.9%).

The expected reversal of the above credit trends implies, in addition to the significant reduction of the new liquidity in the economy, that many of the companies and households that were looking at bank lending before the crisis will not benefit from the very favourable conditions (low cost) that have formed in the recent period. The notably lower interest rates on loans to businesses and self-employed in the second half of last year and in the two months of January-February this year, are also related to the sharp de-escalation of lending rates of the Greek government in the same period. In the two months of January – February, the average interest rate on new loans to non-financial corporations stood at 3.45%, from an average of 3.78% in 2019, with the recent level being at least the lowest since 2010. For all new loans to households, the average interest rate at the beginning of this year was 4.94%, marginally lower than its average level last year (5.09%).

While investment may suffer the strongest blow from the health crisis this year and the next, the pressure on exports from the restrictive measures in Greece and in its export destinations, are projected to exert the most intense pressure on domestic output. That said, this impact will be mitigated by the expected decline in imports, due to the suspension of retail operations and the general decline in production activity, both domestically and internationally, as Greece's exports are characterised by a high share of imported raw materials.

An indicative fact of the impact that the pandemic may have on the international demand for Greek products is that five Eurozone countries, which are deeply affected by the health crisis, were in the top-10 of export destinations in 2019 (Italy, Germany, Cyprus, France, Spain), with Italy ranking first followed by far from Germany ranking second (€3.63 billion versus €2.25 billion respectively). Some of the rest of the top-10 export destinations also face a sharp rise in the coronavirus pandemic (USA, UK). Also, the outbreak of the pandemic in the Eurozone is expected to have negative effects on the supply of the Greek economy from abroad, since five of these countries ranked last year in the top-10 countries representing the largest share in domestic imports (Germany, Italy, the Netherlands, France, Spain).

Restrictions and bans on international passenger travel due to the health crisis, which in Greece concerns flights from Italy, Spain, the United Kingdom, Germany, Turkey, etc. as well as on cruises, will hit the main driver of the expansion of Greek exports in recent years, the rise of international tourism. As their duration cannot be predicted, it is not possible to make a safe assessment of their effects. For example, in March, when the restrictive measures were not in force throughout the whole month, passenger traffic at Athens International Airport was down by 61.3% compared to a year ago. The drop is more pronounced at the 14 regional airports managed by Fraport, where passenger traffic was 97% lower than a year ago.

The restrictions on production activity, even in some of the most developed countries, and on international transport have already significantly reduced the demand for oil and other energy goods. In the period January - March, the price of oil declined by 64.1%, falling to $24.0, which is the lowest level since November 2002. In the first quarter of this year the average price of Brent oil stood at $53.3, from $63.1 a year earlier. Since the beginning of April, the trend in oil prices has been mostly positive. This development is due to Saudi Arabia's decision to convene an emergency meeting of OPEC-participating oil producers and Russia, in order to significantly limit their daily oil production. The meeting took place on April 8, with Saudi Arabia and Russia reaching an agreement to limit oil production by 8.5 million barrels/day each, in the next 2-3 months, with the US position on this still unclear. However, a containment decision to bring oil prices back to levels at which it fluctuated before the outbreak of the global health crisis is not expected, at least in the short term. In the coming months and most likely throughout 2020, the price of oil will be mainly affected by the course of the pandemic.

Taking into account the expected developments in the factors previously determined as drivers of the macroeconomic forecasts, but also the trends in the Greek economy in the first two months of this year - which were largely those anticipated in the previous IOBE report - marking the continuation and possible acceleration of Greece's growth this year, a significant decline in household consumption is expected. Pressure on consumer spending will be exerted by the ban on the operation of physical retail stores, food services, etc., by the anticipated significant rise in unemployment, but also by the decline in consumer confidence due to the health threat. Employment decline is expected to occur mainly in sectors supplying final products and services to consumers, but also in export-oriented sectors. The negative effects will be mitigated by the expected decline in prices, due to weakening demand. In addition, consumer sentiment appears to have been strong in the first two months of this year with the Consumer Confidence Index reaching a 19-year high and the Retail volume strengthening by 8.2% in January. These trends highlight a strengthening of household spending in the first quarter of 2020. Taking into account the above effects, it is estimated that the reduction of household consumption expenditure in the whole of 2020 will have an intensity of at least 4.0% in the baseline forecast scenario, while it is not excluded that in prolonged adverse conditions, in Greece and internationally, it will exceed 8.0%.

In contrast to private consumption, the pandemic of the new coronavirus will lead to a widespread expansion of public consumption. This will come from emergency health care costs, as well as some support for businesses and households affected by the lockdown measures. The increase in public consumption due to the health crisis will depend on its duration and whether it will reappear later this year, whether additional measures will be taken to assist businesses and households, the recently taken measures at Eurozone level, etc. Despite the rise in public spending, there will be a negative "base effect" due to its high level in the second quarter of last year, due to the elections. The expansion of public consumption will be offset by some structural changes in the definition, monitoring and evaluation of public sector expenditure, which were included in the 2020 budget. In this context, the annual expansion of public consumption is projected to be at least 4.5%, should the pandemic ease significantly in May and the support measures be completed by the end of the same month. Otherwise, if the crisis remains strong throughout the second quarter (2020) or if it intensifies in the autumn, then the public expenditure will lead to an increase compared to 2019 of 7.5% or more.

Concerning investment, a large part of the private sector's investment projects has been put on hold and will remain in a state of anticipating developments regarding the new coronavirus. These are investment projects from export-oriented sectors with a steady, large increase in their activity in previous years, such as Tourism, Transportation and Storage, Manufacturing, etc.; therefore, their activity depends on international developments with respect to the virus. This concern also sectors that have benefited from stronger domestic demand and structural changes, such as wholesale-retail trade, as well as some manufacturing sectors and Energy. Given the postponements for many of these private investments, the role of public works and investments in completed or ongoing privatisations (expansion of Athens International Airport, etc.), which have a long-term performance horizon, is expected to be decisive for the level of investment activity this year. Therefore, the importance of completing the relevant licensing procedures is significantly increasing. The specific investments will also be reflected in the construction activity.

Clearly, the additional liquidity injection from the banking system compared to a few years ago, following the reduction of non-performing loans, the return of deposits, but also through the possibility of accessing for the first time the ECB's securities purchase programme, will largely not be used from businesses, at least in the short term. In addition, at least as long as the safe exit from the health crisis and its effects are not apparent, banks are expected to remain more cautious in granting credits.

One technical factor in the process of calculating GDP, which significantly impacted on past investment changes and is likely to have a similar effect this year, is inventories. They result from the difference between the assessment of GDP in terms of demand and that in terms of production. For instance, it is possible that in the first quarter of this year, the domestic production activity will react with a time lag to the rapid developments that took place on the demand side, due to the closure of companies in Greece and internationally, and to restrictions on international transport. Subsequently, a larger part of the production than usual will not be sold. This part of it will be recorded in inventories and then in investments.

Taking into account the effects of these factors on investments, a 2020 reduction rate of at least 17% has emerged in all scenarios, while it is not excluded that it will exceed 30% in the worst of scenarios.

The biggest uncertainty about the extent of the changes lies in the external sector of the economy, as they will depend on developments in the pandemic in each of the countries that are trading partners of Greece, both in terms of exports and imports. Given that the Eurozone, plagued by the health-crisis, is the main export destination of Greece, its strong recession will affect the demand for Greek products. As the expansion of domestic exports last year and to a large extent in previous years came mainly from additional international tourism receipts, the fact that the restrictive measures to deal with the pandemic primarily affect international passenger transport will have a strong impact on the respective revenues. The scenario estimates showed that their decline will be very strong, especially if the protection measures are maintained in part of the third quarter or return in the autumn.

Concerning imports, their decline will be determined primarily by the decrease in domestic demand and in exports of products with a relatively high share of imported raw materials. Supply-side import restrictions may also arise, as in some countries of origin, activity has been suspended even in parts of Industry (e.g. Italy, Spain).

From the estimates for the GDP components based on different scenarios about the developments in their drivers, a forecast range was formed to calculate the change of the domestic product this year. According to this, the recession in the Greek economy this year will have an intensity of at least 5.0%. However, if the conditions in the Greek and international environment remain particularly unfavourable beyond the second quarter and/or a significant outbreak of the virus occurs in the autumn, it is quite likely that the recession will move closer to a double-digit rate. In any case, these predictions reflect current expectations and are likely to be significantly revised in future reports.

State Budget: targets met in the first two months of this year, despite a revenue slippage. Strong and hard-to-predict effects of the pandemic measures.

According to the State Budget's execution data, on a modified cash basis (not ESA or Enhanced Surveillance Methodology), in the first two months of the year (January-February), its deficit was essentially the same as it was a year ago, at €1.11 billion, from €1.14 billion. However, it fell short of the target by €293 million. The primary balance followed a similar development compared to a year ago, reaching a surplus of €831 million, €9 million more than last year. This surplus was €98 million less than the target for that period. The shortfall in the State Budget's deficit against the target was mainly due to less than expected revenues, by €390 million. Tax refunds were also exceeded by €78m, which reinforced the lag in the revenues.

Expenditure was lower by €175 million compared to the target in the first two months, despite higher-than-expected interest payments of €196 million, as well as the higher than the target grants through the Public Investment Programme by €42 million. The expenditure target was achieved due to lower than expected transfers by €143 million.

However, the plan to implement the State Budget for the rest of 2020 has been overturned by measures to tackle the pandemic of the new coronavirus. Strong effects will be exerted on the fiscal balance not only by business and household supporting measures due to the mandatory cessation of activity in many sectors to protect public health, which in turn affects the value chains to which they belong, but also - if not primarily - from losses of revenues from indirect and direct taxation, social security contributions, etc. The cost of the full implementation of the state supporting measures included in the four measure packages announced for the period March - April, reaches €6.8 billion, according to government estimates, of which €5.1 billion concern suspensions of tax liabilities (€2.1 billion), coverage of social security contributions of employees and self-employed (€1.6 billion), and exceptional financial assistance to employees, self-employed and unemployed (€1.4 billion). However, it is quite possible that the provided financial relief and aid will not be used by all potential beneficiaries, making their budgetary costs fall below the initially estimated level. That said, if these or some of these measures are extended, or if additional ones are taken, the budgetary cost will increase.

While to approximate the changes that the aid to households and businesses cause to public finances is not difficult - on the basis of some assumptions - the same exercise for the measures ceasing economic activities and restricting movements is, by contrast, more complex, due to the wide range of its effects, as, at present, there are no indications or data on the intensity of these effects. Obviously, the impact on revenues will depend on the evolution of consumer demand, the trend in unemployment, the course of exports. However, each of these figures is influenced by a number of factors, and there are also interactions between them.

A different feature of the effects on revenues from the pandemic compared to those on expenditure is that the latter expire with the end of the emergency support measures, while those on the revenue will continue, depending on the changes that would have taken place in the domestic and international economic environment.

Unemployment decline in 2019, similar to last year. Rise in 2020, mainly from the effects of the crisis on export sectors.

The stronger growth of exports of services during the second half of last year was reflected in the last quarter of 2019 in the employment of sectors that produce them (Transport, Tourism). This, combined with the significant increase in jobs in Wholesale – Retail trade, in line with the growth of private consumption and the preservation of the job gains since the beginning of the year in Manufacturing, were the main causes of the new employment expansion in the fourth quarter of last year, which - in turn - was the main reason for the further decline in unemployment, at 16.8%. In the whole 2019, unemployment stood at 17.3%, two percentage points lower than a year ago, when it was lower by 2.2 percentage points. Its decline originated by 86.3% from the increase in employment (+83.0k people) and by 13.7% from the decrease in the economically active population (-13.1k people). Most jobs compared to 2018 were created in the Transport - Storage sector (+22.2k or +12.0%). Next in employment growth terms came the sectors of Tourism (+20.2k or +5.6%) and

Manufacturing (+19.3k or +5.4%), while the expansion of employment in Education was slightly weaker (+17.7k or +5.8%). By contrast, employment decreased mainly in the Primary sector (-16.0k or -3.94%) and in Construction (-4.0k or -2.6%).

This year, the suspension of domestic business operations mostly active in providing services to final consumers, as well as restrictions and prohibitions on international passenger transport, as part of the health protection measures, will put intense pressure on employment. This pressure is expected to occur in sectors which have made a significant contribution to the decline in unemployment in recent years, such as Tourism, Transport, Wholesale – Retail, Professional – Technical Activities. Lockdown measures in countries that have been hit hard by the pandemic, with a high share in Greek exports (eg Italy, Spain, France), as well as the broad contraction of the international trade, will dampen employment in the export-oriented branches of Manufacturing. Education, a sector with a significant contribution to the decline in unemployment in 2019, is expected to act in the opposite direction this year, as it was the first to be shut down. The estimated significant decline in investment will affect the activity of the Construction sector. By contrast, the current adverse situation has created specific needs for services, e.g. health, social care, internet services, land courier services, which, despite the general decline of economic activity, will maintain or even boost jobs in the respective sectors.

As in all macroeconomic indicators, the duration and severity of the effects of the health crisis on employment will depend largely on the time elapsed until it weakens significantly, as well as on the possibility of a new coronavirus outbreak within 2020. On the basis of different assumptions (scenarios) on the duration of the pandemic, the change in employment was estimated, quarterly and by sector, taking into account the above expected sectoral trends. All scenarios resulted in an increase in unemployment compared to last year's level (17.3%), by about 2.0 to almost 4.0 percentage points.

Price fall rather likely this year, due to declining domestic demand and falling energy prices

The average rate of change of the domestic Consumer Price Index (CPI) in the period January - February this year compared to the corresponding period of the previous year was 0.5%, same as its rise then compared to 2018. Its increase in the first two months came almost exclusively from the recovery of domestic demand, as the price index with fixed taxes and excluding energy goods increased by 1.8%. The simultaneous, small increase in the oil price compared to last year (+2.8%), which is a key component of energy costs, also explains the marginal positive average effect of energy prices on the rate of change in consumer prices domestically, by 0.2%. The effect of taxation on prices in the first two months of this year was negative, by 1.3 percentage points, mainly due to the reduction in indirect tax rates in May 2019.

Subsequently this year, the lockdown measures in many sectors due to the health crisis, as well as those relating to travel, will limit profits and disposable income as long as they are in force, weakening consumer demand. Their pressures may persist, depending on their impact on business sustainability and employment. More broadly, consumption demand will decline as consumer confidence falls, due to uncertainty about the duration of the pandemic and the health threat. On the domestic supply side, the closure of the vast majority of retail stores has led many businesses with online stores to make discounts in March, possibly to avoid stockpiling seasonal products. This development has had a deflationary effect and will have the same effect if and when it is repeated outside regular discounts and offers. That said, it is also possible to see inflationary pressures on the supply side. Compulsory closure in sectors, which in some countries also concern Industry, or the definitive closure of some businesses, is quite likely to lead to a limited availability or lack of certain products and services after some time. Such developments will lead to price increases.

Restrictions on production activity and cross-border passenger transport have already led to sharp declines in demand for oil as well as other energy goods, hence in their price. Saudi Arabia and Russia 's recent decision to cut daily oil production by 8.5 million barrels each, if implemented, is expected to moderate but not offset the sharp fall in prices. Taking into account the aforementioned developments and expected trends, with their effects on changes in key components of the CPI in periods of past developments such as those expected this year, and the fact that inflation of 0.4% was recorded in the first quarter of 2020, CPI is projected to fall by at least 2.0%. If the health crisis is prolonged or recovers later this year, deflation will be between 3.0-3.5%.

Special study: The role of mobile communications and broadband in the new growth model of Greece

The global health crisis and the unprecedented measures to curb economic activity applied around the world have already led to a significant increase in internet usage, utilising a range of tools and services. A rapid digital transformation seems to be taking place in an effort to transform traditional functions and processes of the economy into a digital environment. E-learning, teleworking, e-government, e-commerce and e-banking services are currently gaining an increasing number of users, who are trying to take advantage of these opportunities to maintain some functionality in part of their personal and professional activity.

IOBE very recently published a study aimed at highlighting the importance of mobile communications and broadband in the new growth model of the Greek economy. The key aim of the study was to quantify the potential impact that a quality enhancement of the use of mobile communications could have on the economy in a number of digital functions. The benefits can be multiple and varied. The current adverse situation may be used as an opportunity, so that after the normalisation of the socio-economic functions in the country, these possibilities will maintain their growth momentum and ultimately accelerate the process of digital transformation in the public and private sectors.

2 ECONOMIC ENVIRONMENT

2.1 Trends and Prospects of the Global Economy

A. The Global Environment

- The global economy grew at a rate of 2.9% in 2019, compared to 3.6% in 2018
- The spread of the new coronavirus from the beginning of 2020, which evolved into a pandemic, has led to rapid developments and unprecedented shocks in the global economy
- Many countries, including some with the strongest economies, are taking extensive measures to protect public health, but with a strong negative impact on economic activity and international trade
- Despite parallel measures to support businesses and households, the recession worldwide this year is expected by the majority of international organisations to be much deeper than in 2009, due to the 2008 financial crisis. However, a full assessment of the effects of the health crisis this year remains extremely difficult, as it will depend on its duration and the possibility of a further outbreak during 2020.

The annual GDP growth rate in the OECD countries in the fourth quarter of 2019 fell marginally compared to the previous quarter, to 1.6% from 1.7%. The growth rate in the most developed economies fell to 1.4%, compared to 1.7% in the previous quarter and 1.6% in the fourth quarter of 2018. Overall, the global economy grew at an average annual rate of 2.9% in 2019, up from 3.6% last year, its weakest performance since the 2008 financial crisis.

Although there were signs that the growth of the world economy was stabilising based on preliminary indicators in early 2020, the new coronavirus epidemic, that began in China in January this year and spread from mid-February and early March mostly to European countries and has turned into a pandemic, has caused unexpected, rapid chain effects in the global economy. In order to limit the spread of the virus in these countries and to protect their population, as well as the health systems that would be affected by an exponentially growing number of patients, strict administrative measures have been imposed. These relate to international passenger transport, restrictions on domestic travel and lockdown of businesses in sectors that are mainly engaged in supplying final services to consumers (wholesale - retail, food services, accommodation, etc.). At the same time, however, measures were also taken to support the companies which were shut down, as well as their employees.

Although the possibility of predicting the magnitude and duration of the health crisis remains limited, according to international organisations[1], the phase in which the pandemic will be on the rise in most countries is expected to last at least until the end of the second quarter, with mitigation measures severely limiting economic activity. In the next phase, in which the spread of the virus will be under control, with the potential presence of vaccine and/or treatment drugs, partial herd immunity, etc., the restrictive measures are expected to continue, but be less stringent. However, they will have a strong impact on the functioning of economies. As restrictions are lifted, economies will gradually return to pre-pandemic operation. However, in order to achieve recovery, the policies implemented during the crisis will play a key role. If the impact on households and businesses proves to be temporary, then the recovery will be faster and smoother. However, if the pandemic is prolonged, in large and powerful economies, it will cause problems on the production side, rupturing international value chains and threatening the possibility of a short recovery.

The preliminary forecasts for 2020 converge in a global recession much stronger than the 2008 global financial crisis, with a recovery expected from 2021. It is also projected that international trade, which was already in a slowdown since the fourth quarter of 2019, will fall 13% this year compared to 2019[2]. However, the above, preliminary forecasts are based on the hypothesis of a relatively rapid reduction in the spread of the virus and strengthening health systems worldwide. Already many countries affected by the health crisis have taken emergency protection measures. In particular, the policies of support for households, businesses and the financial sector consist of a mixture of liquidity measures (credit supply, deferral of financial obligations) and solvency (transfers of real resources). For example, some of the measures are as follows:

- Government loans or loan guarantees for enterprises
- Income subsidies for affected workers
- Deferral of corporate and household tax liabilities
- Postponement or subsidy of social security contributions.
- In addition, in some countries, cash, free of charge, to all citizens (helicopter money) regardless of criteria, in order to stimulate demand (e.g. USA, Hong Kong).

[1] Source: : https://blogs.imf.org/2020/04/01/economic-policies-for-the-covid-19-war/

[2] Source:: https://www.wto.org/english/news_e/spra_e/spra303_e.htm

Obviously, the crisis is an unprecedented challenge for the developed economies that have been hit hard by it. The governments of the vast majority of these countries can finance the high, exceptional costs that are necessary, but by greatly increasing their budget deficit. However, emerging countries appear much weaker to face challenges as capital outflows have already reached a record level of around $100 billion since the beginning of the crisis, making it difficult for them to access financial markets. Already many countries are seeking assistance for emergency funding from the IMF, which also intends[3] to fully mobilise its total lending capacity of $1 trillion, as well as to provide additional foreign exchange facilities. The World Bank also plans to allocate up to $160 billion of capital over the next 15 months as part of an economic support programme for countries to deal with the new coronavirus crisis.[4]

Table 2.1 lists annual GDP changes in the world economy and in selected developed and developing countries for 2019, while the forecasts for 2020 and 2021 are based on the OECD interim report published on 2 March. Therefore, they were carried out in the early stages of the spread of the new coronavirus, so they do not incorporate the effects of the rapid spread that followed.

Subsequently, we analyse the pre-crisis trends in the economies of the major states and associations of states. Policy interventions to address the health crisis are also mentioned.

Among developed countries, the US economy maintained its momentum in the fourth quarter of 2019 with an annual growth rate at 2.3%, up from 2.1% in the previous quarter. Private consumption (2.7% annual growth) had the largest contribution to GDP growth (2.7% annual growth), followed by public consumption (2.3% annual growth), while fixed capital formation remained sluggish (1.0% growth). In the whole of 2019, the U.S. economy grew at a rate of 2.3%, from 2.9% in 2018 and 2.4% in 2017. After the outbreak of the coronavirus crisis, the US gradually began to impose measures against its spread, such as travel restrictions, social distancing, closing schools, bars and restaurants, declaring an emergency in some states. Also, in order to mitigate the economic effects of the above policies, the federal government took financial support measures of $2.3 trillion (approximately 11% of GDP). These include transfers to households, loans to large and small enterprises, aid to state and local governments, support for public health services.

In the Eurozone, annual GDP growth was marginally lower in the fourth quarter of 2019, at 1.0%, from 1.2% in the previous quarter, while on average last year its GDP increased by 1.2%. In Germany, GDP grew by just 0.5% in the fourth quarter of 2019 compared to the respective quarter of 2018, while in France and Italy, growth slowed to 0.9% and 0.1% respectively (from 1.5% and 0.5% in the preceding quarter). Europe was the second geographical region after China that was affected by the coronavirus, which spread rapidly to some of its countries (Italy, Spain). Most countries have taken various measures to halt the spread of the virus, from travel restrictions to closing schools, businesses in non-core sectors and bans on large gatherings.

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[3] Source: https://www.imf.org/en/News/Articles/2020/03/23/pr2098-imf-managing-director-statement-following-a-g20-ministerial-call-on-the-coronavirus-emergency

[4] Source: https://www.worldbank.org/en/news/feature/2020/04/02/the-world-bank-group-moves-quickly-to-help-countries-respond-to-covid-19

Measures in favour of teleworking have also been promoted. At EU level, €37 billion have been raised as liquidity-enhancing measures through the Structural Funds (0.3% of EU GDP), while the European Commission activated the general escape clause in the EU's fiscal rules (Stability and Growth Pact), giving member states flexibility to make additional costs due to the crisis. In addition, on April 9, the Eurogroup agreed on financing actions totalling up to € 540 billion to support health systems, protect workers and jobs, and strengthen small and medium-sized enterprises. Among the eurozone countries, Germany's central and local governments took measures totalling €204 billion (6.4% of GDP) in direct support and €888 billion (26.9% of GDP) in loan guarantees. France announced a budget package of €45 billion (about 2% of GDP, including liquidity measures) and €300 billion (about 13% of GDP) in loan guarantees for liquidity supply by local governments. Italy adopted a €25 billion fiscal emergency package (1.4% of GDP) which, among other things, includes measures to boost credit, in view of allocating up to €350 billion (20% of GDP) of liquidity to businesses and households.

Table 1.1

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*
World	2.9	2.4	-0.5	3.3	0.3
USA	2.3	1.9	-0.1	2.1	0.1
Japan	0.7	0.2	-0.4	0.7	0.0
Canada	1.6	1.3	-0.3	1.9	0.2
United Kingdom	1.4	0.8	-0.2	0.8	-0.4
Eurozone	1.2	0.8	-0.3	1.2	0.0
Germany	0.6	0.3	-0.1	0.9	0.0
France	1.3	0.9	-0.3	1.4	0.2
Italy	0.2	0.0	-0.4	0.5	0.0
Russia	1.0	1.2	-0.4	1.3	-0.1
Turkey	0.9	2.7	-0.3	3.3	0.1
China	6.1	4.9	-0.8	6.4	0.9
India	4.9	5.1	-1.1	5.6	-0.8
Saudi Arabia	0.0	1.4	0.0	1.9	0.5
Brazil	1.1	1.7	0.0	1.8	0.0

* Difference in percentage points compared with Economic Outlook, Volume 2019, Issue 2, OECD, November 2019

Source: Interim Economic Assessment, OECD March 2020

In the United Kingdom, GDP grew by 1.1% in the fourth quarter of 2019, compared to 1.2% in the previous quarter. The slowdown is mainly due to contraction in fixed capital investment and weaker household consumption growth. At the same time, public consumption increased at a higher rate and net external demand contributed positively to GDP, with the country recording a trade surplus for the first time in more than two decades. In all, in 2019, the UK economy grew by 1.4%, after growth of 1.3% in 2018 and 1.9% in 2017. The country's government was initially reluctant to take steps to prevent the coronavirus from spreading. Following updated projections on the number of victims, the UK government implemented a range of measures that include travel restrictions, social distancing, the closure of entertainment venues, hospitality and non-core stores. It also took financial measures totalling £350 billion (15.8% of GDP), of which £330 billion (14.9% of GDP) relate to a government-guaranteed loan programme.

In Japan, GDP shrank by 0.7% year-on-year in the fourth quarter of 2019, from a 1.7% increase in the previous quarter, as the increase in value added tax coupled with the deadly hurricane in October hit consumption and business investment. The Japanese government launched a ¥26 trillion package (around 4.8% of GDP) in December 2019 to stimulate the economy. Japan is one of the first countries where the coronavirus appeared, but remains among the least affected developed countries. In response to the pandemic, measures have been taken to protect health and limit the spread of the virus, such as travel restrictions, cancellation of public events, teleworking, school closures and social distancing measures. Also, the Olympic Games scheduled for this year have been postponed to 2021. As regards fiscal stimulus measures, the Japanese government, in addition to the package of measures in place, adopted two additional measures due to coronavirus epidemic in February and March, totalling ¥446 billion (0.1% of GDP). However, a further support package of ¥108 trillion was recently announced on 7 April (20% of GDP) of which ¥39.5 (7.3% of GDP) relates to direct public expenditure.[5]

Next, in the current sub-section, we present the latest trends and economic policy challenges in five developing economies and economic regions that produce in total almost 1/3 of the world's GDP.

In detail, China's economy grew at an annual rate of 6.0% in the fourth quarter of 2019, as in the previous quarter, while overall in 2019 it grew at a rate of 6.1%. Trade pressures from the US as well as sluggish demand - domestic and external - have led to the lowest growth rate in the last 29 years. In early 2020, China was hit hard by COVID-19 and it imposed strict restraint measures, including lockdown of the Hubei province, large-scale travel restrictions at the national level and social distancing. It also took fiscal stimulus measures with an estimated amount of RMB 1.3 trillion (1.2% of GDP) to address the coronavirus effects. However, the overall amount of assistance is significantly higher, given the recent additional investment initiatives, the health system strengthening and automated fiscal stabilisers.

India's economy grew at a rate of 4.8% year-on-year in the fourth quarter of 2019, from 5% in the previous quarter, remaining in a slowdown for the sixth consecutive quarter, as fixed investment and exports fell stronger, in contrast to domestic demand which slightly accelerated. In response to COVID-19, the government has taken several measures, most recently a total lockdown across the country, while stimulus measures have been announced, estimated at around 0.8% of GDP.

Russia's gross domestic product grew by 2.1% year-on-year in the fourth quarter of 2019, accelerating from the previous quarter (1.5%). The acceleration is due to an increase in fixed investments of 12.1% year-over-year, from 3.2% in the previous quarter. Regarding the coronavirus, the authorities are taking measures to halt its spread, while the cost of the fiscal package taken is estimated at around 1-1.5% of GDP. The Russian economy has recently been hit by the collapse in oil prices, due to the dispute with Saudi Arabia over the extent of its daily

[5] Source: https://www.reuters.com/article/us-health-coronavirus-japan/japan-declares-state-of-emergency-nearly-1-trillion-stimulus-for-coronavirus-idUSKBN21P067

production cuts, to cope with pressures on oil prices. The resulting instability in the financial markets is exacerbating the country's economic situation.

Turkey's economy recorded a growth rate of 5.9% year-on-year in the fourth quarter of 2019 and 1% for the full year. The impetus came mainly from domestic demand, especially private consumption, which has benefited from declining unemployment and inflation, although both are still high. To limit COVID-19, the government adopted various measures, including social distancing, travel restrictions, closing school, shops and entertainment venues. The government announced a package of TL100 billion consisting of fiscal measures (1.5% of GDP) and credit guarantees (0.5% of GDP). In the past month, capital outflows were particularly high (as in other large emerging economies), significantly weakening the local currency. The 10-year bond yield rose to 14.33% in early April from about 10% a month earlier and the central bank's foreign exchange reserves fell by $10 billion.

In Latin America, growth for the whole 2019 is estimated at 0.1%. In the fourth quarter of 2019, Brazil's economy grew at an annual rate of 1.7% from 1.2% in the previous quarter, while Argentina's economy remained weak with a negative growth rate of 0.5%. In Chile, growth shrank by 2.4% in the fourth quarter of 2019 compared to the corresponding quarter of 2018, amid social unrest. To address COVID-19, the Brazilian authorities took measures to mitigate the spread of the virus, such as travel restrictions, school closures and restrictions on non-core services. In addition, in order to mitigate the economic effects of the above measures, the Brazilian authorities announced a package of fiscal measures of 3.5% of GDP, while banks are providing credit lines of up to 2.5% of GDP.

In the midst of the health crisis, monetary policy worldwide is acting supportively to limit the impact on the banking system and financial markets. In particular, the FED cut its key interest rate by 150 basis points to the range of 0-0.25%, while announcing a new $700 billion quantitative easing (QE) programme ($500 billion in government bonds and $200 billion for mortgages loans). At the same time, it provides bank lending facilities and boosts the liquidity of other countries' central banks in dollars through swap lines. Since the first phases of the spread of the corona in the Eurozone, ECB has pledged additional liquidity injections of €870 billion (7.3% of the Eurozone's GDP) in financial markets to address current, unprecedented challenges.[6] It also provides liquidity of up to €3 trillion (about 25% of the Eurozone's GDP) through refinancing operations with very low interest rate of up to -0.75%. For its part, the European Banking Authority (EBA) has approved the release of additional funds of €120 billion, as estimated necessary to support the lending capacity of Euro area banks. The next sub-section presents extensively policy decisions in the European Union and the Eurozone to tackle the pandemic.

[6] Source: https://www.ecb.europa.eu/press/blog/date/2020/html/ecb.blog200319~11f421e25e.en.html

B. The Economies of the EU and the Euro area

- Growth rate in the EU and the Eurozone in the fourth quarter of 2019 lower than in the previous quarter: 1.2% and 1.0%, in the EU and Eurozone versus 1.5% and 1.2% in the EU and Eurozone in the corresponding quarter of 2018
- Negative contribution of net exports to growth in the period October - December in the Eurozone and the European Union
- Unexpected outbreak of the new coronavirus in Europe. Unprecedented measures restricting activity and international passenger transport to protect public health.
- Efforts to coordinate countries at EU and Eurozone level for policy interventions to support the exit from the health crisis. Possible impact of Member States' fiscal policies on the soundness of public finances.
- It is impossible to safely predict the impact of the pandemic on GDP as long as it continues unabated and there are no cures/preventive measures (vaccine)

In the fourth quarter of 2019, the economies of the European Union and the Eurozone grew at a slower pace than in the previous quarter, by 1.2% and 1.0% respectively, compared to 1.5% growth in the EU-27 and 1.2% in the Eurozone a year earlier. According to the latest ECB forecasts,[7] before the outbreak of the coronavirus pandemic in Europe, annual GDP growth would have fallen to 0.8% in 2020 from 1.2% in 2019, while it would have increased to 1.3% in 2021. Regarding inflation, it was expected to reach 1.1% in 2020 and 1.4% in 2021. It should be noted that these forecasts were made at an early stage of the health crisis in Europe, before extensive restrictive measures were taken in economic activity and international transport. Therefore, they do not take into account the economic consequences of the rapid spread of the coronavirus that followed. No forecasts have been released for the EU so far, including the negative impact of the pandemic.

The prospects for economic activity in the euro area have deteriorated sharply since the pandemic, with unprecedented for many decades intensity, in many of its strongest economies (Italy, Spain, France). However, there is still high uncertainty as to its economic impact, as its duration and whether it will resurge in the future, for example in the autumn, remains unknown. Measures to address the public health threat taken in most countries (restrictions on the movement of people, closure of businesses in many sectors, mainly in those providing services to final consumers, suspension of the international passenger transport) will have a profound negative effect on economic activity. But as long as the crisis lasts, government support policies will severely burden each country's fiscal balance. They may lead to a downgrade of the debt of some EU countries by rating agencies and to some difficulties in accessing capital markets. In this section of the text, we present measures to address the impact of the new coronavirus pandemic by European institutions (Box 2.1).

As regards developments in the European Union economies in the final quarter of 2019, growth was supported, as in the previous quarter, by domestic demand, with the positive contribution

[7] ECB staff macroeconomic projections for the euro area, March 2020

of investment increasing, from 0 percentage points of GDP in the third quarter last year to 0.6 percentage points in the next, while that of private consumption falling to 0.8 percentage points of GDP from 1.0 percentage points in the preceding quarter. The impact of net exports on GDP change in the fourth quarter of 2019 was negative, by 0.7 percentage points, compared with a negative effect of 0.4 percentage points in the same quarter last year. Slightly different are the trends in the structure of growth in Euro area economies, with domestic demand being its main driver and even strengthened compared to the previous quarter, to 1.7 percentage points of GDP from 1.2 percentage points in the third quarter of 2019. There was a positive contribution of investment in the fourth quarter last year, by 0.7 percentage points, from marginally negative in the third quarter (-0.1 percentage points), but stronger than a year ago (+0.9 percentage points). The contribution of consumption decreased slightly compared to the previous quarter, to 0.7 percentage points from 0.8 percentage points. In addition, in this quarter, the contribution of net exports to the euro area GDP growth was negative, at 0.7 percentage points of GDP, while in the previous quarter it was marginally positive (+0.1 percentage points).

The structure of the GDP components on the expenditure side remains similar in the EU-27 and the Eurozone, with consumption accounting for 74.4% and 74.6% of GDP respectively, investment accounting for 22.4% and 22.2%, exports 51.3% and 50.0%, and imports 48.1% and 46.8% of GDP.

The highest growth rates in the EU-27 in the fourth quarter of 2019 (annual changes in seasonally adjusted data) were recorded in Ireland (6.3%), Hungary (4.6%) and Malta (4.3%). Greece, with 1.0%, found itself at the average growth of the Eurozone. The lowest growth rates were recorded in Italy (0.1%), Germany (0.5%) and Finland (0.6%). In terms of the 12-month rolling average, Greece showed a growth rate of 1.9%, higher than the EU-27 (1.5%) and the Euro Area (EA - 1.2%) averages. Greece grew faster than the Netherlands, Austria and Belgium, which grew at a rate of 1.8%, 1.5% and 1.4% in the 12-month period, respectively, in the fourth quarter of 2019. The country with the lowest growth rate, on a twelve-month basis, was Italy (0.3%), with Germany (0.6%) and Finland (1.0%) also posting low rates. By contrast, the countries with the highest (12-month rolling) average growth rate in the EU-27, according to the latest data available, were Ireland (5.6%) and Hungary (5.0%).

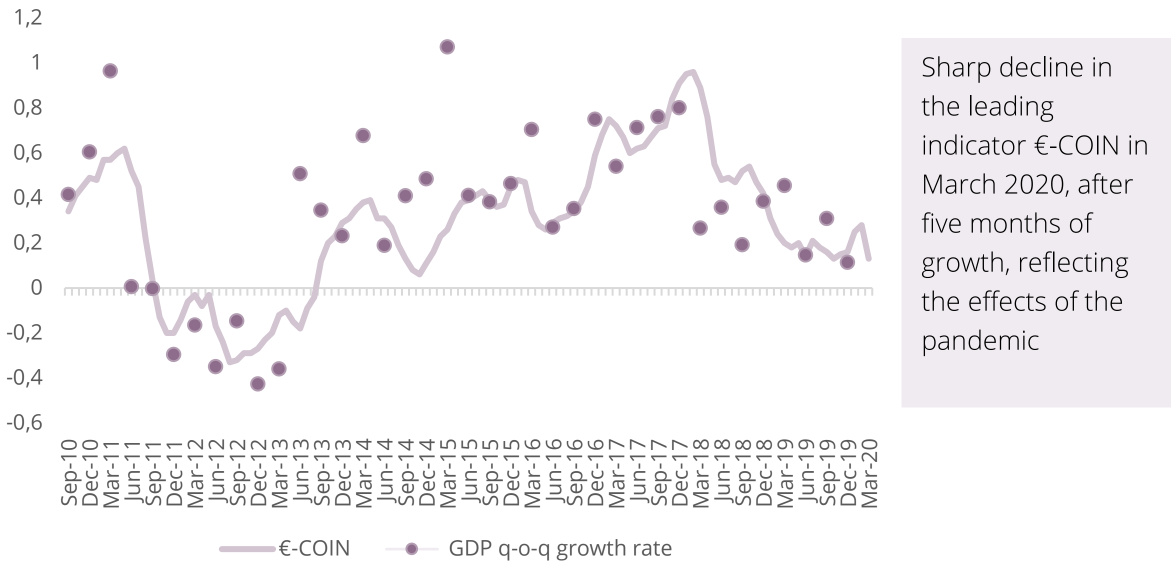
In terms of economic climate trends and key economic activity leading indicators in the Eurozone and the European Union, the €-COIN index increased in the first quarter of the year under review, to 0.22 points from 0.15 points in the previous quarter. That said, it was lagging behind in the first quarter of last year (0.25). But in March the index fell sharply, from 0.28 to 0.13 points, the second lowest since November 2014. This development is thought to reflect the onset of the negative effect on the economic climate due to the pandemic of the new coronavirus.

The European Commission's economic sentiment indicator for the EU-27 and the Eurozone fell further in the period January - March 2020 for the ninth consecutive quarter, from its highest level since 2000 in the fourth quarter of 2017. While in the first two months of 2020 the indicator increased, in March it fell significantly, to 94.8 points in the EU-27 and 94.5 points in the Eurozone, down 8.2 and 8.9 points respectively compared to the previous month. In addition, it stood at 10.4 and 11.1 points lower than a year ago, respectively.

Overall in the first quarter of 2020, the EU indicator was 0.7 points lower than in the previous quarter and 5.5 points lower than in the corresponding quarter of 2019. In the Eurozone, the economic sentiment indicator was 0.4 points lower than in the previous quarter and 5.9 points below its value in the same period in 2019. Among the largest EU economies, France in the first quarter of 2020 saw a strengthening of the economic sentiment indicator compared to the fourth quarter of 2019 by 1.4 points, while compared to the first quarter of 2019 the indicator was 1.9 points higher.

Figure 1.1

Monthly €-COIN Index & Eurozone GDP



Source: CEPR and Bank of Italy

The economic sentiment also deteriorated against the fourth quarter of 2019 in Germany by 0.3 points, while this indicator was 9.5 points lower than in the first quarter of the previous year. In Italy, the indicator decreased significantly compared to the previous quarter by 4.9 points, while it also decreased compared to the corresponding quarter of 2019 by 6.2 points. Finally, in the period January - March 2020, the economic sentiment indicator in Greece was at a higher level than in the previous quarter, by 1.9 points. In addition, in February the indicator was at its highest level since the first quarter of 2008, at 113.2 points, while in March it declined, at 109.4 points, 8.1 points higher than a year earlier.

More information on trends in the euro area and EU GDP figures in the fourth quarter of 2019 and other macroeconomic variables is given below in this section. Regarding their projected trends for this and next year, due to the recent spread of COVID-2019 in Europe, there are currently no forecasts that incorporate its impact.

In detail, according to Eurostat data for the fourth quarter of 2019 (annual changes in seasonally adjusted data), private consumption in the European Union increased by 1.6%, an increase lower than in the previous quarter (1.8%), compared to an increase of 1.5% in the respective quarter last year. In the Eurozone, household consumption increased by 1.2%, from 1.5% in the previous quarter, posting the same growth as a year earlier. At country level, in Germany private consumption was 1.4% higher, a rise lower than in the previous quarter (2.0%), in France its growth remained unchanged compared to the previous quarter, at 1.4%, and in Italy it was unchanged at 0%, from an increase of 0.7% a quarter before. In the United Kingdom and Spain, there was a marginal slowdown compared to the previous quarter to 1.2% from 1.3% in both. In contrast, Greece saw a significant acceleration in growth compared to the third quarter, from 0.6% to 1.8%.

Table 1.2

Economic Climate Index EU-28 & Euro Area (av. 1990-2017=100)

Month	Apr-18	May--18	June-18	July-18	Aug-18	Sept-18	Okt-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
EE-27	111.7	111.8	111.7	111.5	111.5	110.7	110.1	109.3	107.5	106.2	105.4	105.2
Euro area	112.2	111.5	111.8	111.2	111	110.4	109.7	109.5	107.4	106.3	106.2	105.6

Month	Apr-19	May-19	Jun-19	July-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20
EE-27	104	105	103.1	102.4	102.7	101.3	100.4	100.9	101	102.5	103	94.8
Euro area	103.6	105	102.9	102.3	102.6	101.1	100.2	100.7	100.9	102.6	103.4	94.5

Source: European Commission (DG ECFIN), April 2020

The expansion of public consumption strengthened marginally in the EU in the fourth quarter of 2019 compared to the previous quarter, while in the Eurozone it slowed. In particular, it increased in the period October - December by 2.1% and 1.8%, from 2.0% in both. In the fourth quarter of 2018, public consumption rose by 1.0% in the Eurozone and 1.1% in the EU-27. In the last quarter of last year there was a decrease in public consumption in Greece by 1.4%, while in the previous quarter it was unchanged compared to a year earlier.

Investment strengthened in the EU in October-December 2019 at a rate of 2.7%, when in the previous quarter it was virtually unchanged (0.1%). Similarly, in the Eurozone in the fourth quarter it increased at a rate of 3.3%, compared to a decrease of 0.3% in the previous quarter. However, in the fourth quarter of 2018 investment increased by 4.2% in the EU and by 4.1% in the Euro area. In the final quarter of last year, investment contracted by 3.9%, following a 7.0% decrease in the previous quarter, and in Italy, by 4.2%, from a 1.9% fall in the fourth quarter the year before last. Investment expansion in France slowed to 0.9%, from 2.8% in the previous quarter. In Greece, the downward trend intensified to 7.1%, from a contraction of 5.7% in the third quarter of 2019.

The growth in exports of goods and services weakened in the fourth quarter of 2019, to 1.9% in the EU and 2.0% in the EA, compared with an increase of 3.0% and 2.7% respectively in the previous quarter, and 2.3% and 1.7% respectively in the fourth quarter of 2018. At a country level, in Germany, there was a decline in the expansion of exports to 1.0% from 1.4% in the third quarter of 2019. In France exports shrank by 0.2% in the quarter under review, from a 1.8% increase a quarter ago. The expansion of exports in Italy in the fourth quarter of 2019 was 0.4%, from 0.9% in the previous quarter. Greece saw a sharp slowdown in the growth of exports in the fourth quarter of 2019, to 1.0% from 9.2% a quarter earlier. Exports slowed slightly in the fourth quarter of 2019 in Spain, to 3.3% from 3.6%, and in Cyprus, to 6.5% from 9.9% in the previous quarter.

Table 1.3

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

	EU-27			Eurozone		
	2018	2019	2020	2018	2019	2020
GDP*	2	1.5	1.4	1.9	1.2	1.2
Private Consumption	1.6	1.4	1.5	1.4	1.1	1.2
Public Consumption	1.2	1.8	1.7	1.1	1.6	1.5
Gross Investment	2.5	3.8	1.8	2.3	4.3	2.0
Exports of Goods and Services	3	2.5	2.3	3.3	2.4	2.1
Imports of Goods and Services	2.9	3.3	2.8	2.7	3.2	2.6
Employment	1.4	1.0	0.5	1.5	1.1	0.5
Unemployment (% labour force)	6.8	6.3	6.2	8.2	7.6	7.4
Inflation*	1.9	1.4	1.4	1.8	1.2	1.3
Balance of General Government (% GDP)	-0.7	-0.9	-1.1	-0.5	-0.8	-0.9
Debt of General Government (% GDP)	81.9	80.6	79.4	87.9	86.4	85.1
Current Account Balance (% GDP)	2.2	1.9	1.8	3.8	3.3	3.2

* Source: European Economic Forecasts, Winter (Interim) 2020 European Commission, February 2020

Source: European Economic Forecasts, autumn 2019, European Commission, November 2019

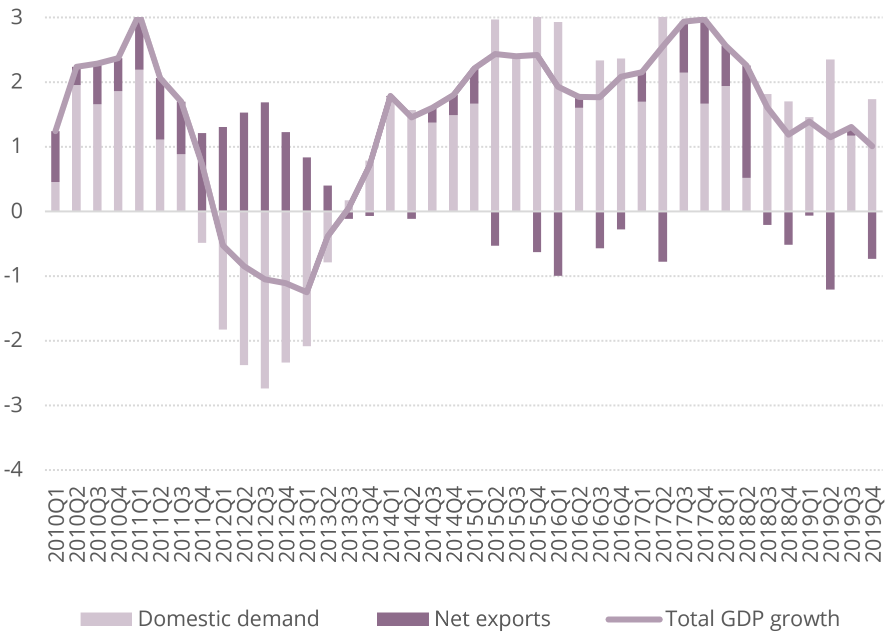
Import growth accelerated in the EU in the fourth quarter of 2019 compared to the preceding quarter, to 3.4% from 2.8%. Similarly, in the Euro area imports increased at a rate of 3.8%, from 2.6% a quarter earlier. Their expansion rate is unchanged and higher than a year earlier, respectively, from 3.4% in the EU and 3.1% in the Eurozone. At a country level, import growth slowed in the fourth quarter of 2019 in Spain, to 2.1% from 2.7% in the previous quarter. In France imports increased by 2.8%, from 1.9% and in Italy by 1.6%, from 1.0%. There was a slowdown in Germany, to 1.1% from 2.7% in the third quarter of 2019. In Greece, imports decreased less than in the previous quarter by 0.3%, compared with an earlier fall of 2.8%.

Based on the developments in the GDP components in the Eurozone, the contribution of net exports to its growth was negative in the fourth quarter of 2019 (0.7%), while in the third quarter it was marginally positive and equal to 0.1% and negative in the fourth quarter of 2018, at about 0.5%. The negative contribution of net exports came from the simultaneous decrease in the contribution of exports, from 1.3 p.p. of GDP in the third quarter to 1.0 p.p. the next, as well as the stronger negative contribution of imports, from 1.2 p.p. to 1.7 p.p. in the final quarter of 2019. The positive contribution of domestic demand was of the order of 1.7 p.p. of GDP, stronger compared to the previous quarter (1.2 p.p.). The increase came mainly from investment, which contributed 0.7% of GDP in the fourth quarter of 2019 compared to a negative contribution of 0.1% in the third quarter of 2019.

Figure 1.2

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

Negative contribution of net exports to GDP growth in the Euro area in Q4 2019. Domestic demand had a positive and growing contribution, due to rising investment



Source: Eurostat

Harmonised inflation remained stable in the fourth quarter of 2019 in the EU and the Euro area, recording a rate of 1.3% and 1% respectively. In the fourth quarter of 2018, harmonised inflation was 2.0% and 1.9%, in the EU and EA respectively. In March, harmonised inflation in France and Italy increased by 0.7% and 0.1%, compared with March 2019, while in Greece it was also 0.1%.

EU employment growth was slightly higher in the fourth quarter of 2019 compared to the previous quarter, 1.0% from 0.9%, but in the EA it was stable, at 1.1% respectively. In both areas it was less than a year earlier (1.2% and 1.4% respectively). The strongest increase in employment in the fourth quarter of 2019 was recorded in Malta (5.3%), in Luxembourg (3.5%), Ireland (3.4%), Cyprus (3%) and Spain (2.0%). In Greece, the employment expansion reached 1.5%. The lowest expansion was posted in Portugal (0.2%) and Sweden (0.5%), while in the Czech Republic employment remained stable.

Unemployment increased slightly in the fourth quarter of 2019 in the EU and the Eurozone, to 6.6% and 7.4% respectively, compared with 6.5% and 7.3% in the previous quarter. In the fourth quarter of last year it was at 7.1% in the EU and 7.9% in the EA. In October - December 2019, the highest unemployment rate was recorded, for another quarter, in Greece (16.8%), followed by

Spain (13.8%) and Italy (9.9%), while in France unemployment was at 8.4% and in Germany at 3.1%.

With regard to fiscal performance, the latest data relate to the third quarter of last year. According to these data, the general government balance deficit in the EU-27 in the third quarter of 2019 decreased to -0.7% of GDP, compared to -0.6% in the second quarter of 2019. As regards government debt, it stood at 86.1% of GDP in the third quarter of 2019. It is estimated to decline in 2019 and next year, to 86.4% and 85.1% of GDP respectively. Despite the progress, government debt remained particularly high in the third quarter of 2019 in several Member States, marking the highest level, as a percentage of GDP, in Greece (178.2%), Italy (137.3%), Portugal (120.5%), Belgium (102.3%) and France (100.5%).

With regard to the monetary policy framework, due to the pandemic of COVID-19 and related adverse economic effects, the ECB has taken extraordinary measures to boost liquidity. In particular, it established a Pandemic Emergency Purchase Programme (PEPP) with a budget of €750 billion. The PEPP collectively supports the provision of bank loans, in particular by facilitating the conditions under which credit receivables are accepted as collateral. 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. Box 2.1 details the programme and other exceptional liquidity-enhancing measures adopted by the ECB.

In March, the ECB announces that it will maintain its key lending rate (0.25%) until inflation appears to converge to a level below 2.0%. Recall that as of 1 November 2019 the ECB has restarted the purchases of bonds and other assets worth €20 billion, per month, for as long as this is deemed necessary (QE 2) and that they will expire shortly before it starts to raise its key interest rates. The amounts from the repayment of the held securities will continue to be fully reinvested under the APP (Asset Purchase Programme) at maturity for an extended period after the date on which the ECB will start raising key interest rates.[8]

In brief, the economy in Europe, and in the Eurozone in particular, is currently facing a number of challenges, and mainly:

- Addressing the pandemic of the new coronavirus, the implementation, as well as the process of removing administrative measures to protect public health, the implementation of the liquidity-enhancing actions of the European Commission and the European Central Bank
- Eurozone member countries agreement on economic policies for exit from the health crisis
- The sharp decline in international trade
- The final implementation of the UK-EU withdrawal agreement and its terms. They concern issues such as the rights of European citizens in the United Kingdom, the financial settlement and the agreement on the terms of trade.
- Geopolitical tensions in the Middle East and migration flows

[8] Press Release «Monetary Policy Decisions», ECB, October 2019

Box 1.1

Pan-European economic measures to support EU economies

The COVID-19 pandemic in Europe has led to a series of measures aimed at protecting public health, such as restricting travel and temporarily business closures. These measures, although necessary to delay the spread of the disease, are expected to hit the economy significantly. To address the expected recession in a timely manner, the European Central Bank (ECB), the European Investment Bank and the European Commission have taken economic measures that could alleviate and limit the adverse effects on economic growth.

The ECB's €750 billion PEPP (Pandemic Emergency Purchase Programme) commenced across the Eurozone in March. This is an emergency measure aimed at addressing the serious risks that the current pandemic poses to the monetary policy transmission mechanism and the prospects for the euro area in general arising. It concerns the purchase of private and public securities and its duration is not predetermined as it depends on the COVID-19 epidemic, however it will certainly last at least until the end of 2020.

The securities selection criteria will be similar to the existing asset purchase programme (APP). An important element of the new PEPP is the participation of Greek bonds in the central bank's purchase programme; in particular there will be a waiver in the eligibility criteria of securities issued by the Greek government. Recall that under the APP, Greek securities were not and remain ineligible. Purchases under the PEPP began on 26 March 2020. The distribution of public sector securities depends on the capital key of the national central banks, which in the case of Greece corresponds to a liquidity boost in the bond market through purchases of approximately €13 billion. However, PEPP is designed with flexibility targeted to deal with the specific situation caused by COVID-19 and it will allow fluctuations in the distribution of asset purchases over time, in all categories of securities. Therefore, there is no strictly pre-determined distribution of securities from the public and private sectors. Under PEPP, government securities with a remaining maturity ranging from 70 days to 30 years and 364 days can be purchased. For securities from the private sector that are eligible under the CSPP, the remaining duration is between 28 days to 30 years and 364 days. There are no relevant restrictions for eligible securities under ABSPP and CBPP3.

Furthermore, the ECB announced the extension of the range of eligible securities under the Corporate Sector Purchase Programme (CSPP) to non-financial corporate securities. It is also going to relax the conditions of eligible collaterals by adjusting the basic risk parameters of the collateral. In particular, the ACC’s scope is extended to include requests related to the financing of the business sector. This will ensure that counterparties can continue to make full use of the Eurosystem's refinancing functions.

The European Commission has launched an investment initiative to address the economic impact of the COVID-19 pandemic (Coronavirus Response Investment Initiative - CRII). Its aim is to mobilise cohesion policy and to respond flexibly to rapidly emerging needs in the most exposed sectors, such as healthcare, small and medium-sized enterprises (SMEs) and the labour market, and to help the worst affected areas of the Member States and their population. To this end, on 13 March 2020, the European Commission presented a series of proposals to amend the legislation that would allow Member States to benefit from more targeted, financial assistance. The measures entered into force on 1 April 2020.

Thanks to this initiative, the Member States can directly address three key priorities: health care spending, support for short-term work programmes and support for the working capital of SMEs. To make this resources available, the Commission proposed the rapid mobilisation of cash reserves from EU funds. The Commission proposed that expenditure related to COVID-19 under the Structural Funds become eligible from 1 February 2020. This will provide immediate liquidity to Member States' budgets and make financing contribution (€37 billion) from resources not yet allocated under the cohesion policy programmes for 2014-2020, thus providing a much-needed boost to investment.

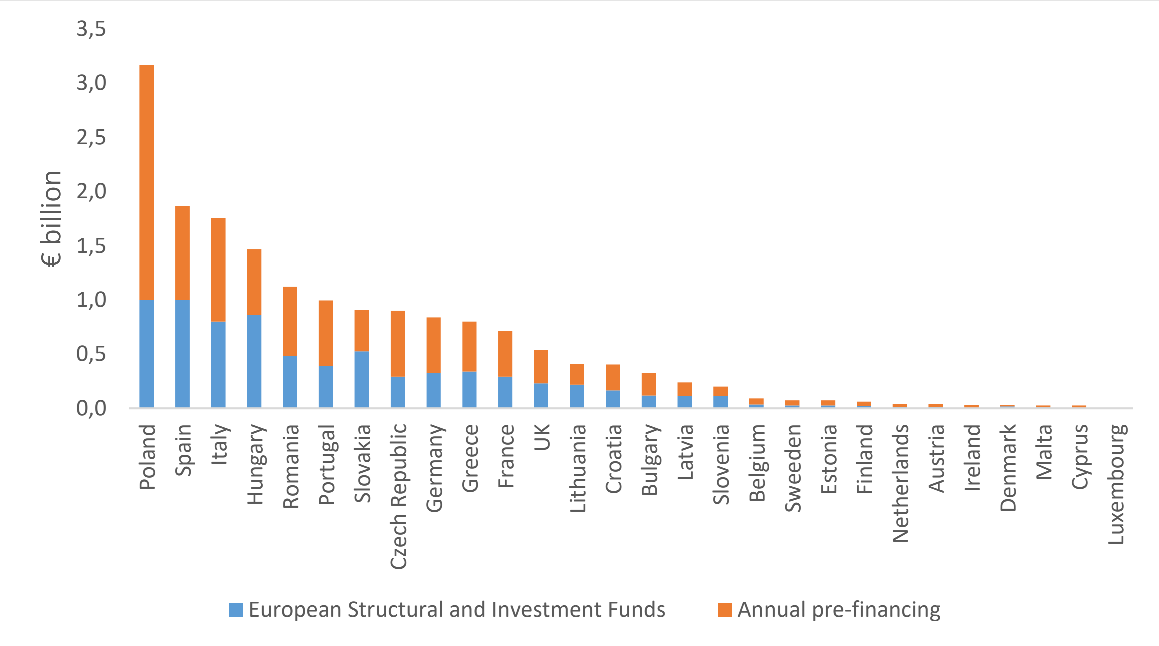
Healthcare costs, such as equipment, medicines, testing and treatment facilities, prevention and awareness raising, the provision of protective equipment, medical devices, can be covered by the European Social Fund (ESF). The ESF can also support short-term labour arrangements and community interventions for relief of vulnerable social groups. The European Regional Development Fund (ERDF) can support the financing of working capital in SMEs, where necessary to address short-term financial difficulties, including through grants.

The EU Solidarity Fund will provide additional assistance of up to €800m to the countries most affected, in order to mitigate the economic burden of the immediate response measures. In order to protect jobs and workers affected by the COVID-19 epidemic, the European Commission has launched a temporary initiative "Support to mitigate the Risks of Unemployment in an Emergency (SURE). The SURE initiative will provide financial assistance totalling up to €100 billion to member states in the form of loans granted on favourable terms. These loans will help Member States to cover the costs of domestic short-term work programmes, i.e. public programmes that will enable businesses to reduce working hours while providing income support. Short-term work programmes help maintain household incomes, production capacity and human capital, while strengthening the economy as a whole.

On the protection of SMEs, the European Commission announced that €8 billion of funding will be made available in April as direct financial assistance to small and medium-sized enterprises across the EU. The Commission has allocated €1 billion from the European Strategic Investment Fund as a guarantee to the European Investment Fund to provide incentives to local banks and other lenders to provide liquidity to at least 100,000 European SMEs. At the same time, the European Investment Bank has proposed a €40 billion package to finance SMEs, through existing guarantee schemes co-financed by the EU budget (€20 billion), emergency credit lines for working capital (€10 billion) and purchases of securitised loans with collateral (€10 billion), and on 3 April 2020 it adopted the EU Member States' proposal to create a new €25 billion guarantee fund to facilitate funding of up to €200 billion, aimed at addressing the effects of the pandemic.

Figure 1.3

European initiative to tackle COVID-19, direct support from Member States



Source: European Commission. Data processing: IOBE

Note: This graph includes only the direct support of Member States which is a subset of the initiatives described in this Box.

Finally, regarding the fiscal rules, the European Commission has for the first time activated the general escape clause of the Stability and Growth Pact (SGP) as part of its strategy to respond quickly, dynamically and in a coordinated manner to the COVID-19 pandemic. This will allow Member States to take measures to address the crisis, and to deviate from the fiscal requirements that would normally apply under the EU fiscal framework. Along the same lines, the European Stability Mechanism reinforced the eventuality of supporting Member States with credit lines, should a country request it, corresponding to up to 2% of each country's GDP, and which, overall, could reach €240 billion. These funds will be used to cover the costs of the pandemic. The Commission also decided to approve requests from all Member States and the United Kingdom, to temporarily waive tariffs and taxes on imports of medical and technological products and protective equipment from third countries.

2.2 The Economic Environment in Greece

A. Economic Sentiment

- Slightly stronger Economic Sentiment Indicator in Greece in the first quarter of 2020 compared to the previous quarter (110.7 from 108.8 point). Marked improvement compared to the corresponding quarter of last year (101.8 points). The recent level is the highest since the fourth quarter of 2007.
- Business expectations improved in the last quarter compared to the previous one in Industry and Services, more strongly in Construction, while they declined slightly in Retail Trade
- The Consumer Confidence Indicator was slightly lower, at -10.4 points, than -7.1 points in the previous quarter and -31.1 points a year earlier. The latest performance is the best since the first quarter of 2002.

The IOBE business and consumer surveys offer significant indications on the developments of the economy in the past few months, from the perspective of both the enterprises and the consumers. In addition, the indicators used in the surveys constitute leading indicators for various economic variables and can be used to predict near-term developments and even the course of GDP.[9]

In the first quarter of this year, the Economic Sentiment Indicator strengthened slightly quarter on quarter. This development came from the trend of the indicator during the first two months of this year, before the outbreak of the health crisis in Europe. During this time the economic environment was domestically affected by favourable developments for the Greek economy, such as the reduction in the cost of financing of the Greek State, its credit upgrade by Fitch, the fiscal interventions in the budget for businesses and households, which had the character mainly of a tax relief on their incomes, already from 2019. Under these conditions, the business expectations on near-term demand were optimistic, while households' pessimism significantly eased. The trend of the Economic Sentiment Indicator changed in March due to the pandemic of the new coronavirus, falling 3.8 points, with a deterioration in expectations in all sectors, while the Consumer Confidence Indicator fell from its highest level in 19.5 years recorded in February by 11.7 points, a decrease that is the largest over time between consecutive months. It should be noted that part of the survey in March was carried out before the imposition of lockdown measures in specific sectors and a larger part of it before the measures to restrict the movement of people. Given this, a further, possibly stronger, deterioration of expectations and overall sentiment is likely in the coming months. After all, the health crisis continues to spread rapidly in many countries, which maintains strong uncertainties in the domestic and international economy. The intensity and duration of the pandemic's impact on expectations for the course of

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

the economy will also depend on the effects of successive policy interventions at national and European level.

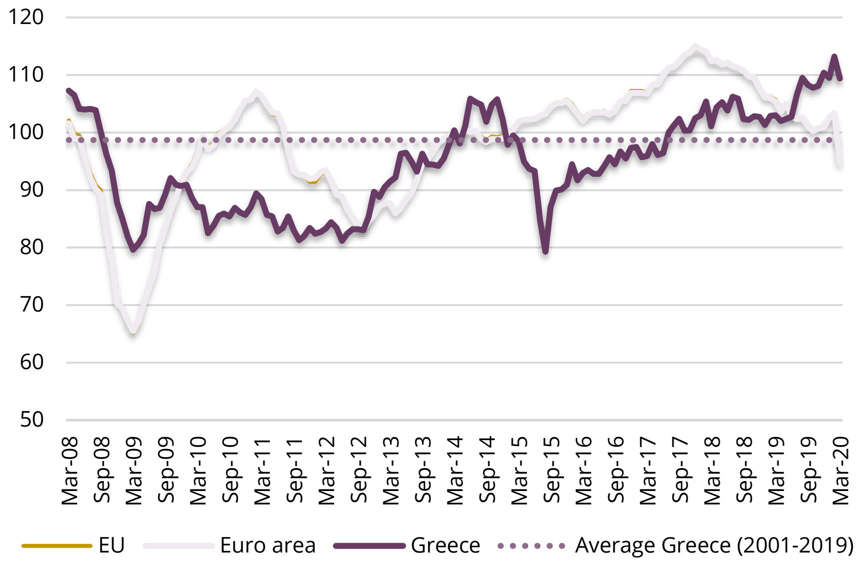
In detail, the Economic Sentiment Indicator in Greece in the January-March 2020 quarter slightly strengthened compared to the final quarter of 2019, at 110.7 points, while it also fluctuated significantly higher than last year's average (101.8 points). This recent level is the highest since the fourth quarter of 2007.

In Europe, the corresponding average indicator was marginally lower during the quarter under review compared to the previous one, both in the EU and in the Eurozone. In particular, the economic sentiment indicator stood at 100.1 (from 100.8) points in the first quarter of this year in the EU, and 100.2 (from 100.6) points in the Eurozone.

Figure 1.4

Economic Sentiment Indicators: EU-27, Euro area and Greece (1990-2017=100, seasonally adjusted data)

The domestic Economic Sentiment Indicator strengthened slightly quarter on quarter, and more significantly year on year in Q4 of 2019



Source: European Commission, DG ECFIN

At a sector level, business expectations in Greece improved quarter on quarter in the first quarter of this year in Industry and more in Construction, while there was a slight decline in Retail Trade and mild increase in Services. On the consumer side, there was a slight deterioration in the consumer confidence indicator. Compared to the same quarter of last year, the indicators strengthened on average in all sectors, mostly in Construction, Services and Consumers, while in Retail and Industry the increase was milder. In more detail:

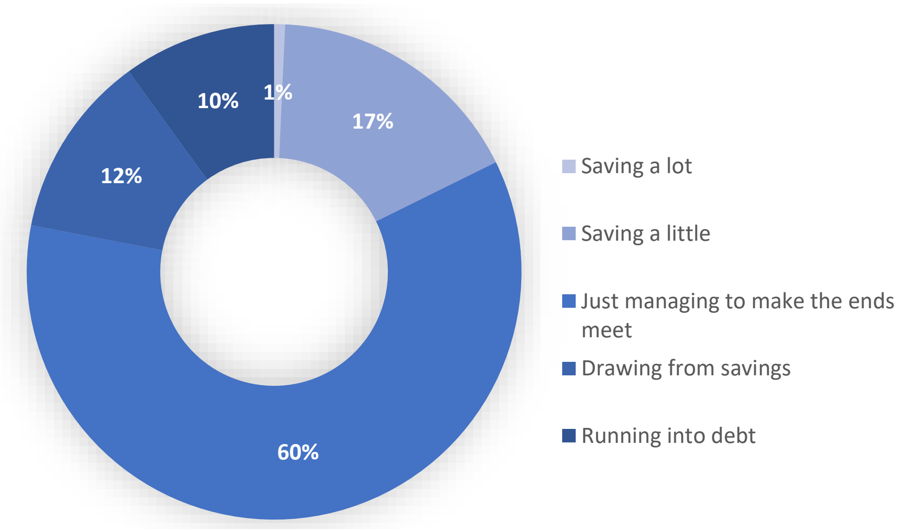
The Consumer Confidence Indicator in Greece in the January-March quarter was slightly lower on average, at -10.4 (from -7.1 in the fourth quarter of 2019), a notably better performance than last year (-31.1 points). The corresponding average index fell marginally in the EU to -7.8 (from -6.7), as it did in the Eurozone (-8.8 from -7.6). These levels are slightly lower than last year (from -6.2 and -7.0 points respectively).

The trends in the individual key components of the overall index were mainly negative in the first quarter of this year compared to the fourth quarter of last year. Thus, both the forecasts of consumers in Greece for the financial situation of their households over the next 12 months and those for the economic situation of the country declined markedly, as did households' assessment of their current situation, while the intention for major purchases in the coming period declined.

More specifically, the percentage of those who are pessimistic about the financial situation of their household in the next 12 months increased significantly, to 29% (from 19% in the previous quarter), while the percentage of those who stated the opposite decreased to 19% (from 30%). Also, the percentage of Greek consumers with downbeat forecasts regarding the country's economic situation has significantly increased to 28% (from 18%), with only 35% (from 50%) expecting an improvement. As for the intention to save, the percentage of households that do not consider any savings as possible in the next 12 months increased slightly, to 80% (from 77%), while respectively the percentage of those who consider it possible decreased to 17% (from 21%). In the unemployment expectations, the percentage of those believing that the situation will worsen increased to 33% (from 23%), with an average of 33% (from 45%) expressing the opposite view. The proportion of consumers reporting to be "running into debt" in the first quarter of 2020 marginally strengthened, to 10% (from 9%), slightly lower than in the same period last year (11%). Also, the percentage of respondents who state that they save a little increased to 17% (from 15% in the same quarter last year). Finally, the proportion of those who report that they "just make ends meet" was unchanged at 60% and the proportion of households reporting that they "draw on their savings" marginally increased to 12% (from 11%), a level mildly higher than in the corresponding quarter of 2019 (10%).

Figure 1.5

Consumer survey data on the financial situation of households (average: January – March 2020)



The share of respondents stating that they save declined quarter on quarter (17%), while the share of those responding that they barely make ends meet remained unchanged

Source: IOBE

The Industry Confidence Indicator stood at 108.6 (from 104.1) points in the first quarter of this year, well above its corresponding performance last year (101.8 points). In the main activity data, the expectations for the short-term development of production significantly strengthened in the examined quarter (+34.0 from +20.0 points on average), while the appraisals for the level of orders and demand deteriorated further (at -9.8 from -7.5 points). The appraisals for the stocks of finished products suggest a slight decline (at +8.9 from +10.5 points), while the trends in the export variables are mixed: the expectations for next year's export dynamics strengthened slightly (+27.6 from +23.5 points), while the current appraisals for the exports of the sector deteriorated (to +7.0 from +12.9 points), as well as the appraisals for the orders and demand from abroad (-5.9 from -4.7 points). In employment expectations, the quarterly balance rose significantly to +14.5 (from +2.3) on average. The rate of utilisation of factory capacity fell slightly, to 71.3% (from 72.8%), while the months of secured production of enterprises were stable, at 5.2 months on average.

Table 1.4

Economic Sentiment Indicator

Time Period	Economic Sentiment Indicator			Business Climate Index				Consumer Confidence Index (Greece)
				(Greece)				
	EU-27	Eurozone	Greece	Industry	Construction	Retail Trade	Services	
2008	92.4	91.9	102.1	96.9	104.8	105.9	104.6	-38.2
2009	76.4	76.6	86.1	76.0	72.0	83.3	75.0	-36.7
2010	99.3	99.1	86.3	79.9	52.2	61.3	68.1	-56.9
2011	99.8	99.9	84.8	81.1	37.7	60.9	66.1	-70.5
2012	88.0	88.1	83.7	81.4	47.5	59.1	58.8	-73.9
2013	90.8	90.8	93.6	92.6	71.5	72.6	75.3	-69.3
2014	99.6	99.4	102.0	99.7	88.4	92.3	93.3	-52.8
2015	102.9	102.9	91.7	86.3	62.0	83.9	78.2	-50.3
2016	104.2	104.0	94.4	96.1	61.3	101.4	79.3	-62.9
2017	110.4	110.4	98.9	98.1	55.4	94.6	92.7	-58.9
2018	111.5	111.5	103.8	102.8	58.1	104.5	97.0	-44.0
Q1 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	100.1	100.2	110.7	108.6	84.9	115.1	106.5	-10.4

Sources: European Commission, DG ECFIN, IOBE

The Retail Confidence Indicator in the quarter under review was slightly lower than the previous quarter, at 115.1 points (from 119.0), a performance higher than in the corresponding quarter of the previous year (105.8 points). Of the index's key variables, the average balance for current sales estimates changed marginally to +41 (from +40) points. Amid the companies in the sector, 18% report that their sales have decreased, with 59% (up from 57%) stating the opposite. In terms of sales expectations, the indicator fell from +48 to +41 points, with stocks strengthening further (at +15 from +7). Of the other activity data, a mild negative trend was recorded in the balance of expectations on orders to suppliers (+32 from +35 points the average quarterly price), as well as for employment in the sector, with the average balance of expectations slightly weakening to +17 (from +23) points. Finally, in terms of prices, the corresponding balance remained positive and further strengthened (+11 from +7 points), with 4% (from 3%) of the companies expressing expectations of price fall and 81% (from 86%) foreseeing price stability. Business expectations were boosted in the first quarter of 2020 in all the sub-sectors of Retail trade, except for Household Equipment and Department Stores.

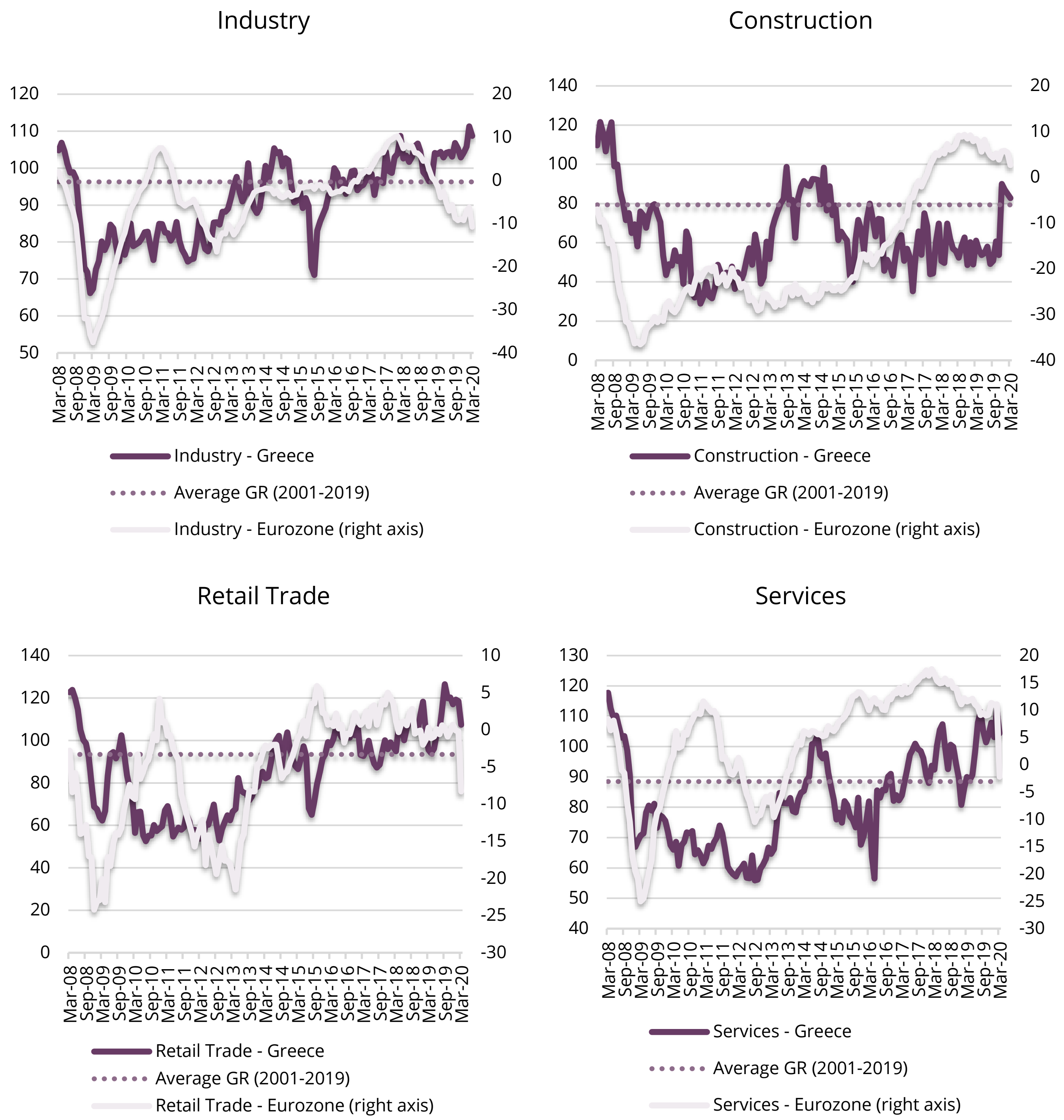
Business expectations in Construction strengthened significantly in the first quarter of this year, with the relative balance rising to 84.8 (from 68.1) points on average. This performance is at a much higher level than in the corresponding quarter of the previous year (56.7 points). In the main variables, the sector's employment expectations improved further, with the balance reaching -22 (from -29) points, as 14% (from 20%) of the businesses were expecting more jobs, while 36% (from 49%) were expect job losses. The expectations for planned work improved (at -31 from -53 points the index), while the appraisals for the current activity level were virtually unchanged (at -8 from -9 points).

The months of secured business activity in the sector remained at 9.0, while the negative balance of selling price expectations intensified (at -14 from -7 points), with 22% (from 16%) of the companies expecting a reduction in the short term and 9% an increase. Finally, the percentage of companies that report that they do not face obstacles in their operation totalled 13% (from 11%), while from the rest of the companies, 26% (from 17%) consider as the major obstacle low demand, 35% insufficient funding and 15% other factors such as the general economic situation of the country, high taxation, lack of projects, delays in payments by the state, etc. At the sectoral level, business expectations slightly improved in the Private Construction sector, while they strengthened significantly in the Public Construction sector.

In Services, the average confidence indicator increased quarter on quarter in the first quarter of 2020, to 106.5 points (from 104.4), to a much higher level compared to the corresponding period of 2018 (85.7 points). Of its key components, the appraisals for current demand marginally strengthened, with the indicator gaining 3 points on average to reach +25 points. By contrast, the appraisals for the current business situation slightly deteriorated (+18 from +21 average balance), with the balance in the short-term demand expectations of the enterprises in the sector significantly strengthening to +29 (from +22) points. Regarding the remaining activity data, the balance of employment expectations strengthened (at +23 from +14 points on average), while in prices, the average index of business expectations increased sharply and stood at +4 (from -4) points. Finally, the percentage of respondents reporting no major obstacles to business operation rose slightly to 32% on average (from 30%), with 29% declaring as main obstacle to operation demand inadequacy, 18% inadequacy of working capital and the remaining 16% factors related to the general economic situation, the inability to borrow, high taxation, delays in payments, etc. At the level of Services sub-sectors, the indicators marginally strengthened in the first quarter of this year in IT Services and Various Business Activities, more strongly in Hotels-Restaurants-Travel Agencies, while they weakened significantly in Land Transport and Financial Intermediaries.

Figure 1.6

Business Confidence Indicators



Source: IOBE.

Business expectations strengthened strongly in the last quarter, compared to the previous one in Construction, milder in Industry and Services, while they retreated in Retail Trade.

B. Fiscal Developments and Outlook

- The target of the State Budget balance was exceeded in 2019 by €2.3 billion, posting a surplus of €168 million instead of a deficit of €2.1 billion. Respectively better primary surplus at €5.1 billion, against a target of €2.2 billion.
- The deficit was curbed by one-off, unbudgeted revenues of €2.8 billion (AIA contract, ANFA's and SMP's) and restraint of the Ordinary Budget expenditure against the €1.5 billion target, mainly from under-implementation of the Public Investment Programme by approximately €1.1 billion.
- State Budget 2020: deficit of €1.1 billion in the first two months, compared to a deficit target of €814 million. Primary surplus of €831 million, compared to a surplus target of €929 million.
- Far-reaching changes to the State Budget are expected due to the coronavirus pandemic: successive packages of measures to support businesses, self-employed, the unemployed, with a budget - so far- of €6.8 billion.
- A significant loss of revenues from indirect and direct taxes very likely to occur, due to the closure of businesses in many sectors to protect public health, but also the estimated rise in unemployment.

Final State Budget 2019

During 2019, there was a clear easing of fiscal policy in relation to budget forecasts, but without compromising the achievement of the agreed primary surplus target. The achievement of this objective was ensured, on the one hand, by the collection of high exceptional revenues, which were not foreseen in the budget and, on the other, with a large reduction, for yet another year, of public investment expenditure.

The change in fiscal policy began in mid-May, with the legislation of a package of expansive budgetary measures of 0.7% of GDP. The main measures were: (a) granting of an exceptional allowance to pensioners totalling €971 million; (b) new legal framework that enables taxpayers to settle all their overdue debts to the tax authorities, local authorities and social security funds in 120 monthly instalments (10 years), on very favourable terms; and (c) transfer from the normal (24%) to the reduced (13%) VAT rate of certain types of food products and services, as well as the transfer of the energy VAT from the reduced (13%) to the super-reduced rate (6%). The European Commission considered that these measures would, on the one hand, jeopardise the achievement of the agreed primary surplus and, on the other, boost consumption, while other growth-friendly measures had been agreed since 2017. In particular, it was agreed to reduce the tax burden on labour (non-wage costs) and business taxation.[10]

Last June it was decided to abolish the already legislated reduction of the tax-free threshold on personal income tax from 01/01/2020, while also retracting the so-called 'compensatory measures'. In July, a significant reduction in the ENFIA rates for 2019 was legislated and in December the tax law was passed, which, among other things, provides for the reduction in the corporate profits tax rate from 28% to 24%, reduction of the entry tax rate for individuals from 22% to 8% for incomes up to €10k, as well as tax rate cuts for other income brackets by one percentage point. All of these changes relate to 2019 incomes.

[10] Enhanced Surveillance Report, Institutional Paper June 2019, p. 5.

Balance and Primary Balance of the State Budget 2019

According to the 2019 final figures of the General Accounting Office of the MoF (GAO), the deficit of the State Budget (SB) was almost zero (€168 million, or 0.1% of GDP), versus a deficit target of 2.0% of GDP. Respectively, the primary surplus reached €5.057 million or 2.7% of GDP, while the target was 1.0% (Table 2.5).

The large improvement in the budget is due to the overrun of the Ordinary Budget (OB) revenue by approximately €3.2 billion, while expenditure remained slightly below the initial 2019 budget projection. In contrast, the Public Investment Programme (PIP) experienced a significant revenue shortfall of around €0.9 billion, alongside a €1.1 billion expenditure reduction (Table 2.5).

At first glance, the 2019 fiscal performance is very satisfactory. However, most of the revenue growth comes from one-off revenues that will not reappear in 2020. Also, in 2019 tax refunds were lower by €536 million compared to 2018, although at the end of the year there were outstanding tax refunds and overdue liabilities totalling €1.945 million, which, under the financing agreement with the ESM, should have been repaid since August 2018.

Table 1.5

Revenue, expenditure and deficit of the State Budget (billion €)

	2018	Budget 2019	Finally 2019	Budget 2020*	% change	
					19/18	20B/19
I. SB REVENUE (1+2)	51,793	53,022	55,097	53,751	6.4	-2.4
1. Gross OB revenue	49,155	49,282	52,240	50,072	6.3	-4.2
OB revenue before tax refunds[1]	54,735	54,100	57,284	54,998	4.7	-4.0
Less Tax refunds	5,580	4,818	5,044	4,926	-9.6	-2.3
2. PIP revenue	2,638	3,740	2,857	3,679	8.3	28.8
of which: revenue from EU	2,098	3,590	2,389	3,479	13.9	45.6
II. SB EXPENDITURE (3+4)	56,372	56,796	55,265	56,037	-2.0	1.4
3. OB expenditure	50,135	50,046	49,623	49,287	-1.0	-0.7
Primary expenditure [2,3]	45,459	44,446	44,398	44,787	-2.3	0.9
Interest	4,676	5,600	5,225	4,500	11.7	-13.9
4. PIP expenditure	6,237	6,750	5,642	6,750	-9.5	19.6
III. SB Deficit (-)/Surplus (+) (I-II)	-4,580	-3,774	-168	-2,286		
% of GDP	-2.5	-2.0	-0.1	-1.2		
OB deficit/surplus	-980	-764	2,617	785		
PIP deficit/surplus	-3,600	-3,010	-2,785	-3,071		
IV. SB Primary Balance	96	1,826	5,057	2,215		
% of GDP	0.0	1.0	2.7	1.1		
GDP (at current prices)	184,714	192,749	187,456	197,315	1.5	5.3

Source: Monthly SB Execution Bulletin, Dec. 2019 and Jan. 2020, Ministry of Finance, January and February 2019

* These figures are not directly comparable to those of the 2020 Budget Report, which have been compiled on a different basis .

Ordinary Budget Revenue

In 2019, the revenues of the Ordinary Budget, before tax refunds, increased by 4.7% to €57.3 billion, compared to €54.7 billion in the previous year. However, this amount includes very significant one-off and extraordinary revenues, some of which are not expected to be repeated: (a) €1,119 million from the extension of the concession agreement of Athens International Airport; (b) €272 million relating to the respective VAT in the above mentioned contract; and (c) receipts from ANFA's and SMP's amounting to €1,682 million, of which €1,391 were not foreseen in the budget[11] (Table 2.6). If the two-year revenues are adjusted to restore comparability, then the 2019 revenues would marginally decrease, by 0.4%, compared to the corresponding receipts for the previous year. So the good course of OB revenues is solely due to one-off/extraordinary revenues of €2,782 million, most of which will not be repeated this year.

Of the revenue sub-categories, income tax receipts surged by 1.0% compared to 2018. Receipts from individuals were up by 1.2%, but fell short of the €41m target. Revenues from legal entities increased significantly by 5.0% compared to 2018, exceeding the target by €92m (Table 2.6).

Real estate tax revenue, essentially from ENFIA, decreased by 9.6%, which was partly foreseen in the 2020 Budget and came from the significant decrease of ENFIA in July. Revenues from taxation of inheritance, donations, etc. increased significantly, by 52.2%, although the amount is relatively small.

As regards indirect taxes, VAT receipts increased by 3.5% compared to 2018 and reached €17,792 million. Recall that this amount includes €272 million from the airport agreement. Without these one-off revenues, the growth rate is limited to 2.0%, which remains satisfactory, taking into account the following: (a) private consumption growth weakened to 0.8% in 2019 and (b) the transfer of goods to lower VAT rates at the beginning of the summer (Table 2.6).

In contrast to VAT, revenues from excise duties decreased by 0.8% compared to 2018, lagging against the annual target, as on an annual basis they were initially projected (Budget 2019) to increase by 2.7%. In relation to the initial targets, the lag is mainly in revenues from tobacco taxation (approximately €180 million) and to a lesser extent in revenues from excise duties on fuels (€71 million). Finally, compared to 2018, revenues from other taxes on production decreased (-20.0%), which was envisaged in the budget, as well as from other current taxes (-7.8%, Table 2.6).

Tax refunds decreased by 9.6% compared to 2018. Thus, net SB revenues grew faster than gross, by 6.3% compared to 4.7%, to €52.2 billion.

The above analysis shows that the positive revenue trajectory in 2019 is solely due to one-off/extraordinary revenues. Moreover, and more importantly, revenue developments do not appear to reflect the 1.9% increase in economic activity in real terms and 1.5% in nominal terms,

[11] Of the €1,391 million, about €100 million is extraordinary but unrelated to ANFA's and SMP's. In the 2019 budget, only €291 million was envisaged to come from ANFA's and SMP's, originating from the Bank of Greece (€1,391 million + €291 million = €1,682 million).

nor the increase in income from extraordinary allowances of December 2018 and May 2019, as well as the increase in the minimum wage.

Table 1.6

State Budget Revenue* (million €)

	2018	2019 Budget	2019	2020 Budget	% Change	
					19/18	20B/19
Net SB revenue	51,793	53,022	55,097	53,751	6.4	-2.4
Net OB revenue	49,155	49,282	52,240	50,072	6.3	-4.2
Tax refunds	5,580	4,818	5,044	4,926	-9.6	-2.3
OB revenue	54,735	54,100	57,284	54,998	4.7	-4.0
Income tax, of which:	16,548	16,796	16,716	16,577	1.0	-0.8
--Personal	10,902	11,070	11,029	11,327	1.2	2.7
--Corporate	4,299	4,420	4,512	4,030	5.0	-10.7
Property tax	3,082	2,801	2,786	2,813	-9.6	1.0
Taxes on donations, inheritance etc.	161	159	245	270	52.2	10.2
Tariffs	232	237	298	322	28.4	8.1
Taxes on goods and services, of which:	27,437	27,559	28,013	28,490	2.1	1.7
--VAT	17,184	17,210	17,792	18,217	3.5	2.4
--Excise duties	7,184	7,381	7,125	7,213	-0.8	1.2
Other production taxes	1,238	944	991	1,136	-20.0	14.6
Other current taxes	2,564	2,631	2,365	2,389	-7.8	1.0
Social contributions	65	58	55	55	-15.4	-
Transfers, of which:	682	459	2,001	782	193.4	-60.9
--ANFA's and SMP's	314	291	1,682	…	435.7	-
Sales of goods and services, of which:	740	773	1,728	700	133.5	-59.5
Concession extension of the Athens Airport	-	-	1,119	-	-	-
Other current revenue	1,968	1,348	2,076	1,132	5.5	-45.5
Sales of fixed assets	18	335	10	332	44.4	3.220.0
PIP Revenue	2,638	3,740	2,857[1]	3,679[2]	8.3	28.8

Sources: (a) Monthly SB Execution Bulletin, Dec. 2019 and Jan. 2020, Ministry of Finance, January and February 2019 (b) Explanatory Budget Report 2019.

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

1. In order to show separately 2019 investment revenue, €2.406 million were deducted from the category "Transfers" and €451 million from the category "Other current revenue".

2 In order to show separately 2020 investment revenue, €3.098 million were deducted from the category "Transfers" and €581 million from the category "Other current revenue".

Significant revenue shortfalls from fuel excise duties are in line with recent research and other data suggesting extensive tax evasion. Specifically, according to a recent survey by KPMG[12], in 2018 Greece ranked first in the production of illicit cigarettes among the EU countries, with a loss of tax revenues of €690 million. In terms of fuel, note that car sales increased by 10.3% in 2019

[12] The survey was published in the newspaper Kathimerini on 15-12-2019.

compared to 2018, reaching their highest level in at least five years at 114.1k vehicles. The increase in sales is also reflected in vehicle registration tax revenues (an increase of 10.0%). Also, in 2019 the traffic of vehicles across the country[13] increased significantly. Especially on the Athens-Thessaloniki highway, the increase in the last months of 2019 reached 10.0%. Therefore, the available data not only do not justify a decrease in fuel revenues compared to 2018, but indicate widespread tax evasion.

Moreover, in particular in recent years, all self-employed persons have consistently declared incomes below the tax-free threshold, which are not sufficient for the bare minimum. This was also the reason why the international institutions insisted on reducing the tax deduction on income taxation, which was not implemented ultimately.

Finally, according to a recent IMF survey[14] Greece held one of the top positions in the EU in terms of the size of the shadow economy.[15] For 2016, the last year covered by the survey, the shadow economy in our country was estimated at 30.2% of GDP, or at €53.3 billion. Of course, the shadow economy is not the same as tax evasion, neither conceptually nor in terms of size, but there is a positive relationship between them. In general, large shadow economy also indicates extensive tax evasion.

Ordinary Budget Expenditure

In 2019, regular budget payments decreased by 1.0% compared to 2018 and amounted to €49.6 billion. Primary expenditure also decreased by 2.3% compared to the previous year, despite the fact that new expenditure was incurred in the first half of 2019 such as the extraordinary allowance for pensioners in May, the housing allowance, etc., which was not there in 2018 (Table 2.7). This development is due to reduced costs for called guarantees, revenue transfers to local authorities and military procurement.

Of the sub-categories, employee benefits increased by 1.0% to €13.3 billion. This rate would turn negative (-1.5%) if €326 million are deducted for retroactive payments of special wage grid categories in January 2019. For these retroactive payments, €982 million were credited in the 2019 Budget, so €650 million were saved (Table 2.7).

In 2019, expenditure on social benefits fell sharply (-67.0%) as payments for family allowances were moved to the category "Transfers" from 01/01/2019. Despite the change, 2019 payments for social benefits (€653m) are almost three times higher than the annual forecast.

According to the new expenditure classification, Transfers are now the largest category of primary expenditure and include a number of subcategories with the largest subcategory being Transfers to Social Security Funds (SSFs). In 2019, payments for transfers were virtually unchanged from 2018 (+0.1%), even though they include the one-off emergency allowance of May, amounting to €971 million, for which there was no provision in the 2019 Budget. This

[13] The survey of transport planners for the increase in traffic was published in Kathimerini on 15-12-2019.

[14] Explaining the Shadow Economy in Europe: Sizes, Causes and Policy Options, IMF, Working Paper 19/278, November.

[15] With the exception of the countries of the former Soviet Union

allowance is included in transfers to the SSFs, which increased by 6.7%. However, in other subcategories there was a significant decrease compared to 2018. Such cases are payments for called guarantees, which fell by 58.3% compared to 2018 (2019: €397 million, 2018: €952 million), transfers to local authorities, which decreased by 28.2% (2019: €2,324 million, 2018: €3,237 million) and hospital grants which declined by 8.8% (or €118 million) compared to 2018. The savings from these three categories alone reach €1,586 million, compared to a year earlier. In particular, due to the containment of these subcategories, total payments for "Transfers" appear to be essentially stagnant compared to 2018.

Table 1.7

State Budget Expenditure* (million €)

	2018	2019 Budget	2019	2020 Budget	% Change	
					19/18	20B/19
SB Expenditure (1+2+3)	56,372	56,796	55,265	56,037	-2.0	1.4
OB Expenditure (1+2)	50,135	50,046	49,623	49,287	-1.0	-0.7
1.Primary OB Expenditure	45,459	44,446	44,398	44,787	-2.3	0.9
Compensation of employees	13,121	13,016	13,247	13,403	1.0	1.2
Social benefits	1,978	246	653	134	-67.0	-79.5
Transfers	28,179	26,104	28,205	27,824	0.1	-1.4
(of which SSFs)	18,037	...	19,243	18,700	6.7	-2.8
Purchase of goods and services	1,532	1,324	1,458	1,145	-4.8	-21.5
Subsidies	75	150	224	89	198.7	-60.3
Other current expenditure	32	51	50	71	56.3	42.0
Non allocated expenditure	-	2,938	-	1,496	-	
Purchase of fixed assets	542	617	562	624	3.7	11.0
2. Interest[1] (gross basis)	4,676[1]	5,600[1]	5,225	4,500	11.7	-13.9
3. PIP Expenditure	6,237	6,750	5,642	6,750	-9.5	19.6

Sources: (a) Monthly SB Execution Bulletin, Dec. 2019 and Jan. 2020, Ministry of Finance, January and February 2019, (b) Explanatory Budget Report 2019.

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

1. Since January 2019, the General Accounting Office reports lower annual expenses on interest by €844 million for 2018 and €1,000 million for 2019 in relations to the Explanatory Budget Report for 2019 (Table 3.2).

Payments for purchases of goods and services decreased by 4.8% compared to the previous year, but exceeded budget forecasts by €134m. Payments for the acquisition of fixed assets (90% concern the military procurement) increased by 3.7% to €562m. (Table 3).

Finally, interest payments increased by 11.7% compared to 2018, to €5,225 million. This increase was expected and had been taken into account when drawing up the budget.

Public Investment Programme (PIP)

In 2019, the deficit of the PIP fell to €2.785 million, compared to a deficit of €3,600 million in 2018. The containment of the deficit is mainly due to a large cut in expenditure but also to a slight improvement in revenues (compared to 2018), which, however, lagged significantly behind the budget projections.

In particular, revenues increased by 8.3% from the very low level of 2018 and reached €2,857 million. However, they lagged behind the budgeted amount by €883 million. It is noted that, as in 2018, the lag is found exclusively in receipts from EU funds (-€1.201 million). In contrast, the domestic revenues of the PIP reached €468m, compared to a forecast of €150m. Recall that the same had happened in 2018, when the domestic revenues reached €541m, compared to a forecast of €180m. It is noted that in 2019 the inflows from EU funds were budgeted to increase by 71.1%, but eventually they dropped by 13.9%. Both in 2018 and 2019, the PIP take-ups from the EU funds are the lowest in a decade (Table 2.5).

As in previous years, the PIP payments were cut by €1,108 million in 2019 compared to the budget, and were reduced to €5,642 million. Overall in 2016-2019, public investment cuts totalled €2.9 billion. At the same time, the inflows made by the EU funds fell short of the projections of the respective budgets by €4.9 billion.

The continued reduction in investment has a very significant negative impact on the country's growth performance, as well as on employment. First, according to all known econometric models for Greece, the multiplier of public investment is greater than any other public expenditure and significantly exceeds one. The €2.9 billion cut in four years means a GDP loss of up to €4.0 billion. Secondly, the maintenance and creation of new infrastructure in the country improves the productivity and efficiency of all private investment, including foreign direct investment, and creates a more attractive investment environment. Third, while public investment is funded by EU funds, it also contributes to boosting the liquidity of the economy, which is particularly important in this conjuncture, under the unprecedented developments due to the coronavirus pandemic.

Execution of the 2020 Budget (January- February)

The drafting of the 2020 Budget last November was based on favourable estimates for macroeconomic developments in 2019, as well as a very optimistic macroeconomic scenario for 2020 (Explanatory Budget Report, p. 35, Table 1.5). However, according to recent estimates (06/03, 2020) of the National Accounts, the macroeconomic performance of 2019 is no longer as favourable. Due to the deterioration of the 2019 results, achieving the 2020 targets will be more difficult, as there will be some negative carry-over effects into 2020 that will affect the budget as well.

However, due to the coronavirus pandemic and its impact on the economy, the above developments are no longer relevant, as the 2020 budget has already been completely overturned since March. In particular, tackling the pandemic requires, inter alia, the cessation of economic activity in many sectors of the economy. In order to support companies which have had to cease or underperform, as well as the jobs and income of workers in these sectors, successive packages of measures have been announced since the first ten days of March. The measures include the support of self-employed (sole proprietors and unincorporated partnerships) without any criteria. Of course, significant emergency spending is needed to support the national health system and tackle the health crisis. For the implementation of the support measures announced so far, a Supplementary State Budget will be drawn up, with higher transfers from special reserve account of the Ministry of Finance by €5.0 billion.

The expected economic downturn is likely to have a negative impact on budget revenues. In addition, the measures envisage extensive restrictive interventions on the revenue side, as the temporary suspension of payment of almost all taxes as well as social security contributions to be paid in March has already been announced for all companies that were forced to cease operations. VAT revenues, in particular, will lag far behind. Servicing loans to banks is also suspended. Recall that before the outbreak of the pandemic, the arrears of taxpayers to the tax authorities, social security companies and banks already exceeded GDP. There is a serious threat of a new disorganisation of the economy, before the return to "normalcy" begins. That is why maintaining confidence and solvency may be more important than maintaining demand.

Unfortunately, the pandemic found the Greek economy very vulnerable in a particularly critical phase, as it emerged from a ten-year economic crisis and in 2020 a substantial acceleration of the growth rate was expected. Already, the first estimates[16] since the start of the epidemic indicate zero growth for 2020, compared to a forecast of 2.8% in the budget, while newer estimates predict a recession. It is also characteristic that while on February 13, the yield of the Greek sovereign bond had fallen below 0.9%, in mid-March it exceeded 4.0%, as the markets predicted significant risks for the Greek economy. The duration of the pandemic, which is currently uncertain, will play a key role in economic developments.

The only positive news is the decline in the international price of crude oil and the country's exceptional participation in the new ECB quantitative easing programme,[17] where Greece will take part for the first time. This will ensure low borrowing costs for the Treasury, banks and businesses. As soon as participation in this programme was announced, Greek sovereign bond yields fell to around 2.0%.

At this juncture, the analysis and evaluation of the implementation of the budget in the first two months of the year is not an indication of what will follow in the coming months. Moreover, due to the pandemic, the Eurogroup of 16 March suspended the country's contractual obligation for a primary surplus of 3.5% of GDP. The easing of fiscal policy is a fact in all countries of the world, including the Eurozone. Moreover, the Stability and Growth Pact provides for extraordinary easing of fiscal rules, in exceptional circumstances. In fact, the budget has been overturned and macroeconomic and fiscal developments will now depend on the duration and intensity of the pandemic.

Balance and Primary Balance of the State Budget

The execution of the SB in the first two months of the year was not affected by the coronavirus epidemic. From the available final data, there is a marginal reduction of the SB deficit compared

[16] Governor's Report for the year 2019, Bank of Greece, 2020, p. 1. 17. The Bank's previous forecast, which incorporated the newest data for 2019, was 2.4%.

[17] Pandemic Emergency Purchase Programme

to 2019. Respectively, the primary surplus increased slightly, by €9 million, compared to the previous year (Table 2.8).

However, if we take into account that in January 2019 retroactive payments of €326 million were made and the necessary adjustments are made to restore comparability, then the 2019 results improve and the first two months of 2020 show significant deterioration compared to the previous year. In particular, the deficit increases by 36.8% and the primary surplus falls by 27.7% (Table 2.5).

Moreover, the results for the first two months of 2020 lag behind the corresponding targets. The deficit is greater by €293m, while the primary surplus falls short of the €98m target. The deterioration is mainly due to the shortfall in the revenues of the State Budget by €390m and excess tax refunds by €78m. In contrast, the SB expenditure was lower than the target by €175m and reduced the deficit slippage to €293m. As detailed below, most of the revenue lag is found in the PIP and concerns the withdrawals from the European Union funds.

Table 1.8

SB Implementation: January-February 2020* (million. €)

	Jan.-February		% Change	2019	2020 Budget	% Change
	2019	2020				
SB REVENUE (1+2)	7,833	7,557	-3.5	55,097	53,751	-2.4
1. Gross OB revenue	7,381	7,126	-3.5	52,240	50,072	-4.2
OB revenue before tax refunds	8,012	7,849	-2.0	57,284	54,998	-4.0
Less Tax refunds	631	723	14.6	5,044	4,926	-2.3
2. PIP revenue	452	431	-4.6	2,857	3,679	28.8
SB EXPENDITURE	8,968	8,664	-3.4	55,265	56,037	1.4
3. OB expenditure	9,698	8,173	-6.0	49,623	49,287	-0.7
Primary expenditure	6,740	6,234	-7.5	44,389	44,787	0.9
Interest (gross)	1,958	1,939	-1.0	5,225	4,500	-13.9
4. PIP expenditure	270	492	82.2	5,642	6,750	19.6
SB Deficit (-) / Surplus (+)	-1,136	-1,107		-168	-2,286	
% of GDP	-0.6	...		-0.1	-1.2	
SB Primary Balance	822	831		5,057	2,215	
% of GDP	0.4	...		2.7	1.1	
GDP (at current prices)	187,456	...		187,456	197,315	5.2

Source: Monthly SB Execution Bulletin, Dec. 2019 and Jan. 2020, Ministry of Finance, January and February 2019.

* In adjusted cash-based accounting, according to the new classification of expenditure, in effect since 01/01/2019. These figures are fully compatible with the Monthly SB Execution Bulletin, but not with the 2020 Explanatory Budget Report.

Ordinary Budget Revenue

In the first two months of the year, the revenues of the SB, before tax refunds, decreased by 2.0% compared to 2019 and amounted to €7,849 million. At the same time, they lagged slightly, by €48 million, compared to the corresponding target (Table 2.9).

The revenues from income tax decreased by 6.5% compared to 2019. The decline is reflected in both revenues from individuals and revenues from legal entities. In the case of individuals, the decrease is partly due to the retroactive remuneration paid in January 2019, from which a 20% tax was withheld. Similar revenues, of around €65m, will not be realised in 2020.

The receipts from ENFIA are also reduced in the two-month period, compared to the previous year, due to the decrease in rates in June 2019. This is the last instalment of 2019, collected in January 2020.

In indirect taxation, VAT receipts decreased marginally by 0.3% compared to the same period last year and amounted to €3.1 billion. This development is due to the transfer of several goods and services from the normal to the reduced rate, as well as of electricity to the super-reduced rate of 6% in the summer of 2019.

Table 1.9

State Budget Revenue* (million €)

	Jan. – February.		% Change	2019	2020 Budget	% Change.
	2019	2020				
Net SB revenue	7,833	7,557	-3.5	55,097	53,751	-2.4
Net OB revenue	7,381	7,126	-3.5	52,240	50,072	-4.2
Tax refunds	*631*	*723*	*14.5*	*5,044*	*4,926*	*-2.3*
SB revenue	8,012	7,849	-2.0	57,284	54,998	-4.0
Income tax, of which:	2,117	1,980	-6.5	16,716	16,577	-0.8
-- Personal	*1,663*	*1,553*	*-6.6*	*11,029*	*11,327*	*2.7*
-- Corporate	*206*	*191*	*-7.3*	*4,512*	*4,030*	*-10.7*
Property tax	389	328	-15.7	2,786	2,813	1.0
Taxes on donations, inheritance, etc	35	39	11.4	245	270	10.2
Tariffs and import duties	49	56	14.3	298	322	8.1
Taxes on goods and services, of which:	4,679	4,622	-1.2	28,014	28,490	1.7
-- VAT	*3,121*	*3,111*	*-0.3*	*17,792*	*18,217*	*2.4*
--Excise duties	*1,107*	*1,068*	*-3.5*	*7,125*	*7,213*	*1.2*
Other production taxes	41	67	63.4	991	1,136	14.6
Other current taxes	236	294	24.6	2,365	2,389	1.0
Social contributions	9	9	-	55	55	-
Transfers, of which:	78	72	-7.7	2,001	782	-60.9
--ANFA's and SMP's	…	…	-	1,682		-
Sales of goods and services, of which:	77	79	2.6	1,728	700	-59.5
Concession extension of the Athens Airport	-	-	-	*1,119*	-	-
Other current revenue	301	302	0.3	2,076	1,132	-45.5
Sales of fixed assets	0	1	-	10	332	3.220.0
PIP Revenue	452	431	-4.6	2,857	3,679	28.8

Sources: Monthly SB Execution Bulletin, Jan. 2020 και Feb. 2020, Ministry of Finance, February and March 2020.

*In adjusted cash-based accounting, according to the new classification of expenditure, in effect since 01/01/2019. These figures are fully compatible with the Monthly SB Execution Bulletin, but not with the 2020 Explanatory Budget Report.

For the display of the revenues of the PIP as a distinct category of revenue, €2.456 million has been deducted in the 2019 annual figures from the Transfers category and €451 million from the Other Current Revenue category. The monthly data was adjusted correspondingly.

Stronger decrease compared to the previous year, by 3.5%, was observed in the receipts from the excise duties, which fell to €1,068 million (Table 2.9). Revenues from all three excise duty categories fell short of the two-month target as well, by €50 million overall, with the largest lag (€23 million) recorded in fuel revenues. Obviously, fuel tax evasion continues. Note that the loss of revenue from the excise duties causes a loss of revenue from the corresponding VAT.

The significant 24.6% increase in receipts from other current taxes compared to 2019 is due to the extension given in December to pay road taxes until 15 January 2020. Road tax receipts also exceeded the two-month target by €57 million.

Tax refunds in the first two months of this year increased by 14.5% compared to the previous year and reached €723m, exceeding the relevant target. For this reason, the net revenues of the Ordinary Budget fell by 3.5% compared to 2019, while the revenues before tax refunds decreased by only 2.0% (Table 2.9).

As evident from the analysis of revenues in January-February, which are not affected by the health crisis, the relevant developments are not satisfactory, as several revenue categories were already lagging behind the relevant targets. Understandably, due to the pandemic, the uncertainty about revenue growth has risen sharply. Due to the closure of businesses in many sectors for the protection of public health, the activity of which relates to the revenues of many categories of indirect and direct taxes, through their financial results and employment (e.g. Wholesale – Retail Trade, Tourism, Transport, Food Services, Arts – Entertainment), it is now considered possible that this year's targets will not be achieved. In any case, the restriction of tax evasion should continue to be a top priority, as it blatantly wrongs diligent taxpayers while distorting competition.

Ordinary Budget Expenses

In the two months of January-February, the payments of the Ordinary Budget decreased by 6.0% to €8.173 million. This reduction is limited to 2.4% if the €326 million paid retroactively in January 2019 to special wage grid categories is deducted from the 2019 expenditure. The reduction is found in primary expenditure and in particular in three categories: social benefits, subsidies and to a lesser extent transfers (Table 2.10).

Of the distinct categories of primary expenditure, payments for the compensation of employees decreased by 10.9%, due to the higher (retroactive) costs in 2019. If the necessary adjustments are made, then wage costs for the first two months of 2020 increased by 2.9% compared to the previous year. This marks a consolidation of an upward trend in this category of expenditure over the past 3-4 years.[18]

[18] See e.g. IOBE Quarterly Report 01/19, April 2019.

Expenditure on social benefits decreased by 88.8%, as since 2019 these payments have gradually been moved to the category 'transfers'. According to the new expenditure classification, transfers are now the largest category of expenditure and include a number of subcategories with largest the subcategory[19] "Transfers to Social Security Funds ". During the first two months of this year, transfers to SSFs decreased by 2.3% compared to the corresponding period of 2019. By contrast, transfers to local authorities, which in 2019 were significantly reduced, increased by 10.9% in this two-month period (Table 2.10).

Table 1.10

State Budget Expenditure* (million €)

	Jan. – February.		% Change	2019	2020 Budget	% Change
	2019	2020				
SB Expenditure (1+2+3)	8,968	8,664	-3.4	55.265	56.037	1.4
OB Expenditure (1+2)	8,698	8,173	-6.0	49.623	49.287	-0.7
1.Primary OB Expenditure	6,740	6,234	-7.5	44.398	44.787	0.9
Compensation of employees	2,435	2,170	-10.9	13.247	13.403	1.2
Social benefits	178	20	-88.8	653	134	-79.5
Transfers	3,996	3,957	-1.0	28.205	27.824	-1.4
(of which SSFs)	*(2,835)*	*(2,771)*	*-2.3*	*19.243*	*18.700*	*-2.8*
Purchase of goods and services	47	80	70.2	1.458	1.145	-21.5
Subsidies	63	6	-90.5	224	89	-60.3
Other current expenditure	20	-	-	50	71	42.0
Non allocated expenditure	-	-	-	-	1.496	-
Purchase of fixed assets	1	1	-	562	624	11.0
2. Interest (gross basis)	1,958	1,939	-1.0	5.225	4.500	-13.9
3. PIP Expenditure	270	492	82.2	5.642	6.750	19.6

Sources: Monthly SB Execution Bulletin, Jan. 2020 and Feb. 2020, Ministry of Finance, February and March 2020.

* In adjusted cash-based accounting, according to the new classification of expenditure, in effect since 01/01/2019. These figures are fully compatible with the Monthly SB Execution Bulletin, but not with the 2020 Explanatory Budget Report.

Following the successive packages of measures announced to support businesses, self-employed and employees affected by the pandemic, a sharp rise in transfers is expected gradually from March to at least Q2 2020. The announced expenditure measures so far include an extraordinary financial assistance of €800 for the period until the end of April to employees and self-employed whose activity is affected by the administrative restrictive measures, as well as to the unemployed. Its budget is €1.4 billion. Adding the extraordinary expenditures on public health, the support of the primary sector, the coverage of part of the Easter allowance for workers who have been temporarily suspended from their employment and its payment to public health workers, the budget of the interventions amounts to €2.1 billion.

[19] In the whole of 2019 this subcategory constituted 63.5% of all "Transfers".

Payments for purchases of goods and services increased by 70.2%. In contrast, spending on subsidies fell by 90.5%. In both cases the amounts are small as they concern the beginning of the year.

Interest expenses decreased by 1.0% compared to 2019 and amounted to €1,939 million, while on an annual basis their projected decrease is 13.9%. Already in these two months, 43.1% of the annual forecast has been disbursed.

Finally, arrears and tax refunds increased marginally at the beginning of the year, as they totalled €2,034 million in January,[20] compared to €1,996 million in December 2019. Two thirds of the arrears relate to social security and hospitals.

Public Investment Programme (PIP)

The PIP contributed decisively to the deterioration of the State Budget balance, as the projected investment revenues lagged significantly behind the target. At the same time, public investment payments increased significantly and exceeded the target. Thus, while the PIP was expected to present a surplus of €323m in the January-February period, it was in deficit of €61m.

More specifically, the revenues of the PIP decreased by 4.6% compared to 2019, falling to €431m. At the same time, they also fell behind the target by €342m. The shortage is found in the withdrawals from the EU funds (Table 2.8).

Public investment expenditure increased by 82.2% in the two-month period compared to 2019, reaching €492m. At the same time, they exceeded the relevant target by €42m.

The stronger investment spending is a very positive development. However, it is uncertain whether, following the outbreak of the pandemic, it will be possible to implement the PIP smoothly during the rest of the year, for reasons related to disturbances in the functioning of the state, but also to difficulties on the part of businesses in submitting grant proposals. It is also very likely that the distribution of funds will change and more will be available to address the effects of the health crisis. To this end, the European Commission announced the Coronavirus Response Investment Initiative (CRII), which speeds up the allocation of so far unallocated resources of €37 billion. These will come from the European Social Fund (ESF) and the European Regional Development Fund (ERDF) and will be available for the needs of the health system, as well as for backing working capital loans of SMEs through guarantees. For Greece, according to the European Commission's letter of 18/03/2020 on the CRII to Greek government officials who are responsible for the management of ESF and ERDF funds (Ministers for Labour and Development),[21] the payment of €340m is brought forward. The same letter states that the Commission will pay early the annual regular pre-financing for 2020, amounting to €460m, in two instalments, in March and at the beginning of April. Therefore, while it appears that the availability of EU funds will be greater than initially expected, there is uncertainty as to whether they will be channelled into grants that go beyond the health sector.

[20] There were no February data available yet.

[21] Source: https://ec.europa.eu/regional_policy/sources/newsroom/crii/el_crii.pdf

C. Financial Developments

- The prospect of a deep economic downturn due to the pandemic poses significant new challenges for banks
- ECB's liquidity support measures create a "security buffer" and access to cheap financing for the Greek banks
- Need to speed up the implementation of the banks' asset protection plan for faster reduction of NPLs
- Lowest cost of new borrowing for the Greek state ever, spread at a decade low
- Lowest ever cost of new borrowing for businesses, but the spread remains high compared to other countries in the Eurozone "South"
- Halt to the recovery of private sector lending

The sudden spread of the health crisis in Europe from late February and throughout March has created a completely different context of economic challenges and expectations, in the current year but possibly for years to come, which directly affect the banks and require appropriate policy measures to avoid reversing the positive trend that had developed until February 2020 on issues such as the management of non-performing loans, the provision of loans, and the cost of borrowing. Therefore, although the developments in the financial sector described in this chapter relate primarily to the period before the severe escalation of the health crisis, it is appropriate to mention first the preliminary effects and challenges created by the economic crisis it has brought about. In particular, the unprecedented restrictions on economic activity implemented in March, in Greece and many other countries, in order to limit the rapid spread of the coronavirus, combined with uncertainty as to their duration and consequences, have led to a radical shift in the investment climate, a sharp fall in securities valuations, and unprecedented volatility in international capital markets. In this context of these developments, the Greek banks lost more than 60% of their capitalisation in just one month, amid concerns that a deep recession would pose significant new challenges to their business plans, especially in relation to the reduction of non-performing loans, the recovery in their profitability and their lending capacity.

As the economic crisis caused by the pandemic seemed to go beyond a temporary cyclical shock, with the risk that its structural effects would affect the robustness and stability of the financial system, policy measures were announced by the European Central Bank to enhance the liquidity of the economy and banks. Especially with regard to Greece, the ECB gave the country access to a government and corporate bond purchasing programme for the first time - the Pandemic Emergency Purchase Program - with a total budget of €750 billion, by way of waiver from its rules on eligibility of government securities. In addition, Greek banks' securities were re-admitted as eligible collateral by the ECB, while the applied valuation haircuts to the eligible securities were reduced. It is estimated that these measures offer a "liquidity buffer" to banks, which reaches up to €15 billion, with the additional feature of cheap financing costs, in contrast to the more expensive forms of financing used in the past.

At the national level, in the context of the emergency fiscal policy measures, it was announced that the state intends to subsidise the interest rate on performing business loans for a three-month period, as well as the deferral of principal payments for these loans. The banks also announced that they would suspend the instalments of performing loans for a period of three months in cases of borrowers who are proven to be affected by the crisis. These measures, taken in order to facilitate consistent borrowers in the current, particularly difficult times, without altering the payment culture, come at a time when the banks are already facing a number of major challenges. Among them, the weak quality of their assets and equity, combined with the ambitious goals of reducing the Non-Performing Loans (NPLs) by the end of 2021 at less than 20% of all loans, stand out. At the same time, the implementation of more effective tools for reducing NPLs is pending, such as the "Hercules" programme for the protection of assets for banks (Asset Protection Scheme). As for the impact of banks on the real economy, credit contraction to households continues unabated and the cost of private sector bank financing, although at historically low levels, remains higher compared to the country's European peers.

In contrast to the effects of the crisis that erupted in March, the general situation and fundamental trends for the investment climate by February 2020 had several important positive elements. Factors that had boosted the domestic investment climate include a series of tax cuts in the 2020 Budget, credit rating upgrades, historically low yields on government bonds (less than 1.1% for the 10-year bond), and decline of the spread against that of the German bonds to the lowest level since 2009 (close to 150 basis points for the 10-year bond). In addition, at the end of January 2020, a 15-year bond was successfully issued, with high demand and a very low interest rate. At the same time, there has been a decrease in the interest rates on new deposits and lending to historically low levels, while credit growth to businesses that started in early 2019 carried over to early 2020, after eight years of credit contraction. The improvement of the terms of raising funds from the interbank market also had a positive effect on the banking system.

On the liabilities side of the bank’s balance sheet, the rate of recovery of private sector deposits increased in the period December 2019 - February 2020, compared to a year ago. A net inflow of €2.5 billion was recorded, due to an inflow of €1.2 billion from non-financial corporations (NFCs) and €1.3 billion from households (Figure 2.7). In the same period of 2018-2019, the net inflow of private deposits was less, amounting to €814m. On a 12-month rolling basis, the average monthly return of private deposits totalled €841 million in February 2020, higher than at the end of 2019 (€738 million net average inflow), as well as from the corresponding month of 2019 (€576 million).

From August 2015 to February 2020, private sector deposits expanded by €28.2 billion, of which €17.4 billion came from households and €10.3 billion from non-financial enterprises. Nevertheless, the stock of total private deposits falls far short of the level of 2014 (November), by €22.1 billion, of which €19.8 billion come from households and €2.3 billion from businesses. Of these, non-financial corporations deposits have increased by €1.6 billion since 2015.

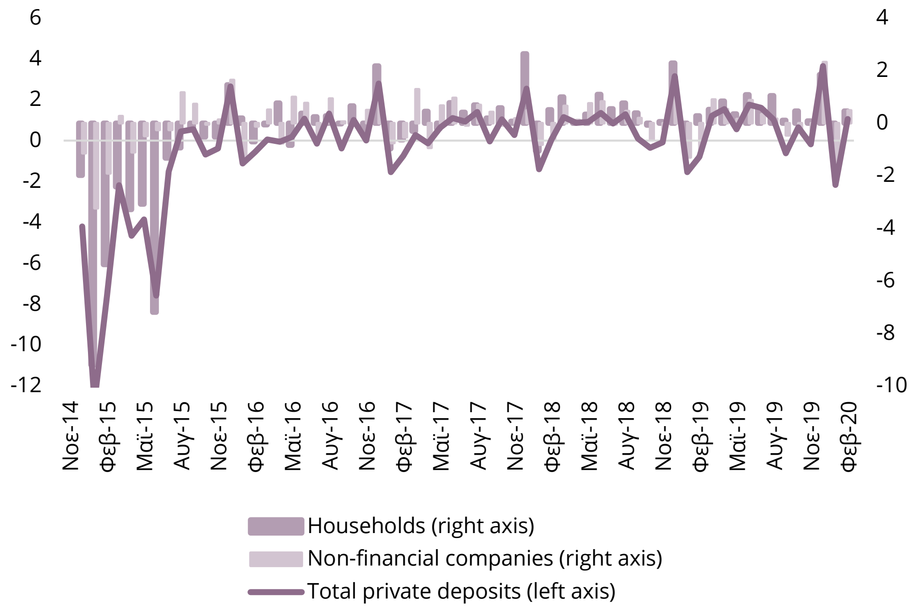
For the rest of 2020, a sudden slowdown in the positive trend in private deposits is initially expected, as households and businesses face the effects of the pandemic, which implies a reduction in disposable income as well as a significant increase in uncertainty. In the event that the health crisis is prolonged, the trend may change to a contraction, while if it is completed relatively soon, private deposits will probably continue to expand, with little intensity.

The second part of the banks' liabilities concerns the financing from the Eurosystem (Figure 2.8). One year after the cessation of funding from the ECB's emergency liquidity mechanism (ELA), and the subsequent upgrades by international credit rating agencies during 2019, banks are looking for alternative sources of liquidity, such as repos in the interbank market, bonds issuance, as well as cheaper sources directly from the ECB. The ECB's recent emergency package of measures to enhance banks' liquidity, temporarily loosening the criteria on the basis of which collateral received under quantitative easing programmes are eligible, now also offers the Greek banks opportunities to draw liquidity from the Eurosystem and the interbank market at a cost much lower than that of the exceptional liquidity mechanisms during the adjustment programmes.

Figure 1.7

Monthly net flow of private deposits at Greek banks (billion €)

Higher net positive inflows of household and business deposits in December 2019 – February 2020, compared to a year ago



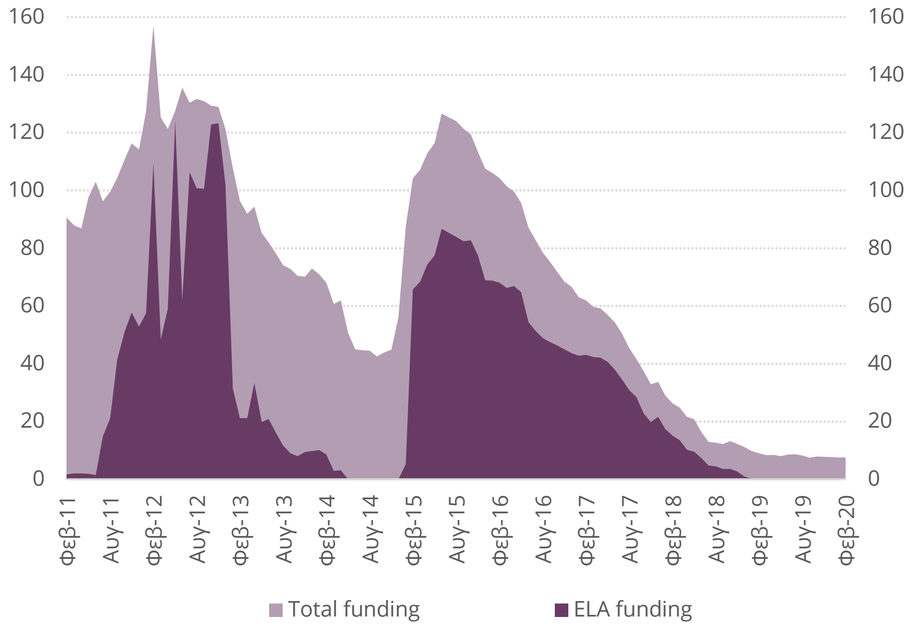
Source: Bank of Greece

On the banks' assets side, credit recovery to non-financial corporations slowed down since the beginning of 2019, after eight years of contraction, while the credit crunch for households strengthened in its tenth year. These trends are due to both supply and demand of loans. On the demand side, the high private debt stock of households and businesses has a negative impact, offsetting the positive impact of stronger activity, until February, in sectors such as Tourism and Energy. On the supply side, the high stock of Non-Performing Loans (NPLs) has a deterrent effect on banks' lending activity, while the recovery in house prices has had a positive effect.

Private sector financing, excluding loan write-offs, shrank in the first two months of 2020 by 0.7% year-on-year, a trend indicating a marginal deterioration compared to the average contraction of 0.4% over the previous year as a whole. (Table 2.11). In the period January-February 2020, the year-on-year contraction of credit in the private sector came from a reduction by 2.9% to households and 2.4% to self-employed (sole proprietors and unincorporated partnerships), which offset the credit expansion by 1.4% to Non-Financial Corporations (NFCs - Table 2.11). Credit to NFCs recorded an average annual rate of growth of 2.2% last year, positive for the first time in eight years. The largest credit expansion to NFCs in early 2020 was recorded in Transport, Energy, Real Estate Activities, Tourism, and Industry. By contrast, credit contracted in Construction, Communications, Agriculture, Shipping and remained unchanged in Trade.

Figure 1.8

Financing of the Greek banks from the Eurosystem (billion €)



The Eurosystem bank financing remains at low levels.
The ECB's recent liquidity package is expected to strengthen it, at a lower cost than ELA.

Source: Bank of Greece

On the demand side, the Bank of Greece's survey of bank lending in the fourth quarter of 2019 continued to record a mild strengthening in loan demand, while credit criteria remained the same, without changes expected in the short term. Long-term loans from both SMEs and large corporations are a key demand driver.

Non-Performing Loans (NPLs) decreased in the fourth quarter of 2019 by 4.0% or €3.2 billion, slightly slower than in the immediately preceding quarter (-€4.2 billion).[22] The total amount of NPLs in December 2019 was €68.0 billion or 40.3% of total loans, approximately €39.2 billion or 36.6% lower than the maximum level of March 2016. In business credit, NPLs decreased to 37.9% of loans in the fourth quarter of 2019, from 40.4% in the third quarter (44.7% in the same quarter of 2018), while a smaller decrease, from 49.7% to 48.7%, was recorded in consumer loans (53% in the same quarter of 2018) and in housing portfolios, from 43.0% to 42.4% (44.5% in the same quarter of 2018).[23] In business credit, the NPL rates in December 2019 declined among self-employed and very small enterprises, but remained at a very high level (62.0% from 64.2% in the

[22] Data are presented for the NPLs that cover only balance sheet items.

[23] The quarterly edition of the BoG report entitled "Operational Objectives of Non-Performing Exposures" has been discontinued, so quantitative NPE statistics such as the cure rate and the default rate are not available for 2019.

previous quarter), while among large corporations and SMEs they fell to 20.6% and 50.6% respectively, from 22.4% and 55.3% in September 2019. It is worth noting that in relation to the initial NPL reduction target agreed under the third programme, with a time horizon by the end of 2019, the banks achieved 91.3% of the target, with a recorded cumulative reduction of NPLs from March 2016 of €39.2 billion compared to the €43.0 billion reduction target.

Table 1.11

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

Quarter / Year	1/19	2/19	3/19	4/19	Jan.20	Feb.20
Total private sector	-0.7	-0.2	-0.2	-0.3	-0.6	-0.7
Households & NPIs	-2.2	-2.4	-2.8	-2.9	-2.9	-2.9
Sole proprietors and unincorporated partnerships	-1.7	-1.8	-2.3	-2.0	-2.4	-2.4
Non-financial corporations	1.3	2.6	2.7	2.2	1.6	1.2
Agriculture	3.0	0.7	0.0	2.2	-2.9	-0.6
Industry	0.3	0.1	-0.8	0.7	-0.3	0.9
Trade	-0.5	-0.3	-0.3	-0.1	-0.1	0.0
Tourism	3.9	5.5	4.2	3.8	3.5	3.5
Shipping	1.8	2.2	1.7	1.1	-0.4	0.0
Construction	-0.7	-0.1	0.5	-1.7	-4.6	-4.4
Electricity-gas-water supply	8.1	18.4	24.0	11.5	6.7	7.1
Transport and logistics	33.1	50.5	48.5	50.4	55.3	0.8
Interest rates on new loans (period average, %)						
Consumer credit	9.10	9.49	9.68	9.59	9.85	9.58
Mortgage credit	3.20	3.16	3.17	2.93	2.86	2.91
Loans to non-financial corporations	4.06	4.06	3.87	3.62	3.63	3.55

Source: Bank of Greece

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

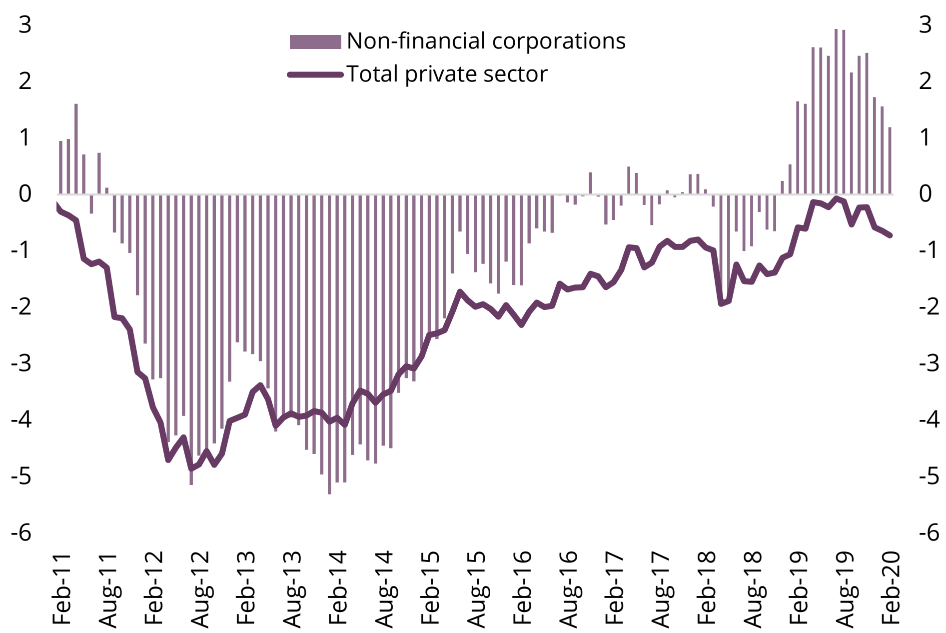
In addition to the quantitative changes, during the period 2016-2019, the qualitative characteristics of the NPLs reduction also changed, which is important to be reinforced. Initially, it was mainly based on loan write-offs (more than half of the cumulative reduction in NPLs since the beginning of 2016), which had a negative impact on the banks' profitability and capital ratios. However, the sales of NPL portfolios gradually gained ground, as their contribution as a percentage of the total annual decrease in NPLs increased from 35% in 2017 (€3.6 billion) to 46% in 2018 (€5.8 billion) and 59% in 2019 (€8.1 billion). Despite advances in the qualitative features of NPL reduction, some possibilities are still under-used, such as (a) collection through active management and (b) receipts from auctions and liquidations of collateral.

During 2019, banks agreed with the European Single Supervisory Mechanism (SSM) revised operational targets for reducing NPLs by the end of 2021, to less than 20% of all loans. According to the plan, the largest contribution to the NPLs reduction will come from loan sales, with a second largest contribution from collateral liquidations and only as a third that of write-offs.

There is also a larger contribution from the business loan portfolio, followed by mortgages and less by consumer loans.

Figure 1.9

Bank financing of the domestic private sector 2011-2020 (annual % change of flows*)



The recovery of bank financing of non-financial corporations has slowed down, while credit to households continues to contract unabated

Source: Bank of Greece

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

In order to accelerate the consolidation of banks' assets and with the approval of the General Directorate of Competition of the European Commission, a guarantee scheme for securitized NPL portfolios was passed into law at the end of 2019 ("Hercules" programme, Law 4649/2019). The plan makes it easier for banks to securitise NPLs and remove them from their balance sheets, while at the same time for lower-risk securities, the State will be able to provide guarantees, receiving in return a remuneration in line with market conditions. The remuneration of the State will be based on a benchmark which will increase with the level of risk and duration of the granted guarantee. The trend of falling cost of new borrowing from the Greek government, at least until February, improve the outlook for the programme. However, more than three months after its adoption, its implementation is still pending, although it is expected to start soon. In particular, it is expected that the State will provide a total guarantee of €12 billion for the securitisation of NPLs of up to €36 billion. The management of securitised NPLs will be undertaken by companies that manage arrears. At the same time, it is appropriate to consider the application of other complementary measures, such as the Bank of Greece's proposal, which aims to improve the capital structure of banks, as in addition to NPLs, it is proposed that a part of the banks' deferred tax claims are securitised and sold to third parties through special purpose vehicles.

In the medium term, the revised NPL reduction target agreed by the banks and the SSM is ambitious as it amounts to a reduction of NPLs by at least 10 percentage points each year, in

2020 and 2021. For the current year the target is becoming even more ambitious, given the unforeseen pandemic crisis and the strong negative impact it is already making on the economic activity of businesses and households. Subsequently, the slowdown in NPL reduction is inevitable, but it is also possible that they will temporarily increase, especially in significantly affected sectors. In order to avoid the interruption of the medium-term trend of steady decrease in NPLs, the "Hercules" programme, as well as additional tools contained in the BoG proposal, must be implemented immediately. The projected, strong economic downturn for this year will also affect the recovery in bank credit seen in 2019, with strong decline of demand in the first half of the year, which will weaken the credit growth of business loans and maintain the credit contraction in consumer and housing loan portfolios. Given these conditions, credit contraction is likely to strengthen this year.

New deposit rates fell to historic lows in the two months of January-February 2020 for Non-Financial Corporations (NFCs) and households, to 0.16%, from 0.25% in 2019. New lending rates also fell, to 4.3% in the same two months this year, from 4.6% in the previous year, mainly due to lower cost of lending to NFCs and for mortgage loans, which offset rising lending rates to individuals for consumer credit (Table 2.11).

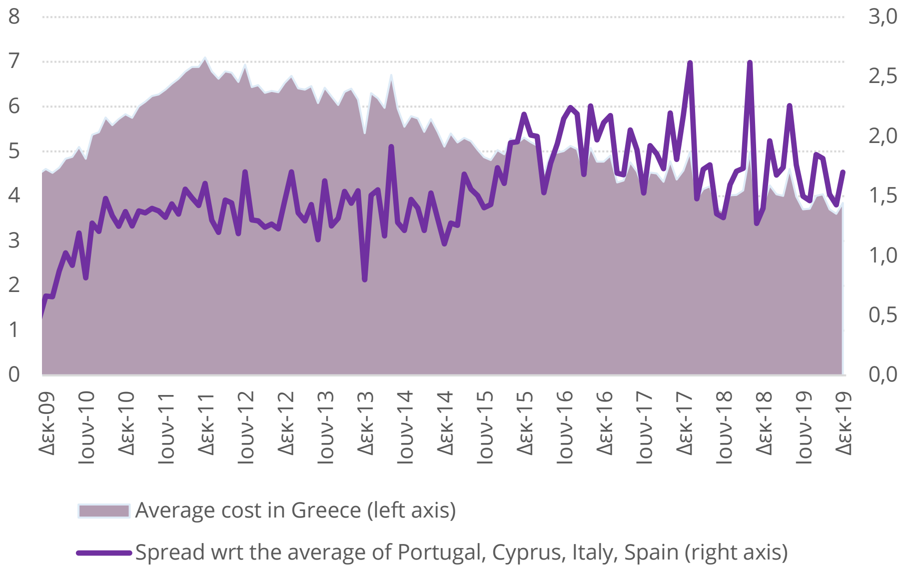
The average cost of private sector bank financing to NFCs fell marginally to 3.6% in February 2020, again touching the historic low of November 2019, which was the lowest ever cost of new borrowing since the country's accession to the Eurozone. However, these costs remain significantly higher than in the other Euro area countries. Indicatively, according to the ECB's composite cost of borrowing indicator (Figure 2.10), the cost for non-financial corporations in February 2020 stood at 1.5% in the Eurozone, 1.5% in Germany, and 2.1% in the countries of the Euro area's "south" (Portugal, Italy, Cyprus, Spain).

Subsequently, the spread of borrowing costs for Greek companies in relation to the averages of the euro area average and the "south" was maintained close to 210 bps and 150 bps respectively. Compared to the pre-crisis level, the spread of borrowing costs for Greek companies compared to the average of other countries in the Eurozone "south" remains significantly higher.

During the first two months of 2020, government bond yields continued to fall sharply, as the 10-year bond reached a historic low monthly average of less than 1.1% in February 2020. It is noteworthy that a series of 3-month issues of treasury bills in late 2019 and early 2020 recorded a marginally negative lending rate. In this favourable setup of developments, at the end of January 2020, €2.5 billion was raised by the Greek State with the issuance of a 15-year bond which was oversubscribed due to very high demand (7.5 times), leading to an interest rate below 2% (1,875%). The above positive trend was partially reversed in March, with the radical deterioration of the investment climate internationally and the strong volatility in capital markets, as the 10-year bond yield temporarily increased by more than 200 basis points before stabilising close to 2%.

Figure 1.10

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

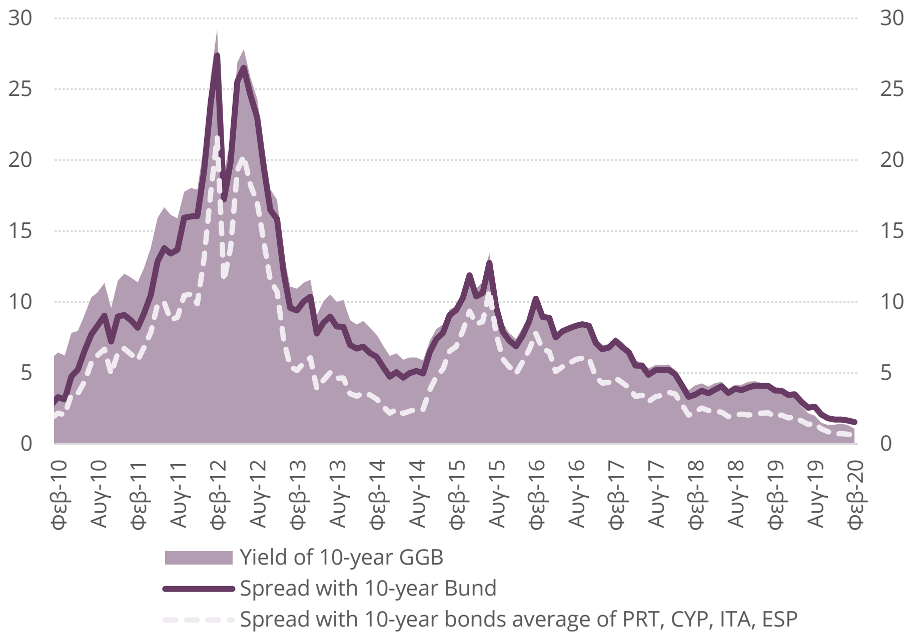


The cost of new borrowing for businesses stayed at record low levels in February 2020, yet it remained 150 bps higher than the average of the Eurozone "South"

Source: ECB

Figure 1.11

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



The decline of the spread of the 10-year Greek bonds against the German bonds accelerated, to about 154 bps in February, its lowest level in a decade

Source: ECB

Despite the historically low interest rates on new lending, and the upgrades of Greece's government securities by the rating agencies S&P (October 2019) and Fitch (January 2020), Greece's credit rating still remains between two (according to Fitch) and four (according to

Moody's) notches away from the "investment grade" category. The spread of the new borrowing costs of the Greek State by the markets in relation to the rest of the Eurozone countries declined in February 2020 to the levels of October 2009 (Figure 2.11), i.e. to 154 basis points against the German ten-year bond (from 378 bps a year ago), and to 56 basis points relative to the average of the Eurozone "south" (from 193 bps in February 2019). A further reduction in Greece's new borrowing costs compared to other countries will signal the extent to which the international investors' confidence in the Greek economy has recovered. However, developments in capital markets in the coming months, in conditions of unprecedented uncertainty worldwide, may not be shaped mainly by the relative country risk assessment.

3 PERFORMANCE AND OUTLOOK

3.1 Macroeconomic Developments

- Economic growth slowed down further in Greece in the fourth quarter of 2019, to 1.0%, from 2.3% in the previous quarter, posting the lowest growth rate since the second quarter of 2017.
- Overall in 2019, GDP increased by the same rate as in 2018, at 1.9%.
- The slowdown in the fourth quarter came mainly from the significant weakening of export growth (+1.0% from +9.2%).
- However, the external balance improved further, due to a marginal decline in imports (-0.3%).
- Investment declined (-7.1% from -5.7%), but due to fewer stocks compared to a year earlier. Excluding these, the expansion of fixed capital formation strengthened (+14.4% from +2.7% in the third quarter).
- The growth slowdown was restrained by a significant acceleration in the rise of private consumption, from 0.6% to 1.8%.

Recent Macroeconomic Developments in Greece

Greece's domestic growth rate slowed further in the final quarter of 2019, to 1.0% from 2.3% in the previous quarter. This rate of GDP change is the lowest since the second quarter of 2017. Subsequently, in the whole of 2019, GDP was 1.9% higher than in the previous year, an increase of the same extent as that of 2018 on 2017. Focusing on trends in the fourth quarter of last year, the slowdown in domestic output growth was mainly caused by a significant weakening in exports. However, the decline in imports has led to a new improvement in the external balance. Both the new, stronger fall in investment, which came exclusively from the difference in the trend of stocks compared to the corresponding quarter of 2018, and the containment of public consumption contributed to the weakening of growth. The only boost to GDP growth came from the significant acceleration in household consumption expansion.

As for the developments in the GDP components last year in greater detail, domestic consumption was 1.0% higher than a year earlier, when it had increased less, by 0.3%. Following a 1.8% increase in household consumption in the final quarter 2019, which was the strongest since the third quarter of 2015, its overall expansion in 2019 was the main reason for the expansion of consumption spending domestically. However, in 2018 the increase in private consumption was slightly higher (1.0%). Public spending increased by 2.2%, primarily due to their particularly strong rise in the second quarter of last year, a development that almost offset their reduction a year earlier, by 2.5%.

Investment remained unchanged last year compared to 2018. Its stagnation came from weaker accumulation of stocks in 2019 compared to the previous year, by €963 million, which offset the expansion of fixed capital formation last year by 4.6%. In 2018, investment had increased by 1.6%, while fixed capital creation had fallen by 12.0%. Fixed capital formation strengthened in the final quarter of last year, with its increase reaching 14.4%, from 2.7% in the previous quarter, a development that reflects the improvement in the investment climate before the outbreak of the coronavirus pandemic.

Most of the fixed capital categories posted growth in the previous year, but its intensity differed significantly between them. The strongest increase, in relative and absolute terms, occurred in investments in transport equipment & weapons systems, by 29.4% or €798m, largely offsetting their decrease of 38.6% the year before. The increase peaked in the final quarter, reaching 113.9%. Next came the formation of fixed capital in dwellings, growing by 12.0% or €165.4 million, at a much smaller rate than transport, continuing its expansion from 2018 by 17.3%. Investment in ICT equipment and in mechanical equipment & weapons systems strengthened by the same rate, 2.4%, much lower in both categories than in 2018 (+17.0% and +15.9% respectively).

By contrast, the strongest decline in 2019 was posted by other construction, by 6.2% (-€469m). However, it was much weaker than the previous year, when it had reached 23.0%. Investments in agricultural products, which have a small contribution to domestic investment activity, followed with a decline of 4.7% (-€4.8 million), slightly stronger than their previous year's rise (+3.8%). Finally, the formation of fixed capital in other products was 0.7% lower (-€21.2 million), against a stagnation a year earlier.

Regarding the developments in the external balance of the economy, the rise in exports in the nine months of January - September last year slowed sharply in the following quarter, from 6.6% to 1.0%. The slowdown is mainly due to a corresponding trend in exports of services, with their growth falling from 10.8% in the first nine months to 2.3%, while in exports of goods the trend changed from an increase of 6.2% to a decrease of 1.1%. Overall in 2019 exports were 4.9% more than in 2018, when their growth rate stood at 8.7%. As in the previous year, the strengthening of export of services by 8.1% last year was the main reason for the increase in total exports, as three-quarters of the growth in exports is almost due to this component (73.8%). The increase came primarily from the new expansion of tourist traffic, but also from stronger international transport, according to revenue data of the Bank of Greece. The rise in the goods exports was considerably milder, by 2.2%. In 2018, international demand for services had also strengthened slightly faster than that for products, by 9.2%, compared with 8.4%.

Imports kept falling throughout the second half of last year, for the first time since the first half of 2016. The decline by 3.8% originated exclusively from the imports of goods, in contrast to the strong expansion by 7.1% in the first half of the year. By contrast, the expansion of the imports of services strengthened throughout the second half of the year (July – December), compared with the previous six months, reaching 9.4%, from 4.3%. In the whole of 2019, imports were 2.5% more than in 2018, when they had increased by 3.0%. Last year's rise mainly came from more imports of services (+6.9%), as in 2018, but then their growth was higher (+14.4%). The rise in product imports was sluggish for the second year, but higher than in 2018, at 1.5% versus 0.7%. The stronger increase in exports compared to imports improved the external balance, the deficit of which, in national accounting terms, fell to €857m (-64.1% compared to 2018) or just 0.4% of GDP.

Approaching GDP from the production side, domestic gross value added last year was 0.9% higher than in 2018, when it had expanded stronger, by 1.8%. Its weaker expansion, despite the same GDP growth last year, is due to the much higher increase in taxes on products compared to 2018, which are part of the GDP that is paid to the state. Specifically, taxes increased by 7.8% last year, compared to an increase of 3.1% a year earlier. In four of the ten main sectors of the Greek economy, activity strengthened in the previous year, in two it remained essentially at its previous level, while in four it fell. Construction experienced the largest output growth, in relative terms, last year, by 12.3% (+€691m), following its increase a year earlier, by 7.9%. However, note that in the final quarter of last year the trend in Construction activity changed into a sharp decline (-8.2%). Next, in terms of percentage increase in activity, as during the first three quarters of last year, came Professional - scientific - technical - administrative activities, with an increase of 4.2% (or €348 million), which is slightly milder than a year earlier (5.4%). They were followed by Wholesale - retail, transport - storage, hotels – restaurants, at a rate of 3.2%, a sector that posted the strongest increase in absolute terms (+€1.2 billion). Therefore, it had the greatest contribution to GDP growth, coming mainly for yet another year from the expansion of international tourism and its revenues. Nevertheless, last year's rise was milder than in 2018 (+4.3%). Arts - Recreation - Entertainment had the mildest increase, by 2.8% (+€200 million), after an increase of 2.0% a year earlier.

The value added in Information – Communication and Real Estate Activities was essentially unchanged in the previous year compared to 2018 (+0.3% and +0.2% respectively). The trends in both of the above sectors are exactly the same as they were the year before. Among sectors with a decline in activity in 2019, the largest contraction was posted in Financial - Insurance Activities, by 8.0%. This sector had experienced the most pronounced recession in the previous year too (-10.0%), a trend that highlights the restructuring process that it is going through. It is followed, with a much smaller decline in their output, by the Primary sector (-1.8%) and Public Administration - Defence - Compulsory Social Security (-0.5%), which were both growing in 2018, at rates of 2.9% and 0.7% respectively. Industry posted the smallest losses, by 0.6%, but a year earlier its output was increasing at a rate of 1.8%. The slight decline in industry output is considered to be related to the similar development in the exports of goods in the final quarter of 2019, when its production declined, for the first time in a quarter, significantly, by 3.6%.

The escalating growth of services exports during the second half of last year was reflected in the final quarter of the previous year in the employment of the respective sectors (Transport, Tourism). Combined with the significant increase in jobs for the first time in a quarter last year in Wholesale – Retail Trade, in connection with the strengthening of private consumption, but also the maintenance of increased jobs since the beginning of the year in Manufacturing, were the main causes of the new expansion of employment in this period, by 1.8% or 68.1k people, which was the mildest in a quarter of 2019. Higher employment was the main reason for the further decline in unemployment in this period, to 16.8% (71.9% of the decline in the number of unemployed), with the remainder of its decline coming from labour force reduction. In the whole of 2019, unemployment stood at 17.3%, two percentage points lower than a year ago, when it had declined by 2.2 percentage points. Its fall came by 86.3% from employment growth (+83.0k people) and by 13.7% from the decline in the economically active population (-13.1k people).

Most new jobs compared to 2018 were created primarily in the Transport - Storage sector (+22.2k or +12.0%). This was followed by Tourism (+20.2k or +5.6%) and Manufacturing (+19.3k or +5.4%), despite the decline of their output mentioned above. Slightly lower was the expansion of employment in Education (+17.7k or +5.8%), which weakened notably in the final quarter (+10.6k). As mentioned in previous IOBE reports on the Greek economy, the sharp expansion of employment in Education since the beginning of 2019, is considered unusual for a sector of largely non-tradable services, due to the high activity of the public sector in it. Human Health - Social Work Activities (+5.8k or +2.4%) completed the top five sectors with the largest contribution to job creation in the past year. By contrast, employment fell mainly in the Primary sector (-16.0k or -3.94%), which intensified in October - November (-23.0k), in Construction (-4.0k or -2.6%) and in Financial - Insurance Activities (-3.4k or -3.9%).

The rate of change of the Consumer Price Index in the final quarter of 2019, as in the previous one, was essentially zero (0.1% after -0.1%). The impact of the VAT reduction last May weakened, as the price fall in the Food and Non-Alcoholic Beverages category slowed from 1.8% to 0.6%. The acceleration of the price reduction in the housing category, from -0.3% to -1.4%, is due to the temporary, widespread decline in household energy prices last October, which faded out in the following two months. The largest decrease in prices in the fourth quarter was recorded in Recreation - cultural activities (-1.8%) and Durable goods, household items and services (-1.5%). The largest price increase in the same period were recorded in Communications (+2.0%), Health Services (+1.9%) and Transport (+1.8%), mainly due to the rise in airfare. These upward trends were evident almost since the beginning of 2019. Over the past year as a whole, the Consumer Price Index increased marginally, by 0.3%, less than in 2018 (+0.6%). On average last year, prices fell in five of the 12 main categories of goods and services that make up the CPI, mainly in Durable Goods and Recreation - cultural activities (-1.7% in both), Other goods - services (-0.7%) and Clothing – Footwear (-0.6%). On the other hand, only Communications (+4.2%) had a high rise in prices, however this was gradually weakening during the year. Health and Transportation (+1.4% both categories) and Alcoholic beverages (+0.7%) followed in terms of price increases, with much smaller inflation rates.

Table 3.1

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

Quarter	GDP		Final Consumption		Investment		Exports		Imports	
	million €	Annual rate of change	million €	Annual rate of change	million €	Annual rate of change	million €	Annual rate of change	million €	Annual rate of change
2006	242,81	5.6%	208,06	3.7%	59,922	23.7%	50,966	5.1%	77,705	13.2%
2007	250,51	3.2%	216,94	4.3%	64,994	8.5%	56,373	10.6%	88,905	14.4%
2008	249,90	-0.3%	221,47	2.1%	59,020	-9.2%	58,486	3.7%	89,866	1.1%
2009	239,14	-4.3%	220,03	-0.6%	43,185	-26.8%	47,790	-18.3%	71,706	-20.2%
2010	226,11	-5.4%	206,96	-5.9%	38,613	-10.6%	49,959	4.5%	69,238	-3.4%
2011	205,35	-9.2%	188,22	-9.1%	30,201	-21.8%	49,998	0.1%	63,435	-8.4%
2012	190,32	-7.3%	173,92	-7.6%	22,965	-24.0%	50,578	1.2%	57,496	-9.4%
2013*	184,27	-3.2%	167,79	-3.5%	20,699	-9.9%	51,388	1.6%	55,586	-3.3%
2014*	185,70	0.8%	168,37	0.4%	22,064	6.6%	55,352	7.7%	59,870	7.7%
2015*	184,76	-0.5%	168,47	-0.3%	19,382	-12.2%	56,917	2.8%	60,112	0.4%
2016*	184,29	-0.3%	168,16	0.1%	20,534	5.9%	55,818	-1.9%	60,806	1.2%
Q1 2017	46,169	0.0%	42,143	1.1%	6,824	29.8%	14,453	6.0%	17,227	16.1%
Q2 2017	46,700	1.7%	42,348	1.3%	5,723	-1.6%	14,727	9.1%	16,268	5.8%
Q3 2017	46,900	1.9%	42,477	1.3%	4,444	-6.9%	15,250	6.6%	15,534	4.8%
Q4 2017	47,190	2.2%	42,318	-0.1%	5,491	17.2%	15,223	5.8%	16,275	3.2%
2017*	186,95	1.4%	169,28	0.9%	22,482	9.5%	59,652	6.9%	65,304	7.4%
Q1 2018	47,418	2.7%	42,538	0.5%	5,263	-22.9%	15,720	8.8%	15,930	-7.5%
Q2 2018	47,337	1.4%	42,196	1.5%	5,571	-2.7%	16,087	9.2%	16,722	2.8%
Q3 2018	47,770	1.9%	42,560	1.1%	6,262	40.9%	16,173	6.1%	17,957	15.6%
Q4 2018	48,040	1.8%	42,485	0.8%	5,741	4.6%	16,869	10.8%	16,6627	2.2%
2018	190,56	1.9%	169,77	1.0%	22,837	1.6%	64,849	8.7%	67,235	3.0%
Q1 2019	48,156	1.6%	42,610	0.9%	5,915	12.4%	16,423	4.5%	17,492	9.8%
Q2 2019	48,651	2.8%	43,008	0.0%	5,690	2.1%	16,926	5.2%	17,381	3.9%
Q3 2019	48,851	2.3%	42,863	0.6%	5,960	-5.7%	17,663	9.2%	17,453	-2.8%
Q4 2019	48,515	1.0%	43,053	1.8%	5,336	-7.1%	17,040	1.0%	16,583	-0.3%
2019	194,17	1.9%	171,53	0.8%	22,847	0.0%	68,053	4.9%	68,910	2.5%

* provisional data

Source: Quarterly National Accounts, ELSTAT, March 2020

Medium-term outlook

- The duration of the corona pandemic and the measures to restrict its effects, but also to strengthen businesses and households, are a major determinant of GDP change.
- An important obstacle in making predictions is uncertainty about the duration of the health crisis, the possibility of finding a cure and the possibility of its resurgence in the future.
- Forecasts were carried out for all macroeconomic variables based on alternative sets of assumptions (scenarios) for parameters that affect them (e.g. crisis duration, magnitude of the shock to the Eurozone economy, degree of implementation of support interventions, multiplier effects)
- With this forecasting process, a recession of at least 5.0% is projected for this year. If conditions at home and around the world remain particularly unfavourable over the second quarter and / or a significant outbreak of the virus occurs in the fall, it is possible that the recession will move closer to double-digit rates.

In the previous IOBE report on the Greek economy, the developments which were considered to be the most decisive for the political and economic environment domestically in the first half of this year were the completion of the effects of the election cycle and the clarification of changes in economic policy by the new government, through the implementation of related interventions (tax relief measures from September 2019 and Budget 2020 (law 4646/2019)), new development law ("Invest in Greece", law 4635/2019), and the Hercules Programme for guarantees on securitisations of non-performing loans (NPLs) of banks in Greece (law 4649/2019). In order to achieve the fiscal targets in parallel with tax cuts and benefits, this year's budget included reforms in the fiscal administration, to strengthen the accountability of public spending and revenues, and to assess the efficiency of the use of public resources. These reforms included an overview of expenditure and revenue in General Government agencies, the transition to a performance budget, with the creation of a system of key performance indicators (KPIs), and a more realistic depiction of the spending limits per ministry in cooperation with the General Accounting Office. In addition, actions were planned to combat tax evasion, expand the tax base, increase real estate revenue collection and speed up the resolution of outstanding tax disputes in the courts.

However, the rapid spread of coronavirus since February this year, resulting in a global health crisis, has already changed significantly and will continue to affect, in the medium term at least, the conditions not only for the Greek, but also for the European and global economy. Its duration and intensity, in the current and possibly in the coming years, and thus the intensity of its effects at various levels (public health, social relations, education, interstate relations, production, public finances, banking system, etc.) cannot be predicted at present. Especially with regard to the economic impact of the pandemic, the fact that it is spreading rapidly, particularly in Europe and in the US, while presenting particularly high mortality, has led to unprecedented protective measures, which have created significant obstacles to the smooth functioning of their economies and exert strong, unprecedented since World War II, pressures on them. The sudden halt in economic activity in developed economies affects their demand from developing and emerging economies that have access to key natural resource and/or raw materials for production. More broadly, as the crisis lengthens and possibly intensifies, it acquires more structural and less conjunctural characteristics, which significantly exacerbates its effects.

The effects of the coronavirus protection measures on household and business demand, both for domestically produced products and services, as well as for imports - affecting related industries - will be offset to some extent, which cannot be currently assessed, by fiscal policy interventions, already implemented and those that will take place in the future. In the countries of the European Union, these interventions will probably take place mainly with national resources, with a corresponding negative impact on fiscal balances. So far, four bundles of measures have been announced in Greece, many of which concern the revision of previous ones. Initiatives taken by EU institutions, such as the €37 billion Coronavirus Response Investment Initiative of the European Commission, and the €750 billion Pandemic Emergency Purchase Programme of the ECB, focus mainly on boosting liquidity and investment activity, as shrinking international trade and consumer demand, restrictions on economic activity and general uncertainty put pressure on the banking system, e.g. on the service of loans and the inflow of deposits. However, the same factors significantly affect the incentives and decisions on the supply side of the economy, i.e. on businesses. Their decisions include investment decisions.

The impact of the coronavirus outbreak has been partly reflected in the evolution of expectations. The Economic Sentiment Indicator in Greece fell by almost four points in March 2019, from 113.2 to 109.4. However, in Retail Trade and sectors that provide services mostly to final consumers, the confidence indicators fell by 6.2 and 7.0 points respectively. In addition, the Consumer Confidence Indicator fell from its peak level of 19.5 years in February, by 11.7 points, the highest ever drop in consecutive months. The indicator declined sharply even though most of the primary research was conducted before the start of restrictions on the operation of stores, on March 13. Therefore, the evolution of the index does not fully incorporate the range of developments that took place in March. Still, it does not include the effects of successive policy interventions at national and European level either. Besides, the implementation of most of them has not yet started.

International developments due to the coronavirus pandemic have completely overshadowed other developments in the international environment, which affect, to a much lesser extent than the health crisis, the Greek economy. These include geopolitical issues in the eastern Mediterranean, the migration and refugee crisis on the border with Turkey, and the consensual Brexit from the European Union.

Given the characteristics of the pandemic, in particular the uncertainty about its duration, but also its multidimensional effects, the setting of the parameters for the macroeconomic forecasts is strongly hampered. In conditions of unprecedented uncertainty, it is more substantial and reliable to identify the factors whose fluctuations affect the macroeconomic forecasts. Following the identification of factors whose changes are considered to affect the macroeconomic variables, with alternative assumptions on their course, the variables can be then projected. The different forecasts resulting from the different assumptions will form a forecast range for each macroeconomic variable and then for the GDP. This approach will be followed for the forecasts in the current and subsequent IOBE reports for the Greek economy.

Under this specific approach to macroeconomic forecasting, the factors whose changes have influenced the macroeconomic forecasts for the Greek economy are as follows (Box 3.1).

Box 3.1

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

- Duration of the current pandemic of the new coronavirus domestically and internationally, and possible new outbreak of the virus within the year
- Time profile 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 price
- Size and duration of policy interventions at EU level to address the effects of the crisis

The basic forecast scenario is based on the assumption that most domestic public health protection measures will be maintained until mid-May and then begin to be phased out, while the same will be done from the end of the same month for international passenger transport, domestically and internationally. This hypothesis implies that the health crisis will weaken significantly by the end of May. As for the measures to support businesses and households by the state, as they have been established up to the fourth set of measures (30/03/2020), they will be extended until the end of May. Therefore, tourism businesses will be able to receive international visitors for a significant part of the summer tourist season. As regards economic activity in the euro area, recession in the whole of 2020 with an intensity equal to one and a half times the recession of 2009, then due to the international financial crisis, is assumed. However, it is considered possible to differentiate the following developments in this scenario: the gradual lifting of public health protection measures for international passenger transport takes place much later than those concerning the operation of businesses in the country and the restrictions on domestic travel, e.g. at the end of June, given the much larger spread of the virus in many EU countries, compared to Greece. Then, the tourist season will be quite restricted, but still not completely lost.

In the alternative, unfavourable scenario, it is assumed that the majority of internal measures to protect public health will be maintained until the end of June and then begin to be phased out, while the same will be done for international passenger transport from the end of July, domestically and internationally. As regards the state support measures for businesses and households, as adopted by the fourth package (30/03/2020), they will be extended until the end of July. Therefore, tourism enterprises will be able to accept international tourism in a small part of the summer tourist season, and many of them will not have an incentive to operate this year. As far as economic activity in the euro area is concerned, the 2020 recession is assumed to be twice as deep as the 2009 recession. Alternatively, the adverse scenario covers the case in which the assumptions about measures to deal with the current coronavirus pandemic are the same as the baseline scenario. However, during the fourth quarter, for example, since November, there is a new outbreak, leading to the reintroduction of protection measures at least until the end of this year.

In detail as to the possible and most anticipated developments in the above factors affecting macroeconomic forecasts, the economic effects of the global protection measures taken so far are many and strong. As long as most of them continue to be implemented and if additional measures are taken, the impact will widen. Restrictions or bans on cross-border transportation of passengers and even goods (e.g. in US for products from China) will lead to a sharp decline in international transport and trade. International trade will also be severely affected by restrictions or bans on the operation primarily of commercial enterprises within many countries in order to prevent a rapid spread of the virus. Internal administrative measures will put intense pressure on household consumption demand as a whole, directly due to restrictions on consumption, but also indirectly, through their impact on labour income, from the compulsory closure of businesses in many sectors and the decline of activity in their value chain. These effects come on top of the weakening of the intent to consume, due to the general concern about the negative coronavirus effects. While the first of the above effects in the external sector, concerning international travel, will be reflected initially in the exports of each country, the second, within each country, concerns at first its imports.

More broadly, the contraction in activity, coupled with uncertainty about the evolution and duration of the health crisis, as well as the possibility of its recurrence in the future, for example in the autumn, will be a major blow to the intention to invest. On the production side, the sectors that are expected to be most affected by administrative measures domestically and internationally, in addition to those of Transport and Wholesale - Retail Trade (except super markets) mentioned above, are those with high activity in internationally tradable products and services, such as many Manufacturing sectors, Tourism, the Primary sector, Mining – Quarrying. The compulsory closure of enterprises in specific sectors within the country will also put strong pressure on some others, who have not been subjected to such measures, such as Professional, scientific and technical activities (liberal professions) and Construction, due to the sharp decline in investment.

In order to address the mitigating effects of protection measures, governments are taking measures to support and facilitate businesses and households. As mentioned above, policy interventions mainly to stimulate liquidity and investment have also been taken at the level of the European Union. The European Commission has facilitated the implementation of support policies by national governments through the suspension of the Stability and Growth Pact. In Greece, four packages of measures have been announced. After the first, the subsequent packages include new interventions and an extension of the scope of the existing measures instituted with previous packages. The aim of the measures is, first of all, to support and facilitate businesses and their employees, as well as self-employed persons, affected by the protection measures during their implementation and in the subsequent period; secondly, the provision of liquidity and investment funds to deal with the particularly unfavourable situation due to the coronavirus pandemic and to support business growth. The measures are included in Box 3.2.

According to the Ministry of Finance, the direct support measures for March - April and up until the fourth package, announced on 30/03, include suspensions of tax liabilities of more than €2.1 billion, suspensions of social security liabilities and coverage of contributions of employees – self-employed amounting to €1.6 billion, exceptional financial support for employees, self-employed and unemployed from 1/3/2020 reaching €1.4 billion. Therefore, in total these measures amount to €5.1 billion.

Box 3.2

Policy interventions in Greece to support businesses and households

Possibility of suspension of payment of VAT and instalments of schemes for the payment of arrears to the tax authorities until the end of March, for 4 months, for approximately 800,000 enterprises, in sectors and areas where business activity is interrupted. The maintenance of existing jobs is a precondition for participation in the arrangements.

Suspension until 31/7 of the payment of taxes and contributions, based on main economic activity code, for companies that are severely affected

For self-employed, sole proprietorships, etc. all tax liabilities are deferred for 4 months

Companies whose business activity is suspended will pay 60% of the rent for March-April for business premises. The same applies to the primary residence of their employees.

Interest rate subsidy on business loans, based on economic activity code, until the end of April (should the crisis continue, the measure's duration will be extended). In agreement with the banks, the payment of the loan instalments of these companies is postponed until 30/09/2020

Payment of €800 to 1.7 million private sector workers, self-employed, and sole proprietors. In addition, beneficiaries are also those who were fired or forced to resign from March 1st to March 17th. The support for those who are temporarily suspended from work is tax-free, exempt from appropriation and cannot be offset with other debts. Coverage of social security contributions for these beneficiaries for 45 days.

Easter Allowance: Businesses that have suspended their operation will be able to pay it up to 30/06/2020. The part of the allowance that will not be paid by employers for the period of suspension of employment contracts will be paid from the State Budget. 108,000 public health workers, as well as those serving in the General Secretariat for Civil Protection, will also receive Easter benefit.

Measures to support the primary sector. For this purpose, €150 million is initially allocated from the Ministry of Finance to the Ministry of Rural Development and Food.

Workers with temporary suspension of work are granted suspension of payment of arrears to the tax authorities for 4 months, with the possibility of a 25% discount if paid on time.

For tax instalments due in April, a 25% discount is granted if they are paid on time. If VAT liabilities payable in April are paid on time, 25% of their amount is offset against all future tax liabilities

Financing of small and medium-sized enterprises through the "returnable advance" financial scheme to deal with the reduction of turnover, wage and non-wage costs.

Educational allowance €600 for the current period and €800 compensation from May, announced for the country's scientific staff.

AADE (Independent Authority for Public Revenue) proceeds with the immediate payment of all arrears of the state to companies. At least €218 million have been repaid.

Adding the emergency expenditure on public health, the budget of grants through the financing scheme of the 'repayable advance' for SMEs, the support of the primary sector, the coverage of part of the Easter allowance for workers who have been temporarily suspended from their employment relationship and its payment to public health workers, the interventions budget totals €6.8 billion. For the implementation of the support measures, a supplementary State Budget will be prepared, with raised credits of the special account of the regular reserve of the Ministry of Finance by €5.0 billion.

The above interventions do not include those to support liquidity and investments with financial resources from EU funds and the Hellenic Development Bank, which will be presented later in the analysis of investments prospects.

The number of people and businesses who will make use of the above interventions, as well as their duration, will determine their favourable impact, as well as the burden on the fiscal balance. However, the loss of tax revenues, social security contributions, etc. from the compulsory lockdown of business, as well as from the other sectors affected by this event, would perhaps have a stronger fiscal impact. Recall that the 2020 Budget included a 0.9 p.p. reduction in social security contributions from the middle of the year. The particularly high overall burden on the State budget from the cost of the measures to support the economy, as well as from revenue losses, is quite likely to lead to the use of the cash buffer available to the Greek State, which was mostly accumulated in the period before the completion of the third Economic Adjustment Programme. The buffer consists of two components: the largest comes from central government loans from general government bodies through repos, and the rest from borrowing under the ESM loan agreement. If the duration of the current coronavirus outbreak is either prolonged or it recedes in the second quarter and resurges in the autumn, the resulting deterioration of the fiscal balance in Greece and other Eurozone countries may affect the lending terms of the official sector from the capital markets.

The repercussion of the health crisis on the functioning of the state, as well as on the institutions of the European Commission, are expected to postpone the reviews as part of the Enhanced Surveillance process. In addition, the implementation of the reforms planned under this process is likely not to continue under the current conditions at the planned pace, resulting in delays in their implementation. However, note that the latest, fifth review under the Enhanced Surveillance was successfully completed in February.

The particularly unfavourable environment is considered to be a major impediment in the implementation of structural reforms through concessions and privatisations. The HRADF's revenue target for 2020 is €2.45 billion, of which €2.07 billion was expected to come from tenders that would be completed this year and €376 million from tenders for which binding offers have been submitted and the expected first disbursement would be made this year and from the payment of instalments of completed transactions of previous years. In the 2020 Budget, only the sources of €376 million were specified, mostly from the first instalment of the sale of shares of Hellinikon SA, which has not yet been completed (€300 million). The remaining €2.07 billion were reported to come from ongoing actions, without specifying the transaction anticipated to be completed in 2020 and their expected revenues. 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. Iteas and Aretsou, Thessaloniki) and other real estate included in the HRADF portfolio. As the revenue target for this year was 77.4% higher than the maximum revenue in one year so far (€1.38 billion in 2017), it was considered ambitious from the outset. Under the current circumstances, it is now likely that this will not happen. HRADF's progress in the first quarter was as follows: the investors for the second phase of the tender (binding bids) of the acquisition of 30% of the share capital of AIA SA were pre-selected, the concession of the Chios marina was completed and an investor submitted an expression of interest for the Marina of Iteas, while nine investors submitted an expression of interest for the acquisition of 65% of DEPA SA.

The uncertainty about the return of the global economy to its pre-pandemic mode and pace of operation is anticipated to have much stronger negative impact on investment than on the other key demand-side components of GDP. The negative impact is primarily due to the inability, for the time being, to determine when the pandemic will significantly weaken and turn into an endemic disease. As mentioned above, the government has already announced liquidity and investment support programmes as part of the measures, including:

a) A guarantee facility for small and medium-sized enterprises with the participation of the European Commission for working capital loans of up to €6 billion

b) Provision of liquidity by the European Investment Bank (EIB) to banks for the granting of new business loans of up to €2 billion.

c) Guarantee mechanism in cooperation with the ECB for investment loans up to €500m.

d) Simplification of the Hellenic Development Bank's Entrepreneurship Fund and an increase of €250m for the granting of loans to companies affected by the coronavirus, with a 100% subsidy of the interest rate for 2 years.

In addition to the financing capacity of these mechanisms, Greece will raise €800 million from the European Structural and Investment Funds as part of the Coronavirus Response Investment Initiative. These capital resources will come from the European Social Fund (ESF) and the European Regional Development Fund (ERDF) and can be made available for the needs of the health system (ESF), as well as for guaranteeing SME working capital loans (ERDF). These funds include the payment of the regular annual pre-financing by the Structural Funds, amounting to €460 million, in two instalments, brought forward in March and early April.[24]

The Public Investment Programme (PIP) remains the main financing mechanism on the public sector side. As the PIP spending fell to €5.64 billion in 2019, its lowest level since at least 2000, compared to €6.24 billion a year earlier, there is a possibility of an increase this year, given the €6.75 billion target in the 2020 budget, which is unchanged for the fifth year. Based on the latest available data for January – February of this year, the provision of PIP grants followed a strongly upward trend compared to last year, as they reached €492m, 82.2% higher on their very low level recorded in the same period of the previous year. In addition, they exceeded their target (€450 million).

[24] Source: https://ec.europa.eu/regional_policy/sources/newsroom/crii/el_crii.pdf

As the emergency measures include the immediate payment of all arrears of the state to companies, their total amount is expected to decline significantly. At the end of January, arrears including tax refunds amounted to €2.03 billion.[25] So far, at least €218 million has been repaid, so the return of around €1.8 billion is pending. Once this process is completed in a relatively short period of time, it will provide a significant support for the beneficiaries in the current, particularly unfavourable situation. The importance of implementing this measure is reinforced by the fact that in the whole of 2019 the repayment of arrears did not exceed €107.6 million.[26] Moreover, the section on government arrears in the 2020 Budget did not mention any target for the current year, such as total payments to beneficiaries or outstanding balance at the end of the year.

Therefore, given the extraordinary financial instruments due to the current pandemic, the financing options to raise liquidity and finance investments, and the volume of available resources, are clearly more than in previous years. However, in the wake of the health crisis, the most important factor for companies to make use of the financing opportunities are the duration and intensity of uncertainty about the health crisis evolution, not only in the current, but also in the coming years. The implementation of investments is decided upon assessing possible trends and developments in the medium and long term. Until the protection measures are lifted internationally and it becomes clear that an effective way has been found to treat or inhibit this particular coronavirus, preventing its future outbreaks, the implementation of a very large part of the investment plans will be suspended. Exceptions to this trend will be health-related investments from the public and private sectors, e.g. to create appropriate infrastructure for the treatment of the pandemic, for the preparation of medicines and healthcare consumables, for health and safety in transport, etc., but also ongoing investments in public works and in completed privatisations.

Understandably, for the same reasons businesses will be particularly wary for raising capital from the banking system. After all, for the above reasons, banks will also be clearly more cautious in granting credit. Moreover, as many of the restrictive measures to protect public health continue for many months, with a strong impact on business activity and household incomes, it is quite likely that the defaults on bank loans will bounce back, leading to a new expansion of non-performing loans (NPLs).

To facilitate borrowers proven to be affected by the crisis, banks offer relief for the repayment of performing loans. Specifically, for individuals (employees, self-employed and sole proprietors) who are directly affected, due to the suspension of operations of the companies which they own or work for, as part of the measures taken, and who will receive the €800 support, the banks will get in touch with the beneficiaries to suspend the loan instalments for a period of three months. In addition, there is the possibility for the State to subsidize the interest rate on business loans that were performing up to 31/12/2019, based on principle business activity codes, until the end of April, a measure which, should the crisis continue, will be extended in time. The payment of the

[25] Pending tax refunds that cannot be repaid are included. In other words, they present an impediment (e.g. non-response of a beneficiary or failure to provide supporting documents). Source: General Government Monthly Data Bulletin – January 2020, General Accounting Office of the State, March 2020.

[26] Source: General Government Aid / Grants - Overdue Payments – December 2019, General Accounting Office of the State, February 2020

principal of the debts of these companies has also been postponed from 17/03/2020 to 30/09/2020. Finally, the legislative act of 30/03/2020 includes the suspension of the deadlines for the expiration, receipt and payment of checks, bills of exchange and bills in order, with a payment date from 31/03/2020 to 31/05/2020, by 75 days. It concerns beneficiaries liable for payment of such securities, with a principle business activity code that is affected by the measures, who could declare their intent to make use of this regulation until 07/04/2020.

As the economic impact of the health crisis extends beyond the sectors considered to be affected and the people working in these sectors, but also as it weakens and administrative suspension measures are lifted, many of the companies and their employees, even in sectors for which support measures have been taken, will not return to pre-crisis levels of activity at least in the short term, the possibility of a new NPLs is considered quite possible. In December 2019, NPLs amounted to €68.0 billion (or 40.3% of total loans), from €71.2 billion last September and €13.8 billion at the end of 2018. The decline in their stock last year came primarily from loan sales (€8.1 billion or 58.7% of the decline) and secondarily from write-offs (€4.3 billion or 31.1%). Therefore, as demonstrated in previous IOBE reports on the Greek economy, the reduction of non-performing loans through active management (loan restructuring, collateral liquidation, arrears collection, etc.) was small, at €1.4 billion. However, in the final quarter of 2019 there was a significant decrease in the inflow of new NPLs, resulting in a net outflow of NPLs at system level.[27]

Recall that in September 2018, banks set revised NPL reduction targets for the end of 2021. In particular, the non-performing loans should fall below 20% of loans, i.e. half their level at the end of the previous year, over this period. Unless a new generation of NPLs emerges due to the effects of the coronavirus pandemic, the objective is considered achievable with the aid of the Hercules programme. Based on the programme, by providing guarantees from the Greek State of up to €12 billion, the banks will be able to securitize loans of more than €30 billion within an 18-month period from 10/10/2019, the date on which the European Commission's decision on the programme was published. It should be noted that according to the law that legislated the programme (Law 4649/2019), the maximum amount and the period for the provision of guarantees may be extended with a decision of the Minister of Finance, following a decision of the European Commission. If the NPLs start growing sharply due to the health crisis, this possibility will probably be utilised. After all, in Italy, which is plagued by the pandemic, the corresponding program was also approved with an initial duration of 18 months, but it has been repeatedly extended and remains in force. However, according to the Bank of Greece, other schemes should be considered as well, such as the one prepared by its experts, which, in parallel with the problem of NPLs, addresses the issue of deferred tax credits (DTCs).

The most significant development related to the liquidity of the Greek economy in the current period, and probably in recent years, is Greece's access to the ECB's Pandemic Emergency Purchase Programme (PEPP), with a budget of €750 billion. Greece has been accepted for the first time by the ECB in a securities purchase programme, which has been sought since 2014. Membership of the programme was achieved by excluding Greece (waiver) from the eligibility rules on debt issued by the central governments of the euro area countries, which are the same as those

[27] Source: Governor's Report 2019, Bank of Greece, March 2020

applicable to the ECB's Asset Purchase Programme.[28] According to these rules, long-term securities must be issued by entities with a credit rating of at least the third Credit Quality Step of the Eurosystem Credit Assessment Framework.[29] The outstanding duration of public sector securities eligible for purchase under the PEPP ranges from 70 days to 30 years and 364 days. Non-financial marketable securities, i.e. those not issued by banks, are also eligible, conditionally, for purchases both under the PEPP and the Corporate Sector Purchase Programme (CSPP). However, the relevant securities of Greek companies have not been accepted in the PEPP. The PEPP will end 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 against a possible increase in the demand for capital by the country's residents, but also against a possible speculative attack. However, for the reasons mentioned above and related to the uncertainty as to the duration of the current coronavirus outbreak and to the possibility that as long as no treatment or prevention method is discovered, it may resurface in the future, growth of credit from the banking system due to access to PEPP is not expected for most of 2020. Given these conditions, credit is considered more likely to contract further this year. Moreover, for the same reasons, demand for capital from businesses and households is expected to be sluggish. Only if these sources of uncertainty significantly ease will both supply and demand for bank credit recover.

Based on the latest available data on lending from the banking system for the first two months of this year, prior to the outbreak of the health crisis, the rate of credit contraction overall to the private sector (non-financial corporations and households) slightly strengthened compared to the end of 2019. This trend is due to a slowdown in the rate of credit growth for non-financial corporations, to 1.4% from 2.2% in the final quarter of last year, as credit contraction to households and non-profit institutions continued at an unabated rate (2.9%). Therefore, in early 2020, the banks’ credit policy continued to differ across borrower categories, focusing on business support.

The expected reversal of the above credit trends implies, in addition to the significant reduction of new liquidity in the economy, that many of the companies and households considering bank lending before the crisis will not benefit from the very favourable recent terms. In particular, in January – February the average interest rate on new fixed-term loans to non-financial corporations stood at 3.45%, from 3.78% on average in 2019, with the recent level being the lowest since at least 2010. The interest rate on the same category of new loans to the self-employed stood at 5.16%, from 5.52% on average last year, the lowest since at least 2010. For all new household loans, the average interest rate at the beginning of this year was 4.94%, marginally lower than its average level last year (5.09%). In contrast to the interest rates on new loans to businesses and self-employed people in early 2020, those to households are not the lowest in the last decade, with their lowest level during this period occurring in the first quarter of 2015 (4.5%).

The sharply lower lending rates for businesses and sole proprietors in the second half of the previous year and January - February this year also relate to the sharp fall in the same period of the Greek government borrowing rates. In particular, its ten-year bond yield fell from an average

[28] ECB Decision on PEPP: https://www.ecb.europa.eu/ecb/legal/pdf/celex_32020d0440_en_txt.pdf

[29] Source: https://www.ecb.europa.eu/pub/pdf/other/mb201404_focus03.en.pdf

of 3.37% in May to 1.34% in October, a level around which it fluctuated until January this year. The following month, the last one for which there are data, the average interest rate on the 10-year Greek government bonds stood at 1.07%, its lowest level since at least 1993, according to data from the European Central Bank. This development contributed to the upgrade by the rating agency Fitch 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 the bids exceeded the issue by 7.5 times, reaching €18.8 billion, while its interest rate stood at only 1.875%. In addition, the spread with Germany's 10-year bond had fallen to 154 basis points, a level that was last seen almost ten years ago, in October 2009. As mentioned above, if the duration of the main phase of the coronavirus pandemic is prolonged, not only domestically but also internationally, or it resurges from the autumn, then the deterioration of the fiscal balance of activity suspension measures in sectors and professions, and of those for the protection of public health and for the support of the economy, in Greece and in other Eurozone countries, is likely to have significant effects on the terms of borrowing of the official sector from capital markets.

The rapid deterioration of the conditions in the capital markets in the recent period, which in Greece is characteristically reflected in the strong decline of the Composite Index of the Athens Stock Exchange by 376 points or by 41% since 20 February when its fall began until the beginning of April, will deter strongly the effort of large companies and banks to raise capital from domestic and international capital markets in sustainable terms. The negative effects on financing through the markets run counter to its upward trend since last September, as after the elections the issuance of bonds had recovered. A common feature of these issues was the oversubscription of the fundraising goal, which reflects the confidence of investors. Recent offerings include that of Ellaktor, worth €70m, with an interest rate of $6^{3/8}$% and maturity ending in 2024. The initial size of the issue was €50m, but after bids for more than €200m, the raised amount was increased. In November, Mytilineos issued a five-year, €500m bond, with the interest rate set at 2.5% and bids exceeding €1.9 billion. In mid-October, TERNA-Energy issued a seven-year bond of €150m, at an interest rate of 2.6%, which was oversubscribed 4.5 times and at the beginning of the same month, WIND Hellas completed the issuance of a five-year bond in the international capital markets, amounting to €525m, with a coupon at 4.25%.

While investment may suffer the strongest blow from the health crisis this year and the next, restrictions or bans on cross-border passenger travel and freight movements and the broader contraction in international trade are expected to put stronger pressure on domestic output through exports. Nevertheless, this impact will be mitigated by the expected decline in imports, due to the suspension of commercial operations and the general downturn in production activity, from the fall in demand, both domestically and internationally, as the exports of Greece are characterised by a high proportion of imported raw materials (e.g. exports of petroleum products). As has already been stressed, the intensity of the trends in the two main components of the external balance will depend on the duration of the above restrictions in the current phase of the spread of the pandemic and on its eventual resurgence in the autumn.

The pivotal contribution of exports to the growth of the Greek economy in recent years is reflected in the fact that their rise contributed 1.6 percentage points of the GDP growth last year and 2.8 p.p. in 2018. Of the 2019 contribution, 0.4 percentage points came from goods and 1.2 p.p. from services, primarily due to higher tourism revenues. The year before last, the contribution of the two main components of exports to growth did not differ substantially, standing at 1.5 and 1.3 p.p. respectively. On the side of goods, the growth of exports to the Eurozone last year, by 7.0% at current prices, was the most decisive for their overall expansion, although it was significantly weaker than a year earlier (16.2%). The fact that five eurozone countries, hit hard by the health crisis, were among the top 10 export destinations in 2019 (Italy, Germany, Cyprus, France, Spain), with Italy in first place and Germany second at a distance (€3.63 billion versus €2.25 billion), is indicative of the impact that the pandemic will have on the international demand for Greek products. Some of the remaining top-10 countries also face a major coronavirus outbreak (USA, UK). The loss of the strong 2018 momentum in international product demand was largely related to its decline in neighbouring countries to Greece with a relatively large share of its exports, mainly Egypt and Lebanon.

Negative effects of the outbreak of the pandemic in the Eurozone are expected to emerge in the supply of the Greek economy from abroad as well, as five of the top 10 countries last year with the largest imports to Greece (Germany, Italy, the Netherlands, France, Spain) belong to the Eurozone. Section 3.3 of the quarterly report includes a special text box on the composition of exports and imports of goods between Greece, Italy and Spain in 2017-2019.

Regarding the trends in export flows of key product and service categories in 2019, according to data from the Bank of Greece, the exports of goods, at current prices, increased marginally last year compared to 2018 (+0.2% or +€60.8 million), when they had expanded significantly (+15.5%), due exclusively to the strengthening of exports excluding fuels - ships (+4.5% or + €1.04 billion). By contrast, fuel exports were down 10.3% (-€938m), after increasing by 27.0% (+€2.13 billion) a year earlier. Last year, the decrease in ship exports was stronger (-43.1%), yet as their absolute size is small, their negative impact on exports was not significant (-€39.4 million). Regarding the international flows of services, receipts increased last year by 7.5% or €3.0 billion, following their expansion by 10.4% in the previous year, coming mainly (69.7%) from international tourism receipts, which rose by 11.5% (+€2.09 billion), after an increase of 9.9% the year before. Next, in terms of contribution to the growth of services exports, came international transport services, with 22.4%, due to their 3.9% increase (+€673.2 million). Other services strengthened more than international transport, by 5.1%, but because their absolute size is smaller than the other components, their share in the increase of the exports of services in 2019 was small (7.9%).

Therefore, restrictions and bans on international passenger travel due to the health crisis, which in Greece concern flights from Italy, Spain, the United Kingdom, Germany, Turkey, etc. as well as on cruises, will hit international tourism - the main driver of Greek exports growth in recent years. As their duration cannot be predicted, a safe assessment of their effects is not possible. Indicatively, in March, when the restrictive measures were not in force during the whole period, the passenger traffic at Athens International Airport was 61.3% lower compared to a year ago, as only 640,000 passengers were transported. The number of domestic and foreign passengers decreased by 60% and 62%, respectively. The drop is more pronounced at the 14 regional airports managed by Fraport, where passenger traffic was 97% down year on year.

Restrictions on production activity, even in some of the most developed countries, as well as restrictions on international transport, have already significantly reduced the demand for oil and other energy goods. The price of oil (Brent) has been falling since early January, when the new coronavirus spread within the Chinese city of Wuhan, raising concern about the likelihood of its spread to the rest of the country and its impact on the economy. The retreat of the oil price was temporarily halted in the first two weeks of February. It then continued stronger, until the end of March. Since the beginning of this month, the price of oil has been growing. This development is due to Saudi Arabia's decision on 1 April to convene an emergency meeting of the OPEC oil producing countries, including Russia, in order to significantly cut their daily oil production. The meeting took place on April 8, culminating in an agreement between Saudi Arabia and Russia to limit oil production by 8.5m barrels/per day, each, in the next 2-3 months; the US position on this is still pending. In any case, in January-March, the price of oil fell by 64.1%, to $24.0, its lowest level since November 2002. In the first quarter of this year, the average price of Brent oil stood at $53.3, from $63.1 a year earlier.

If the recent agreement between the OPEC member countries and Russia to limit daily oil production is implemented, it will boost oil prices. However, a restrictive decision is not expected to bring it back to the levels it was at before the global health crisis, at least in the short term. In the coming months and most likely throughout 2020, the cost of oil will be mainly affected by the evolution of the pandemic and secondarily by developments in its treatment and prevention. As long as there is no significant, steady weakening of the pandemic, which will allow most of the protection measures taken to be lifted, the pressure on oil prices will continue. Moreover, it is not considered possible in the coming months to fully restore the functioning of the global value chains to the pre-crisis conditions, which would also bring oil demand back to its pre-crisis levels. For these reasons it is considered most likely that its price will fluctuate for the most part this year notably lower than a year earlier. By how much and for how long will also depend on the above factors.

The very strong, unexpected outbreak of the new coronavirus in Europe, but also the recent failure to agree in the Eurozone on fiscal policy measures which need to be taken jointly by its members to address the needs the health crisis has created, as well as to address its economic impact, led to a fall in the euro exchange rate against the dollar in February , from 1.11 to 1.07, its lowest level since May 2017. The sharp spread 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. The announcement by the US president of a $2 trillion budget package to support the economy has significantly restored confidence in the US economy's outlook. The measures include transfers to households, loans to large and small businesses, aid to state and local governments, and support for public health services. In addition, the contrast with the US response further highlighted weaknesses in the euro area policy decision-making, resulting in a further fall in the euro exchange rate against the dollar.

From the effects of the policy actions taken so far or their lack, it is clear that the dynamics of the Eurozone economy this year will be more sensitive to these effects than in previous years. Therefore, greater responsiveness is needed from its political leaders to take measures whenever and as many times as necessary to deal with the coronavirus developments. As long as these fall short of the prevailing conditions and the current problems, the attractiveness and credibility of the Eurozone economy will lag behind that of the US economy. This year's probable euro exchange rate depreciation against the dollar will slightly raise the cost of energy in the Euro area.

Taking into account the recent and possible future developments and effects of the new coronavirus pandemic, and in particular the impact of restrictions and prohibitions on international passenger transport, the lockdown of businesses, the domestic fiscal policy measures to address the pandemic effects, but also the trends in the Greek economy in the first two months of this year, before the global health crisis, household consumption is expected to decline significantly. Pressure on consumption spending will be exerted by the ban on retail, food services, etc., the estimated significant rise in unemployment after a six-year decline, and the decline in consumer confidence due to the health threat. Employment is expected to decline mainly in sectors selling finished products and services to consumers, some of which have driven the decline in unemployment in recent years (Tourism, Transport – Storage, Professional - Scientific -Technical Activities), but also in other export-oriented sectors (e.g. Manufacturing). Of course, the intensity of these effects will depend on the duration and intensity of the current outbreak and if it weakens for a period whether there will be a new outbreak later on.

The negative effects will be mitigated by the expected decline in prices, which has already manifested itself in discounts and offers in online stores. In addition, consumer sentiment appears to have been strong in the first two months of this year, with the Consumer Confidence indicator reaching a 19-year high and the volume of Retail Trade strengthening by 8.2% in January. These trends will probably prevent a decline in household spending in the first quarter of 2020. Considering the above strong, adverse effects, it is estimated that the household consumption expenditures will decline by at least 4.0% in the basic forecast scenario, while under prolonged adverse conditions, in Greece and internationally, its contraction may exceed 8.0%.

In contrast to private consumption, the pandemic of the new coronavirus will lead to a widespread expansion of public consumption. This will come from extraordinary health expenses, as well as from some spending to support businesses and households affected by the protection measures. Similarly to private consumption and other components of GDP on the demand side, the change due to the health crisis will depend on its duration and whether it will resurge later this year, on whether additional measures will be taken to support businesses and households, on other measures taken at Euro area level, etc. The negative "base effect" from its high level in the second quarter last year, due to the elections, will limit the rise of public sector consumption this year. Some structural changes in the setting, monitoring and evaluation of public sector expenditure, which were included in the 2020 budget (review of expenditure and revenue in General Government bodies, transition to a performance budget, the creation of a system of key performance indicators (KPIs), etc.) will also curb the expansion of public consumption. Taking this into account, public consumption is projected to expand by at least 4.5%, should the pandemic fall significantly in May and the support measures expire at the end of the same month. Otherwise, if the health crisis remains strong throughout the second quarter or if it resurges in the autumn, then public spending will increase by 7.5% or more compared to 2019.

As already mentioned, investment may suffer the strongest blow from the health crisis, as its implementation is decided by assessing possible trends and developments in the medium to long term and the current very high uncertainty about the prospects of the domestic, European and global economies hampers this process. The adverse investment environment will continue until the pandemic ends and an effective way of treating or preventing this coronavirus is found, i.e.

probably throughout most of 2020, precluding the majority of potential investors from taking an investment risk.

In this respect, many private sector investment plans have been put on hold and will remain in a state of anticipation of developments regarding the new coronavirus. These are investment projects from export-oriented sectors with continuous, large increase in activity in previous years, such as tourism, transport and storage, and branches of manufacturing, but also from sectors that benefited from stronger domestic demand and structural changes, such as wholesale - retail trade, other manufacturing branches and energy.

The notable rise in liquidity available from the banking system compared to a few years ago, following the restriction of non-performing loans, the return of deposits, but also thanks to the possibility of accessing the ECB's securities purchase programme for the first time, will be largely left unused by the businesses, at least in the short term. In addition, as long as the safe exit from the health crisis and its effects is not apparent, banks are expected to be more cautious in lending, as there will be a risk of a new escalation of non-performing loans.

Subsequently, the role of public works and investments in completed privatisations (Hellinikon, PPA, expansion of the Athens International Airport, regional airports), which have a long-term investment horizon, is expected to be decisive for the level of investment activity this year. Therefore, the importance of completing the relevant licensing procedures is significantly higher. These investments will be reflected mainly in Construction. That said, the boost in recent years from construction projects in Tourism, in hotels and home renovations for Airbnb use will not take place this year. If privatisations had taken place faster in previous years, there would now be more investment in infrastructure and large businesses, limiting the impact of current factors on investment activity.

It should be noted that while the implementation of public works, which should take precedence at the present time, is closely related to the Public Investment Programme, a large part of the investment financed by the PIP is private. Like the bank-funded investment plans, those supported by the PIP are estimated to be notably fewer in the near future, due to the uncertainty about the prospects of the domestic and international economy, which discourages investment risk.

A technical factor in the process of calculating GDP, which has had a significant impact on its change over some years in the past and is likely to have a similar effect this year, is inventories (stocks). For the most part, they arise from the difference between the assessment of GDP in terms of demand and that on the production side. It is possible, for example, that in the first quarter the domestic production activity reacted with a time lag to the rapid developments on the demand side, due to the closure of businesses in Greece and internationally, and the restrictions on international transport. Subsequently, a larger part of the production than usual will not be sold, which will be recorded in stocks and then in investments.

Alternative scenarios for investment were developed taking into account the effects of these factors on investment, which are mostly negative, and bearing in mind that their impact will depend primarily on the duration of the current pandemic and the likelihood of a resurgence of the new coronavirus later in the year. Each scenario involves assumptions about the change in activity in sectors related to key categories of fixed capital (mechanical equipment, means of transport, construction) and uses correlation ratios from time series on changes in activity and changes in investment spending. An assumption common in all scenarios is that in January - February this year, the Greek economy was operating smoothly and the trend in investment activity was what was expected before the crisis, i.e. a significant rise, following the strong growth in the final quarter of 2019 and the continuous credit expansion to businesses since the beginning of last year. In addition, it is quite possible that stocks will increase in early 2020. This process has resulted in a range of estimates of investment change. In all scenarios, investment in 2020 is projected to decline at a double-digit rate, by at least 17%, while its contraction may exceed 30%.

Table 3.2

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

	2018	2019	2020	2021
Annual Percentage Change				
Gross Domestic Product	1.9	2.2*	2.4*	2.0*
Private Consumption	1.1	0.5	1.5	1.4
Public Consumption	-2.5	3.4	0.3	0.1
Gross Fixed Capital Formation	-12.2	10.1	12.5	8.1
Exports of Goods and Services	8.7	4.3	3.4	3.0
Imports of Goods and Services	4.2	5.1	4.0	3.0
Employment	1.7	2.2	2.2	1.4
Compensation of Employees per capita	1.3	0.4	1.1	2.0
Real Unit Labour Cost	0.5	0.0	0.1	-0.2
Harmonised Index of Consumer Prices	0.8	0.5	0.7*	0.9*
Contribution to real GDP growth				
Final Domestic Demand	-1.3	2.1	2.5	2.0
Net Exports	1.5	-0.3	0.3	0.0
Inventories	1.8	0.0	0.0	0.0
As a percentage of GDP				
General Government Balance	1.0	1.3	1.0	1.1
Current Account Balance	-1.1	-0.8	-1.1	-0.9
General Government Gross Debt	181.2	175.2	169.3	163.1
In percentage terms				
Unemployment (% of the labour force)	19.3	17.3	15.4	14.0

* Source: European Economic Forecast, winter 2020, European Commission, February 2020

Source: European Economic Forecast, autumn 2019, European Commission, November 2019

The greatest uncertainty about the extent of the changes lies in the external sector of the economy, as these will depend on the pandemic developments in each of Greece's trading partners, both on the export side and on the import side. Given that the Eurozone, plagued by the health crisis, is the main export destination for Greek products, its strong recession will be reflected accordingly in the demand for these products. Exports will be hit hard by the contraction in international trade worldwide, the extent of which, according to recent World Trade Organization forecasts, will be at least 13%, while in the worst case it could reach 32%.[30] As the expansion of domestic exports last

[30] Source: https://www.wto.org/english/news_e/pres20_e/pr855_e.htm

year and – to a large extent – in previous years stemmed mainly from higher international tourism receipts, the fact that the restrictive measures to tackle the pandemic primarily affect international passenger transport will have a strong impact on the relevant receipts. The passenger traffic data in March at the Athens International Airport and at 14 regional airports presented above are a first indication of these strong effects, which will escalate in the coming months and continue as long as the measures remain in force, not only domestically, but also internationally. Therefore, from the estimates and the first data on international trade and exports, it appears that their decline will be very strong, at least as long as the measures are in force.

Table 3.3

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

	MinFin		EU		IOBE		IMF		OECD	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
GDP	2.0	2.8	2.2*	2.4*	2.1	-5 to -9	1.9	-10.0	1.8	2.1
Private Consumption	0.6	1.8	0.5	1.5	0.7	>-4.0	:	:	0.6	1.8
Public Consumption	1.6	0.6	3.4	0.3	2.0	>4.5	:	:	2.3	1.1
Gross Fixed Capital Formation	8.8	13.4	10.1	12.5	2.5	>-17.0	:	:	7.3	10.3
Exports	4.9	5.1	4.3	3.4	6.0	:	:	:	3.9	3.6
Imports	4.1	5.2	5.1	4.0	4.7	:	:	:	4.0	3.1
Harmonised Index of Consumer Prices (%)	0.7*	0.9*	0.8	0.5	0.5	-2 to -3.5	0.5	-0.5	0.4	0.4
Unemployment (% of labour force)	17.4	15.6	19.3	15.4	17.4	19.3 – 21.2	17.3	22.3	17.5	16.3
General Government Balance (% GDP)	1.2	1.2	1.0	1.3	:	:	0.1	-0.5	1.3	1.0
Current Account Balance (% GDP)	:	:	-1.1	-1.1	:	:	0.4	-9.0	-0.5	0.2

* **Source:** European Economic Forecast, winter 2020, European Commission, February 2020

Sources: Explanatory Report of the State Budget 2020, Ministry of Finance, November 2019 – European Economic Forecast, autumn 2019, European Commission, November 2019 - The Greek Economy 01/20, IOBE, April 2020 – World Economic Outlook, IMF, April 2020 - Economic Outlook 106, OECD, November 2019

On the import side, the contraction will be determined primarily by the decline in domestic demand and in exports of products characterised by a relatively high proportion of imported raw materials, not by the direct effects of public health protection measures on international passenger transport, such as on the export side. The share of imports of goods excluding ships - petroleum products in total imports is much higher than that of exports of the same category of goods in the total value of Greek exports, 54.8% versus 32.0%. In addition to pressure from the demand side, imports may be restricted from supply-side constraints, as in some major import-supplying countries, activity has been suspended even in parts of industry (e.g. in Italy, Spain). The estimation of the impact of the decline in domestic demand on imports, in particular, can be approached based on the alternative forecasts for changes in its components presented earlier and the elasticity of demand for imports with respect to domestic demand. For this indicator as well, the mildest negative change will be in the region of 15% overall in 2020, while in the adverse scenario its contraction can be considerably higher.

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, imply that there is particularly strong uncertainty about the overall evolution of domestic output this year, but also in the near future. As repeatedly mentioned in the forecasts for its components, the duration of the current health crisis and whether the virus will resurge within the year will be the most decisive drivers of economic activity. That said, during most of the first quarter this year, the Greek economy operated smoothly with the momentum that it had gained in 2019. For this reason, it is possible that in this period it may post at least marginal growth. But in the second and third quarters, the fall in GDP will be strong, judging from the conditions that are evident so far. For these reasons, it is not possible to provide a specific estimate of the change in GDP for the current year overall.

From the process of estimating GDP based on different scenarios for the developments in its drivers described above, a forecast range was formed for the change of domestic output this year. Accordingly, the recession in the Greek economy this year will have an intensity of at least 5.0%. However, if the conditions in the Greek and international environment remain particularly unfavourable over the second quarter or there is a significant new outbreak of the virus in the fall, it is quite possible that the recession will move close to a double-digit rate. In any case, these forecasts reflect current expectations and are quite likely to be revised significantly in upcoming reports.

It is understandable that the suspension of domestic businesses which are mostly active in the provision of services to final consumers, but also restrictions and prohibitions on international passenger transport, in the context of pandemic protection measures, will put intense pressures on employment. These are expected to manifest in sectors that have made a significant contribution to the decline in unemployment in recent years, namely Wholesale – Retail Trade, Food Services, Professional – Technical Activities, Accommodation and Transport. The lockdown measures in countries with a large spread of the coronavirus in the population and with many losses in human lives, which have a high share in the exports of Greek products (e.g. Italy, Spain, France), and the widespread decline in international trade, will have a relatively high negative impact on employment in export-oriented branches of manufacturing. Education, a sector with a significant contribution to the decline in unemployment in 2019, is expected to have the opposite effect this year, as it was the first to cease operations. In addition, the estimated significant decline in investment will affect activity in the Construction sector. By contrast, the current adverse conditions have created specific needs for services, e.g. in health, social care, internet services, and land courier services, which, despite the general decline of economic activity, will sustain or even create jobs in the respective sectors.

As with all macroeconomic figures, the duration and severity of the effects of the health crisis on employment will depend largely on the time that elapses until it weakens significantly, as well as on the likelihood of a new outbreak of the coronavirus within a year. On the basis of different assumptions (scenarios) for the duration of the pandemic, the change in employment was estimated by quarter and sector, taking into account the above expected sectoral trends. In this way, a range of estimates for the average level of unemployment for this year emerged. All scenarios resulted in a rise in unemployment. Based on their results, the unemployment rate in 2020 will be higher by around 2.0 to almost 4.0 percentage points, compared to last year's level (17.3%).

The restrictions on production activity and on cross-border passenger transport have already severely affected the demand for oil and other energy goods, and thus their prices. The recent decision of Saudi Arabia and Russia to cut daily oil production by 8.5 million barrels each is expected to moderate, but not offset, the sharp fall in prices. According to the latest forecasts of specialised organisations, which reflect current expectations, the average price of Brent oil will reach $33 per barrel, recording a decrease of 48%. Therefore, energy products will have clearly anti-inflationary impact on prices this year.

Regarding the effects that will be exerted on prices by domestic factors, the lockdown of the vast majority of physical retail stores led many businesses with online stores to offer discounts in March, possibly to avoid stockpiling seasonal products. This development on the supply side had deflationary effects. If and when it is repeated outside periods of seasonal sales, it will have the same effect on prices. Nevertheless, it is possible to see inflationary pressures on the supply side, especially if the crisis is prolonged or repeated to some extent in the autumn. Compulsory closure in sectors which in some countries also include industry, or the definitive closure of businesses, is quite likely to lead to a limited availability or lack of certain products and services after some time. Such developments may lead to price increases.

On the side of domestic demand, the - on average - decline in household disposable income due to rising unemployment, coupled with the deterioration of expectations, will reduce the appetite for consumption. As indirect tax increases are not included in the fiscal measures for this year, no increase in prices is expected from this source. In fact, it has been estimated that in years when indirect taxation is unchanged, its net effect on prices is often slightly negative. Taking into account the changes in domestic prices in the above components, in times in the past with similar conditions to those expected this year and taking into account that in the first quarter of 2020 there was inflation of 0.4%, it is predicted that the Consumer Price Index this year will fall by approximately 2.0 – 3.5%, depending mainly on the intensity of the pandemic and the duration of the related measures.

3.2 Developments and Prospects in Key Sectors of the Economy

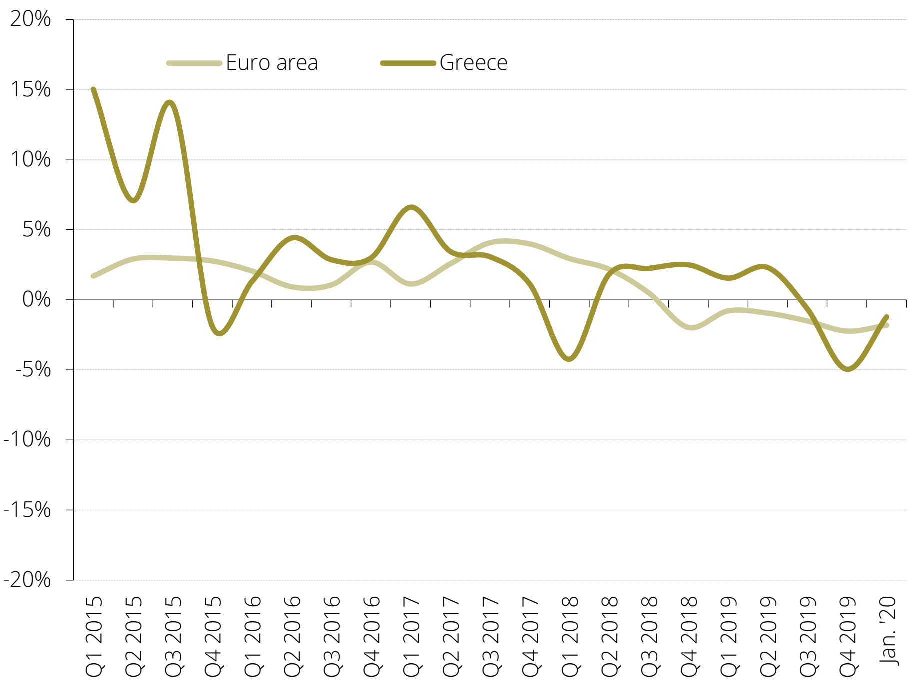
- Industrial production declined in 2019 by 0.8% against 1.6% the year before
- Decline in Construction in 2019 by 5.5%, following a decrease of 12.5% in 2018
- Mild growth in Retail Trade in the previous year, at a slower pace than a year earlier (+0.8% instead of +1.4%)
- Higher turnover in 2019 in twelve of the thirteen branches of Services

Industry

In the whole of 2019, the industrial production index decreased by 0.8% compared to the previous year, during which it had strengthened at a rate of 1.6%. According to the latest data, in January 2020 last year's trend continued, with industrial production lower by 1.2% compared to January 2019, when it was strengthening by 3.9%.

Figure 3.1

Industrial Production Index in Greece and in the Eurozone-19 p.p. (% change compared to the same quarter of the preceding year)



Industrial production declined in 2019 (-0.8%), against growth by 1.6% in 2018

Sources: ELSTAT, Eurostat

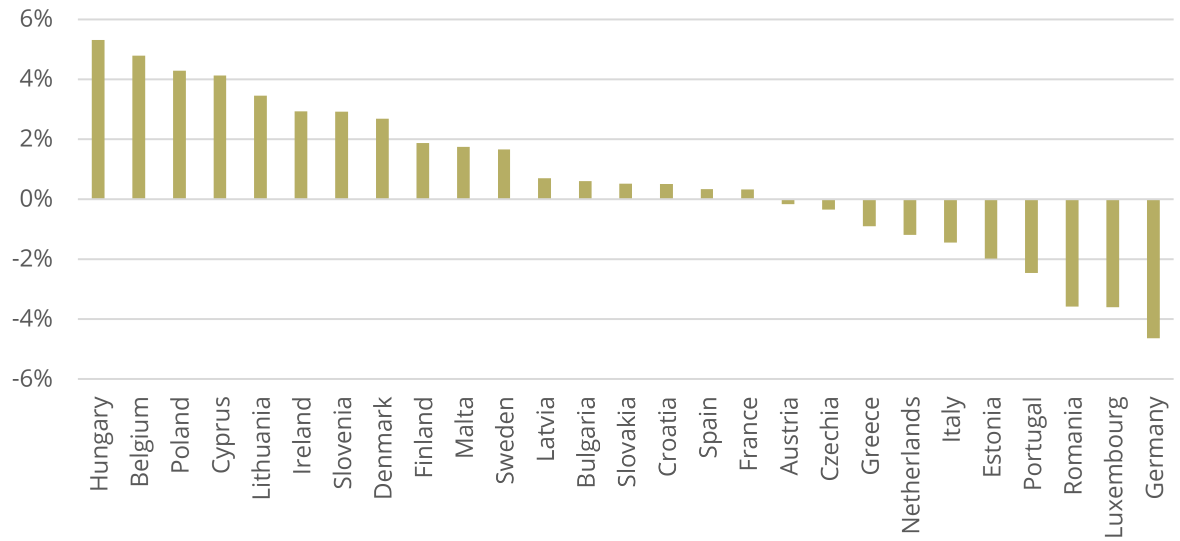
Industrial prices over the whole of last year were 0.4% higher than in 2018, when they had seen a much stronger increase of 4.3%. This is the third year in a row that industrial prices have risen, following a four-year decline (2013-2016). The increase came from the prices of industrial products channelled to the domestic market (+0.6%, from +3.3% in 2018) as the prices of exported products fell by 0.6%, in place of a 7.6% increase the year before last. Following these changes in production and prices, the industry's turnover index decreased in 2019 by 0.3%, against growth by 8.9% in 2018.

In the Eurozone, industrial production fell by 1.7% last year, against a rise by 0.9% a year earlier, while in 10 of the 27 Member States production declined. The largest decline in industrial production occurred in Germany (-4.6%, from +1.0% the previous year) as a result mainly of the decline in orders for capital goods (tools, equipment, vehicles).

At the level of key sectors of Greek industry, over the past year marginal improvement was recorded in Manufacturing (+0.9% instead of +2.8% in 2018) and Water Supply (+0.6% instead of -2.3%). By contrast, in 2019, Mining-quarrying had significant losses (-9.1%), when the year before last their production was unchanged. A 5.6% drop was recorded in the production of Electricity, which was more intense in 2018 (-1.4%).

In 2019 production declined in all sub-sectors of Mining. In the Mining of Coal - Lignite and support activities the drop reached 31.8% instead of a markedly milder decline in 2018 (8.9%). Production in Mining of Metal Ores decreased by 9.3%, against an increase of 18.7% the year before, while production of Other Mining - Quarrying was 6.1% lower than in 2018 (-5.7%).

Figure 3.2.
Industrial production index in EU Member States, percentage change, 2019/2018



Source: Eurostat

The largest decline in industrial production in an EU country in 2019 occurred in Germany (-4.6%).

In Manufacturing, production increased in 14 of its 24 branches. In branches with heightened importance for the Greek economy, there was an increase in the output of Basic Pharmaceutical Products (+18.1%, then +19.1% a year earlier) and in Food products (+1.4% from no change in

2018). By contrast, Basic Metals production was down by 3.1%, in contrast to its 3.8% increase a year earlier.

In the remaining manufacturing sectors, the biggest fall last year was recorded in the manufacture of Other Transport Equipment (-16.1%, from -6.1%), Coke - Refined Petroleum Products (-8.6% against +3.5%), Other Non-Metallic Mineral Products (-8.0% from +1.5%) and Clothing (-6.3% from -1.7%).

The sectors whose production strengthened include Computers - Electronic Products (+28.1% from +11.4% in 2018), Electrical Equipment (8.2% against -7.8%), and Repair - Installation of Machinery - Equipment (+8.1% from +1.9%).

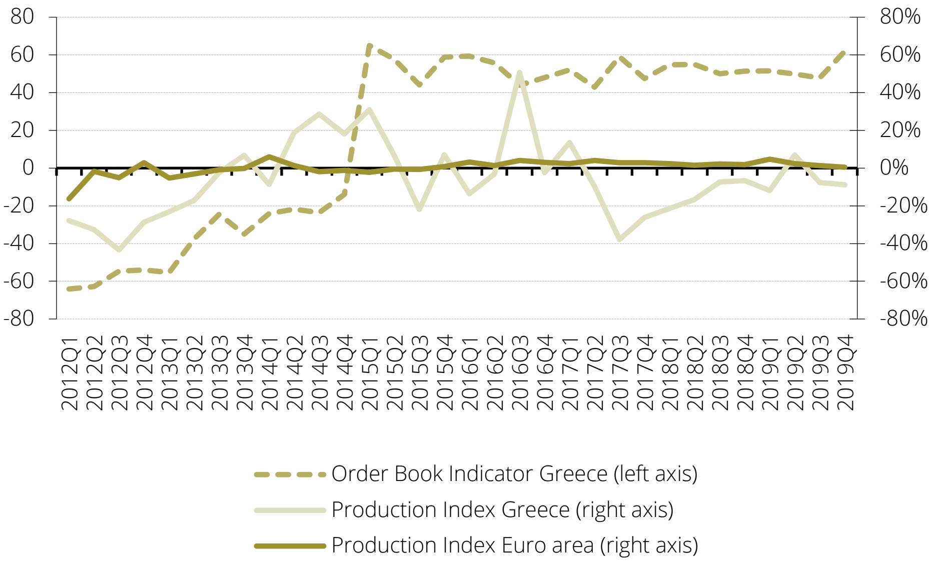
In 2019, output strengthened in three of the five main industrial product groups. In detail, the production of Capital Goods increased at the same rate as in 2018 (5.5%), while Non-Durable Consumer Goods increased by 4.1%, after an increase of 2.9% in the previous year. A softer increase than in the year before last was recorded in Consumer Goods (+1.4% instead of +1.7%). In contrast, contraction of production was recorded in Energy (-6.2% against +0.1%), and Intermediate Goods (-0.8% against +1.2%).

Construction

In 2019, the Construction production index decreased by 5.5%, after a sharper decrease of 12.5% in 2018. In the constituent sub-indices, the production of Buildings decreased by 6.5%, approximately as much as the previous year (-5.3%). The production index in Civil Engineering Works also declined, recording losses of 4.9%, much smaller than those in 2018 (-16.2%).

Figure 3.3

Production Index in Construction and Building Activity Index



The decline of the domestic production index in Construction slowed down in 2019 (-5.5%, against -12.5% in 2018).

Source: ELSTAT

Aggregating the monthly data of construction activity for the whole of 2019 shows that the number of building permits increased significantly, by 24.4%, against a marginal increase of 0.2% the year before last. In terms of volume, the increase was 8.6%, significantly lower than the year before last (+ 23.6%). A similar increase occurred in terms of surface area (+8.5% instead of +23.0%).

In the Eurozone, the Construction production index increased in 2019 at the same rate as the year before last (2.1% instead of 2.0%).

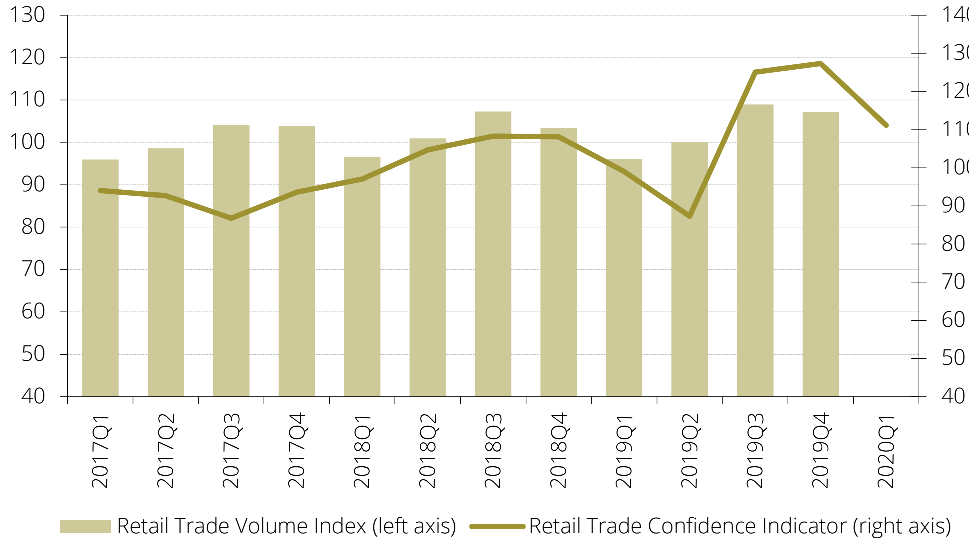
Retail Trade

The revised Retail volume index[31] strengthened in 2019 at a slower pace than in 2018 (0.8% instead of 1.4%). According to the latest available data, in January 2020 the volume index increased by 8.4%, against a decline by 3.2% in January last year.

Figure 3.4

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

Slight expansion in the volume of Retail trade in 2019, compared to 2018 (0.8% against 1.4%).



Source: IOBE

The volume of activity increased last year in 6 of the 8 sub-sectors. The largest increase was recorded in Books - Stationary (9.5% instead of 2.0%), followed by Furniture - Electrical & Household Equipment, with 7.3%, after a milder growth by 4.7% the year before last. Fuel sales expanded by 1.8%, against a decline by 0.8% a year earlier. In addition, sales improved gently in Pharmaceutical Products - Cosmetics (+0.7% against no change in 2018) and Clothing - Footwear (+0.5% against +1.2% in 2018).

Sales declined last year in Department stores (-10.6% against -0.4%), and Food-Beverages-Tobacco (-6.0% against -2.9%).

[31] New base year in 2015

Expectations in the Retail trade sector in the first quarter of 2020, as reflected in the leading indicators of the IOBE Business and Consumer Surveys, improved at a rate similar to 2019. The confidence indicator strengthened by 8.9 points, against an increase by 8.5 points in the corresponding quarter of 2019. Note that the indicators for this period incorporate to a small extent the effect of the pandemic of the new coronavirus, based on part of the results of the survey for March.

At a branch level, expectations deteriorated in Textiles – Clothing – Footwear (-17.8 points from -25.7 points) and in Vehicles – Spare Parts (-14.7 points from +6.4 points the year before last). The significant decline in Vehicles is due to the March data. The pandemic protection measures that led to drastic restrictions on traffic and economic activity seems to have negatively affected the expectations of businesses in the branch. The current sales balance stood at 22 points in the first quarter, a significant decline compared to the corresponding quarter of 2019 (58 points). The deterioration in the balance stemmed from an increase in the proportion of those who reported reduced sales and a significant decrease in companies that reported increased sales, reversing the positive trend and recovery of recent years. Stocks followed similar trends of growth and decline, so that the quarterly balance did not change significantly on average. The balance of orders did not change, remaining at 25 points, despite the fact that in March the number of companies expecting a decline increased significantly. This development shows that in the first two months of this year, the businesses had very positive estimates for orders in the coming months. A similar trend to the current sales balance is reflected in their expectations, with the balance falling to 22 points, compared with 27 points in 2019, again due to their much lower level in March. Finally, on the employment side, strong indications of job stability, but at the same time there is a decline in the share of businesses expecting job growth in the future.

By contrast, stronger optimism is found among the representatives of Department Stores (an improvement in the index by 38.4 points against a mild increase of 3.7 points in 2019), Household Equipment (+24.8 points from -11.0) and Food – Beverages – Tobacco (+11.1 points from +26.0).

Table 3.4

Volume Index in Retail Trade, annual changes

Category of Retail Trade Stores	Volume Index (2010=100)				
	2017	2018	2019	Change 2018/2017	Change 2019/2018
Overall Index	100.6	102.1	103.1	1.4%	1.0%
Overall Index (excluding automotive fuels and lubricants)	101.8	103.5	104.2	1.7%	0.7%
Store Categories					
Supermarkets	101.2	104.8	106.1	3.5%	1.2%
Department Stores	107.0	106.7	95.4	-0.4%	-10.6%
Automotive Fuels	94.2	93.4	95.1	-0.8%	1.8%
Food – Drink – Tobacco	95.2	92.4	86.9	-2.9%	-6.0%
Pharmaceuticals – Cosmetics	99.3	99.3	100.1	0.0%	0.7%
Clothing – Footwear	108.9	110.1	110.7	1.2%	0.5%
Furniture – Electric Equipment – H. Appliances	104.9	109.9	117.9	4.7%	7.3%
Books – Stationary	112.4	114.7	125.6	2.0%	9.5%

Source: ELSTAT

Table 3.5

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

	Q1 2018	Q1 2019	Q1 2020	% Change 2019/2018	% Change 2020/2019
Food-Drinks-Tobacco	72.9	98.9	110.0	35.7%	11.2%
Textiles - Clothing – Footwear	116.9	91.2	73.4	-22.0%	-19.5%
Household Appliances	90.8	79.8	104.6	-12.1%	31.1%
Vehicles-Spare Parts	117.0	123.4	108.7	5.5%	-11.9%
Department Stores	97.9	101.6	140.0	3.8%	37.8%
Total Retail Trade	93.8	102.3	111.2	9.1%	8.7%

Source: IOBE

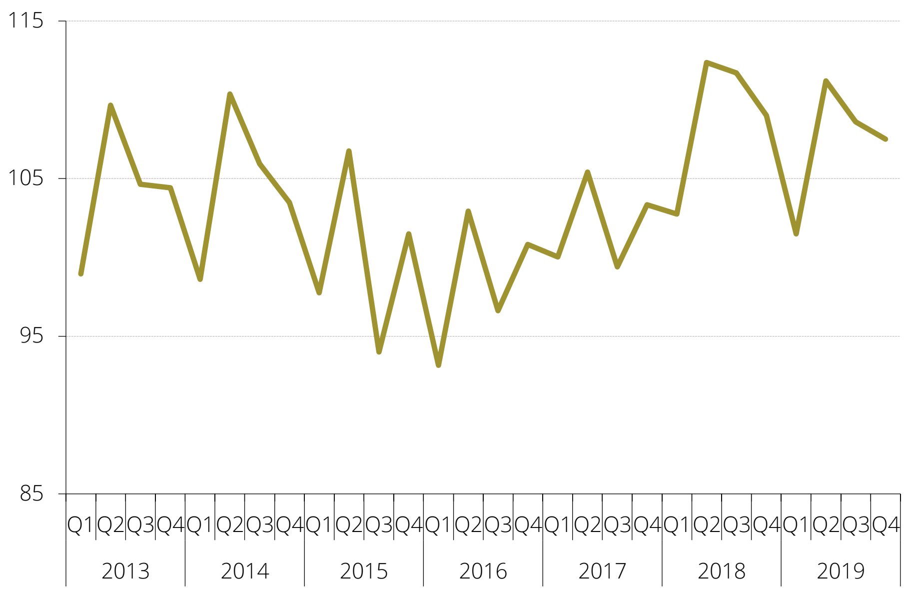
Wholesale Trade

In 2019, the revised Wholesale Turnover Index decreased by 1.6%, compared with an increase of 6.8% the year before last. It is noted that in all four quarters the activity was worse than the corresponding period of 2018.

Figure 3.5

Turnover Index in Wholesale Trade

Turnover decline by 1.6% in 2019 against 2018. Decline in all quarters compared to a year ago.



Source: ELSTAT

Services

Last year, turnover increased compared to 2018 in twelve of the thirteen branches of Services. A drop in turnover occurred only in the services of Other professional, scientific and technical activities, whose turnover fell by 6.2%, against an increase of 3.8% the year before last.

In contrast, the biggest increase in activity occurred in Employment activities (+19.4%, followed by +16.3% in 2018), Advertising (+9.9% from +1.1%) and Information service activities (8.2% instead of -4.2%). Computer programming (+6.8%, from +7.0%) and Legal - Accounting services (+6.0%, then +6.9% in 2018) come next with a similar growth as in 2018. Telecommunications services expanded slightly (+2.4%, from 0.6% the year before last), while the smallest, marginal increase in activity was recorded in Architectural and engineering activities, but after a strong contraction in 2018 (+0.4% instead of -12.8% in 2018).

Table 3.6

Turnover Indexes (2010=100)

Services branch	% Change 2018	% Change 2019
Publishing activities	-3.3%	4.6%
Architects and Engineers	-12.8%	0.4%
Data and Information service activities	-4.2%	8.2%
Security and investigation activities	-3.9%	0.9%
Telecommunications	0.6%	2.4%
Advertising and market research	-1.1%	9.9%
Postal and courier activities	8.1%	4.7%
Computer programming, consultancy and related activities	7.0%	6.8%
Other professional, scientific and technical activities	3.8%	-6.2%
Legal, accounting and management consultancy activities	6.9%	6.0%
Office administrative, office support and other business support activities	9.6%	1.7%
Employment activities	16.3%	19.4%

Source: ELSTAT

Table 3.7

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

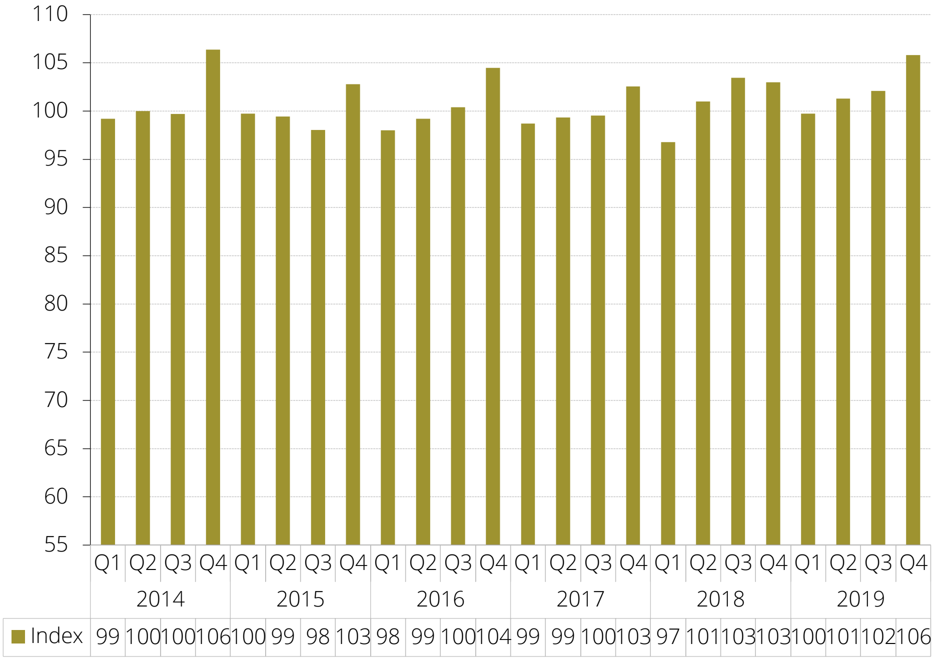
	Q1 2018	Q1 2019	Q1 2020	Change % 19-'18	Change% 20-'19	Change 2018/2017	Change. 2019/2018
Hotels – Restaurants – Travel Agencies	95.5	78.9	92.8	-17.4%	17.62%	-16.6	13.9
Other Business Services	66.4	79.8	99.5	20.2%	24.69%	13.4	19.7
Financial Intermediation	95	73	93.6	-23.2%	28.22%	-22	20.6
Information Services	77.2	82.6	85.5	7.0%	3.51%	5.4	2.9
Total Services	85.4	80.1	99.8	-6.2%	24.59%	-5.3	19.7

Source: IOBE

Figure 3.6

Turnover Index in Telecommunications (branch 61)

Small boost in 2019, yet stronger than in 2020 (2.4% against 0.6%)

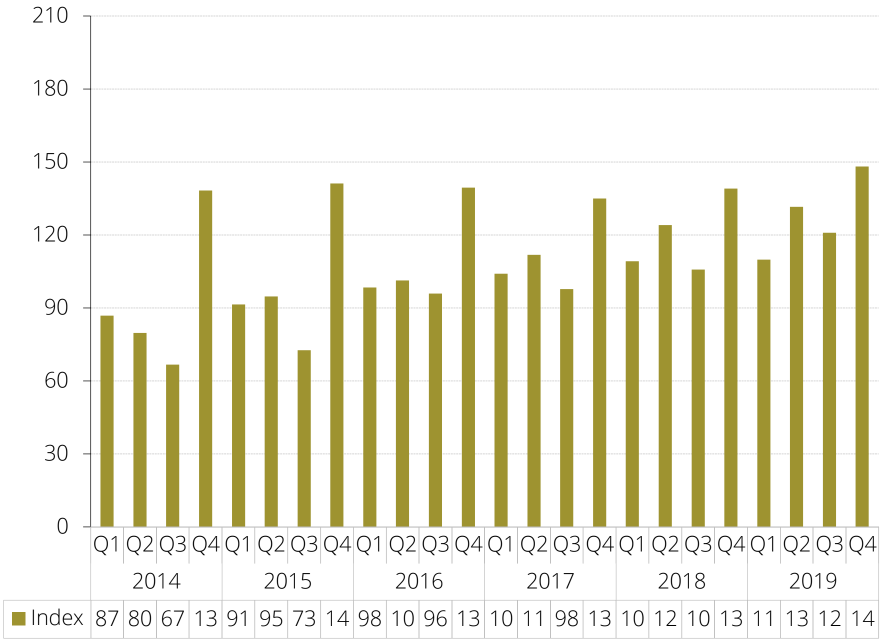


Source: ELSTAT

Figure 3.7

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

Sixth consecutive year of sales growth, by 6.8% in 2019, about the same as in 2018 (+7.0%)

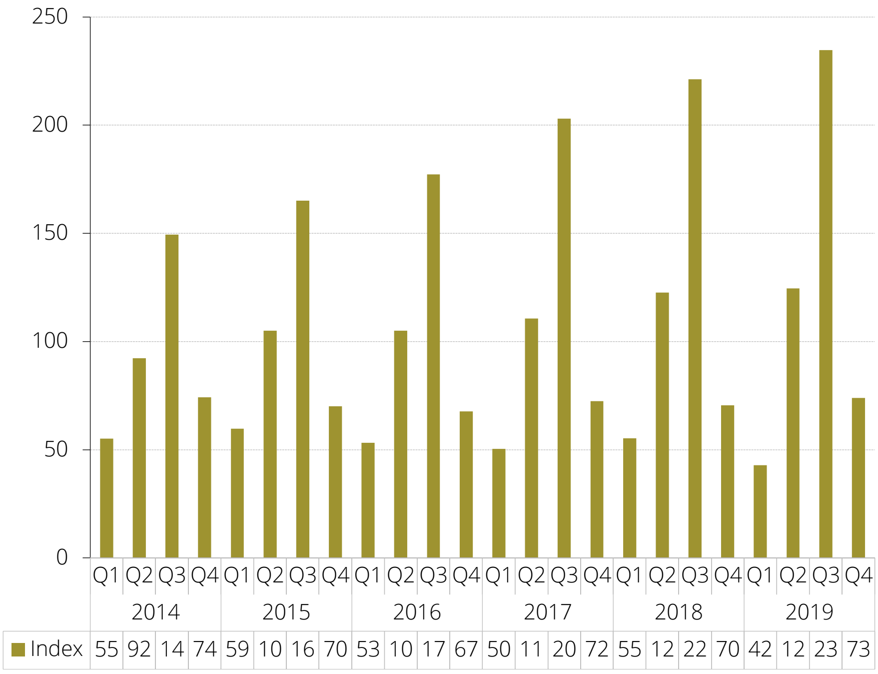


Source: ELSTAT

According to IOBE's leading economic sentiment indicators for the first quarter of 2020, expectations strengthened in all four sub-sectors of Services, while the overall indicator for Services increased by 19.7 points, offsetting the decrease of 5.3 points in the corresponding quarter of 2019. It should be noted that the indicators for this period incorporate to a small extent the effect of the pandemic of the new coronavirus, based on part of the results of the survey for March. The confidence indicator strengthened by 20.6 points in Financial Intermediaries (against a decrease of 22 points last year) and by 19.7 points in Various businesses services (after a rise of 13.4 points). In Hotels - Restaurants, the indicator strengthened by 13.9 points, after decreasing by 16.6 points last year. Finally, expectations in IT services improved by 2.9 points.

Figure 3.8

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



Significant slowdown in the expansion of activity in Tourism (+1.3% instead of +7.6% last year)

Source: ELSTAT

3.3 Export Performance of the Greek Economy

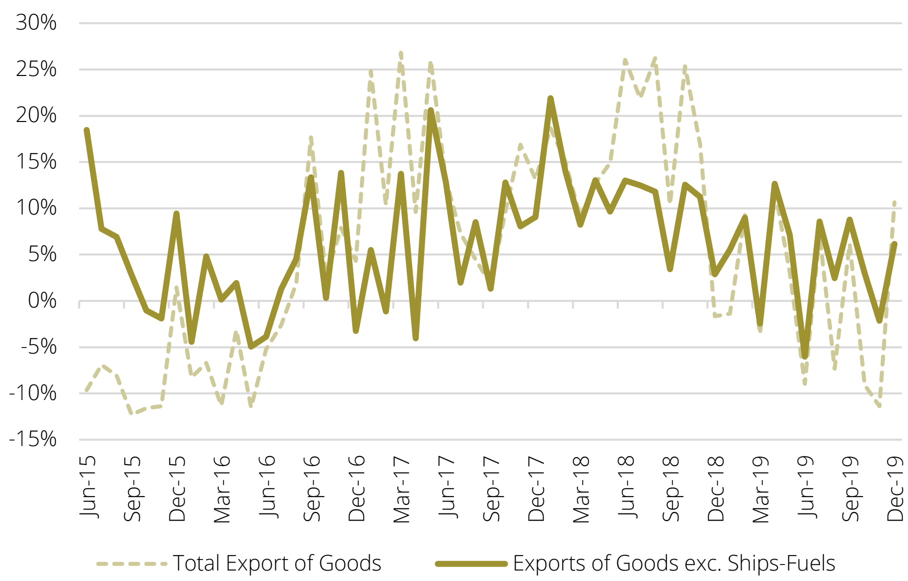
The exports of goods amounted to €33.4 billion in 2019, compared to €33.1 billion in 2018, marking a marginal increase of 0.8%. Excluding oil and ship exports, other exports increased by 4.1% to €22.9 billion, from €22.0 billion in 2018 (Figure 3.9). Imports rose 2.3% last year to €54.0 billion, up from €52.8 billion a year earlier. At the beginning of this year, in January, exports rose 13.5% compared to a year ago, reaching €2.85 billion. As a result of the above developments in the key components of the trade balance of goods last year, its deficit was €965.2 million higher than in 2018, at €20.6 billion, from €19.7 billion (+4.9%). Subsequently, the value of exports of products of the Greek economy last year corresponded to 61.8% of its imports, while in 2018 it corresponded to 62.7%.

In detail, the exports of Agricultural Products decreased by 1.5% last year, reaching €5.85 billion, from €5.95 billion a year earlier, while Fuel exports decreased by 7.1%, reaching €10.7 billion, from €11.5 billion in 2018 (Table 3.8).

Figure 3.9

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

Exports except petroleum products and ships reached €22.9 billion in 2019, 4.1% higher than in 2018



Source: ELSTAT. Data processing: IOBE

The exports of these two product categories accounted for 49.6% of the domestic goods exports in 2019, from 52.7% the year before. The decrease in Agricultural Products came mainly from a drop of 41.3% in demand for Animal and vegetable oils and fats, the value of which totalled €409.4 million, from €697.5 million a year ago; as a result, their share in the total exports of goods decreased from 2.1% in 2018 to 1.2% in 2019. In the Food - Live Animals category, which accounts for about 80.4% of agricultural exports, exports increased by 3.8%, from €4.5 billion in 2018 to €4.7 billion last year. In Beverages and Tobacco products, which account for 12.6% of exports of the Agricultural Products category, demand last year stood at €736.6 million, up 3.3% from 2018.

Exports of Industrial Products increased by 7.9% in 2019, with their value reaching €14.8 billion, from €13.8 billion a year earlier. This increase is mainly due to the strengthening of international demand for Chemical and Related Products, by 17.5%, with their value reaching €4.0 billion. Exports also rose in the Miscellaneous manufactured articles, by 21.6%, amounting to €2.7 billion last year from €2.3 billion the year before last, while demand for Machinery and transport equipment increased by 8.2%, to €3.0 billion from €2.8 billion the year before last. In contrast, there was a 4.5% decrease in exports of Manufactured goods classified chiefly by raw material. Finally, exports of Raw Materials rose by 7.7%, reaching €1.5 billion, from €1.4 billion, while exports of Commodities and transactions not classified by category increased by 4.6%. amounting to €527.6 million in 2019.

Regarding export trends by geographical area in 2019, they expanded to the euro area countries by 7.0%, approaching €13.2 billion, up from €12.3 billion in 2018. As a result, almost 39.5% of the exports of Greek products were directed towards this region in 2019. Exports to the EU-27 increased by 7.2% or €1.2 billion, to reach €17.3 billion, from €16.1 billion a year earlier. In the Eurozone countries, which absorb the largest share of exports to the EU, exports expanded to Italy by 5.1%, from €3.5 billion the year before last to € 3.6 billion in 2019, and to Cyprus, by 8.2%, from €1.8 billion to €1.9 billion. Exports to Germany also increased, by 6.4%, from €2.1 billion in 2018 to €2.2 billion a year later. By contrast, the largest percentage contraction in exports in 2019 to the Euro area was recorded in Lithuania, by 10.2% or €5.3m, bringing them to €46.4m, while the highest percentage increase was posted in Estonia, by 79.0% or €14.5m.

Among the other European Union countries, to which total exports increased by 7.8% or €296.0m, reaching €4.1 billion, Bulgaria remains the main export destination, with an increase in outflows by 9.7% or €138.5m. Exports also increased to Romania, another country from this group absorbing a significant share of Greek exports, by 7.2% or €67.7m, to €1.0 billion. The largest percentage increase to an EU country outside the Eurozone, by 42.4%, was recorded in Croatia, where Greek exports increased by €40.6m, from €104.1m the year before last, to €146.3m in 2019.

Table 3.8

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

Product	Value		% Change	% Share	
	2019*	2018*	19*/18*	2019*	2018*
AGRICULTURAL PRODUCTS	5,858.4	5,950.1	-1.5%	17.6%	18.0%
Food and Live Animals	4,712.3	4,539.4	3.8%	14.1%	13.7%
Beverages and Tobacco	736.6	713.2	3.3%	2.2%	2.2%
Animal and vegetable oils and fats	409.4	697.5	-41.3%	1.2%	2.1%
RAW MATERIALS	1,466.6	1,361.8	7.7%	4.4%	4.1%
Non-edible Raw Materials excluding Fuels	1,466.6	1,361.8	7.7%	4.4%	4.1%
FUELS	10,673.4	11,484.6	-7.1%	32.0%	34.7%
Mineral fuels, lubricants, etc	10,673.4	11,484.6	-7.1%	32.0%	34.7%
INDUSTRIAL PRODUCTS	14,830.4	13,738.6	7.9%	44.5%	41.5%
Chemicals and Related Products	4,049.2	3,446.9	17.5%	12.1%	10.4%
Manufactured goods classified chiefly by raw material	4,943.5	5,176.3	-4.5%	14.8%	15.6%
Machinery and transport equipment	3,095.8	2,860.3	8.2%	9.3%	8.6%
Miscellaneous manufactured articles	2,741.8	2,255.0	21.6%	8.2%	6.8%
OTHER	527.6	553.2	-4.6%	1.6%	1.7%
Commodities and transactions not classified by category	527.6	553.2	-4.6%	1.6%	1.7%
TOTAL EXPORTS	33,356.4	33,088.2	0.8%	100.0%	100.0%

* Provisional Data

Sources: ELSTAT, PSE-KEEM

Regarding the rest of Europe,[32], the demand for Greek exports decreased by 1.3% in 2019, to €6.29 billion from €6.37 billion the year before last. In Turkey, which is one of the major export destinations for Greece, exports decreases by 3.0%, from €2.03 billion to €1.97 billion, while in the United Kingdom they increased slightly, by 2.2%, from €1.20b in 2018 to €1.22b a year later.

Exports to North American countries fell 3.8%, from €1.69 billion in 2018 to €1.62 billion in 2019, mainly due to a 4.8% decrease in exports to the US, from €1.37 billion in 2018 to €1.30 billion in 2019, and to Canada, by 5.5% or 8.9 million. The fall to the US may be related to trade protectionist measures. In contrast, exports to Mexico increased (+6.0%).

[32] The United Kingdom is included in this group, following its withdrawal from the EU.

Exports to the countries of the Middle East and North Africa fell by 12.1%, to €4.7 billion from €5.4 billion. The fall came mainly from the decline in exports to Egypt (-18.2%), where exports totalled €942.6 million in 2019, compared with €1.1 billion a year ago, but also to Lebanon (-21.8%), where they fell by €324.8 million in 2019 compared to the year before last (Figure 3.11). By contrast, in Saudi Arabia, a major export destination in the Middle East, exports increased by 2.8%, to €745.4m, a rise more than offset by a 21.0% fall to the United Arab Emirates, to €253.4m last year.

The flow of Greek products to Oceania increased by 19.6%, with their value in 2019 amounting to €210.8 million, when a year earlier it was €176.3 million. Exports to Australia increased by 19.0%, from €158.4m the year before last year to €188.4m in 2019. There was also a strong increase in New Zealand by +24.4%.

Exports to the markets of Central and South American countries expanded by 17.1% in 2019, totalling €418.5 million, from €357.3 million a year ago. The improvement in export performance to the countries of this region is mainly due to the increase in demand for Greek products from Brazil, by 21.7%, which shaped their value at €134.6m, and from Panama, by 39.5%, where they reached €189.8m.

International demand for Greek goods declined in Asia, where exports shrunk by 12.0% compared to 2018, to €2.0 billion from €2.3 billion. This development is mainly due to the decline in demand from Singapore (-66.1%, €143.7m from €424.6m in 2018) and the Philippines (-89.4%, to €6.9m from €65.1m the year before last year). By contrast, strong growth of Greek exports, by 38.7%, was recorded in South Korea, from €113.0 million in 2018 to €156.8 million the following year, and in Japan, by 57.1%, from €121.1 million in 2018 to €190.3 million a year later.

Table 3.9

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

ECONOMIC UNION – GEOGRAPHIC REGION	EXPORTS		% CHANGE	% SHARE	
	2019	2018	19/18	2019	2018
World	33,356.4	33,088.2	0.8%	100.0%	100.0%
OECD	18,555.1	17,426.0	6.5%	55.6%	52.7%
EU	17,275.1	16,112.1	7.2%	51.8%	48.7%
Euro Area	13,180.4	12,313.4	7.0%	39.5%	37.2%
G7	9,936.2	9,426.9	5.4%	29.8%	28.5%
North America	1,628.8	1,693.6	-3.8%	4.9%	5.1%
BRICS	1,402.4	1,469.6	-4.6%	4.2%	4.4%
Middle East & North Africa	4,717.3	5,366.3	-12.1%	14.1%	16.2%
Rest of Africa	1,816.6	2,183.8	-16.8%	5.4%	6.6%
Oceania	210.8	176.3	19.6%	0.6%	0.5%
Latin America	418.5	357.3	17.1%	1.3%	1.1%
Rest of Asia	2,027.6	2,304.1	-12.0%	6.1%	7.0%
OPEC	1,841.9	1,845.0	-0.2%	5.5%	5.6%

* Provisional Data

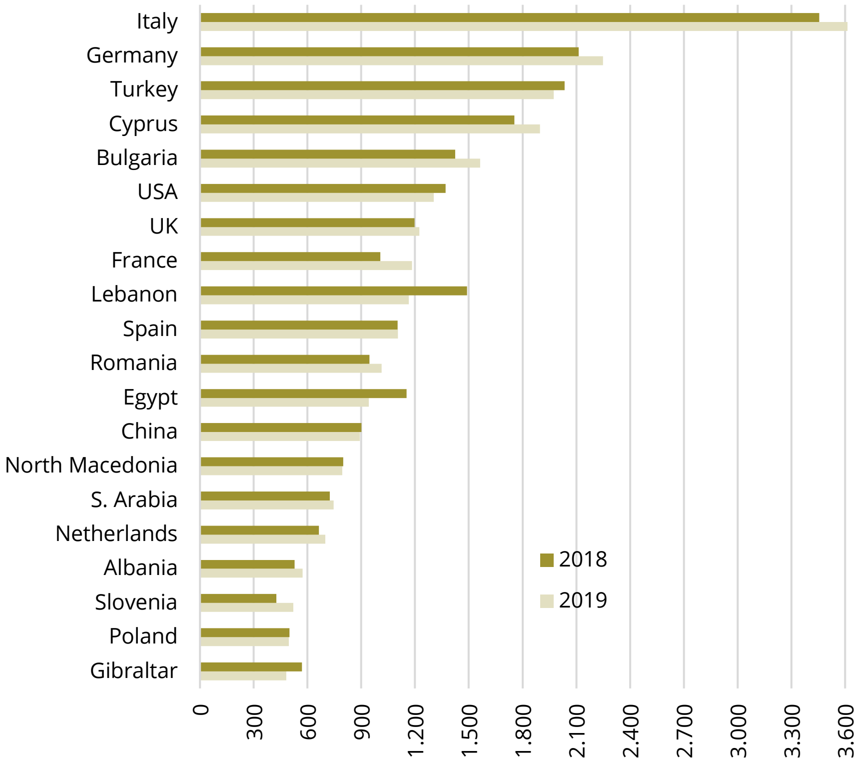
Source: ELSTAT, Processing KEEM.

To sum up, in 2019, Greek exports recorded a new historic record, reaching €33.4 billion. The boost in exports came mainly from stronger demand for industrial products (+7.9%) and raw materials

(+7.7%). At country level, there has been a significant increase in specific countries which are among the major export destinations (France, Italy, Cyprus).

Figure 3.10

Countries with the largest share in the exports of Greek goods (million €)



Strongest expansion of exports of goods in absolute terms to France (by €176.8 million). Italy remains the largest among Greece's trading destinations.

Source: PSE-KEEM, Data processing: IOBE

As predicted in the previous quarterly report of IOBE on the Greek economy, the exports of goods were increasing at the beginning of this year at a significant rate, as shown by the first available data for this year mentioned above. However, following the rapid spread of the new coronavirus from China, where it first appeared, to Europe and then North America, and due to the public health protection measures taken by many countries, the prospects for international trade in 2020 have changed completely compared to those predicted at the beginning of the year, while the conditions in international trade may have changed for years to come. The impact of the current pandemic on international trade and more broadly on economic activity worldwide will depend on its duration and the time that will elapse until it significantly weakens, but also on when an effective treatment and a method of prevention will be found, which will prevent a new outbreak in the future, with the unprecedented effects of the current one. As long as the existing lockdown measures are in place in many sectors, in Greece and internationally, or if they are lifted and imposed again later on, international trade will fall significantly. According to recent forecasts from the World Trade Organization, in an optimistic scenario for the evolution and treatment of the coronavirus, world trade will decline by 13% this year. However, if the health crisis is not controlled and governments do not coordinate with each other in order to implement effective countermeasures, the decline could reach 32%.[33]

In any case, Greece's international trade in products is expected to be hit hard by the pandemic. Its decline may be strong, as major export destinations for Greek products (Italy, Spain, France) are among the countries that have been hit hard by the virus. Italy and Spain were among the first countries outside China with a rapid spread of the virus and very large losses in human lives, which prompted them to take extensive measures to protect the population earlier than other countries. In view of these unprecedented developments and the importance of the two countries for Greece's bilateral trade, Greece’s trade flows with the two countries are presented in a Box that follows, as well as their various structural features both in terms of exports and imports, for the period 2017-2019 (Box 3.3).

Box 3.3

Trade flows of Greece with Italy and Spain and possible effects of the coronavirus pandemic

The pandemic due to the spread of the new coronavirus, which started in China in January 2020, has now more than a million cases, causing great losses in human lives and testing the resilience of health systems even in the most advanced and developed countries. Public health protection measures taken in many countries include restricting or banning international movement of people, restricting the movement of the population within the countries, as well as suspending business operations in certain sectors. Therefore, in addition to the health crisis and the loss of human lives, the pandemic has a significant economic impact on countries taking strong public health protection measures, as most of the production process has been suspended. The effects affect each country taking action, as well as its trading partners, as economic globalisation has created significant interdependence between the national economies. Italy and Spain are, so far, the countries with the most loss in human lives due to the health crisis. The unpleasant developments prompted them to take, earlier than any other country, measures of almost universal lockdown, including cessation of activity in the majority of sectors, with the result that the decline in economic activity is immediate and strong, greater than in other countries.

Therefore, the outlook for the Italian and Spanish economies is of particular interest. An additional reason is that Italy and Spain have long been major trading partners of Greece, which highlights the importance of examining the effects of declining economic activity and demand in these countries. Furthermore, Greece has taken special measures for these countries (e.g. banning flights to and from them). Next, the trade flows between Greece and the two countries are mapped, at the level of product category (capital, consumer), but also at the sectoral level, in 2017-2019. Trade flows relate only to goods, so the likely effects on travel receipts are not presented. The purpose of this exercise is to highlight the possible implications for the foreign trade of the Greek economy. The negative effects may come either from the import side, as the inability of these countries to

[33] https://www.wto.org/english/news_e/spra_e/spra303_e.htm

operate their industry smoothly can cause shortages of raw materials, etc., or from the export side, since the strong recession expected there will also reduce their imports from Greece.

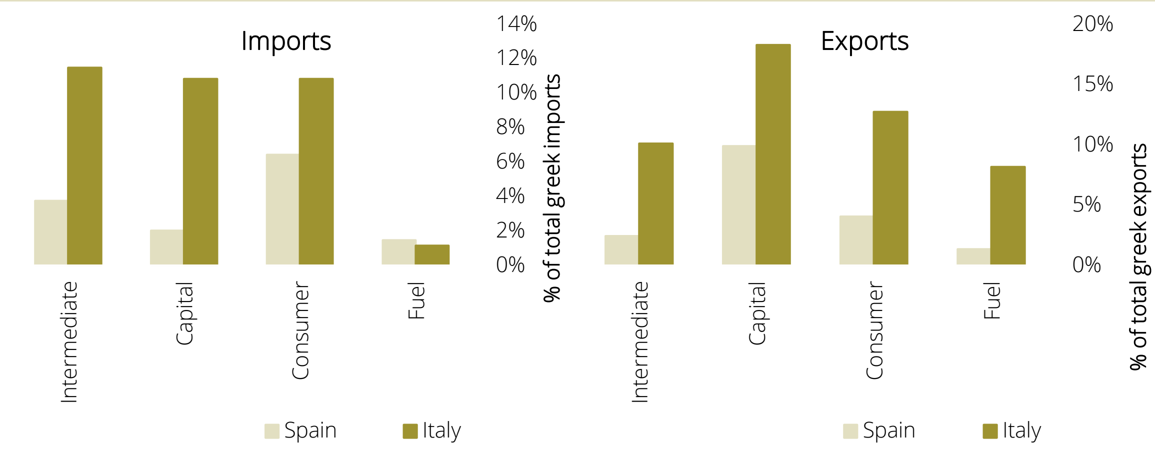
Italy is the first destination for Greek exports of goods in the period under review, with about €3.4 billion, accounting for 10.6% of Greek exports and 20% of its intra-EU exports. Spain is Greece's 10th largest trading partner in terms of exports, with a share of 3.0% of the total. On the Greek import side, Italy is in 2nd place, after Germany, as our country imports 8.5% of the products from Italy, with the corresponding share from Spain at 3.7%. Therefore, cumulatively the two countries account for 13.7% of exports and 12.3% of domestic imports, reflecting strong trade flows.

The next Figure shows the share of the two countries in Greek imports and exports by product category. The classification of products is carried out according to the Classification by Broad Economic Categories Rev.5 in:

- Intermediate goods (goods for the production of other goods)
- Capital goods (for fixed capital formation)
- Consumer goods (for final consumption)
- Fuel

Figure 3.11

Imports - exports from Italy - Spain, by product category (average 2017-2019)



Source: Eurostat (EU trade by BEC)

Most of the imports from Italy and Spain are consumer products, at 40% and 50% respectively, followed by intermediate goods, with a 45% share in imports from Italy and 32% in Spain. By calculating the shares of imports (excluding fuel) from these countries in all domestic imports of goods, their gravity to the Greek economy may emerge. According to these calculations, about 11% of Greece's imports come from Italy, while Spain also holds a significant share (from 2.0% to 6.4%). Therefore, if industrial production in these countries declines significantly in 2020 due to restrictive measures, it is possible that there will be some difficulties for the supply of Greek industry, especially in cases where similar products are not produced in other countries, as 15.2% of the imports of intermediate goods and 12.9% of capital goods come from these two countries (Figure 3.11). Their share in consumer products is even higher than 17% in total, but for products in this category it is generally easier to find substitutes. As for fuel imports, those from Italy and Spain are not high and in total do not exceed 2.6% of the total.

On the exports side, Greece mainly exports consumer products to these countries, as 40% of its exports to Spain and 35% to Italy are products of this category, followed by intermediate goods and fuels. By product category, 12.6% of the intermediate goods exported by Greece are directed to these countries (Figure 3.11), while their share in the Greek exports of capital goods is particularly high, with the percentage share of the two countries approaching 28.2%. Therefore, a large percentage of Greek capital equipment exports are absorbed by Italy and Spain. So, if their industry activity declines sharply, for a long time, this will result in reduced orders for the Greek industry. About 16.8% of the Greek exports of consumer goods are also directed to these countries, but their supply with retail products has not been interrupted and continues without hindrance.

At sectoral level (double-digit NACE rev.2 classification), Table 3.10 shows the share of Italy and Spain in the top five sectors of the Greek economy in imports and exports (excluding the crude oil sector, whose trade flows originate almost exclusively from non-EU countries). In imports, 10.7% of food imports come from Italy and 6% from Spain. In the chemical industry, Italy's share is even higher, while as previously reported, there is no significant dependence on petroleum products from both countries.

Domestic imports from the pharmaceutical industry, a sector of particular importance in the current situation, come from Italy by 7.0%, while in total the two countries supply 1/10 of the imports of the sector in Greece. Given the strong demand from these destinations in the current period, Greece should look for alternative suppliers. In the Computer sector there is no significant flow from both countries. On the export side, Greece exports 7.7% of petroleum products to Italy and a small share to Spain. The two countries are particularly focused on exports of the food sector, with a total share of 18.1%. A similar share is recorded in Basic metals, while Agriculture and Chemicals are also expected to be affected, as 12.4% and 12.8% of their exports are imported from these two countries.

Table 3.10

Share of Spain and Italy in the most import-export sectors of Greece (average 2017-2019)

	Imports			Exports	
	Italy	Spain		Italy	Spain
Food	10.7%	6.0%	Fuels	7.7%	1.5%
Chemicals	12.1%	6.0%	Food	15.4%	2.7%
Fuels	3.0%	6.0%	Raw Minerals	15.0%	2.5%
Pharmaceuticals	7.0%	2.6%	Agricultural products	9.6%	1.8%
Electronics	2.7%	0.5%	Chemicals	9.3%	3.5%

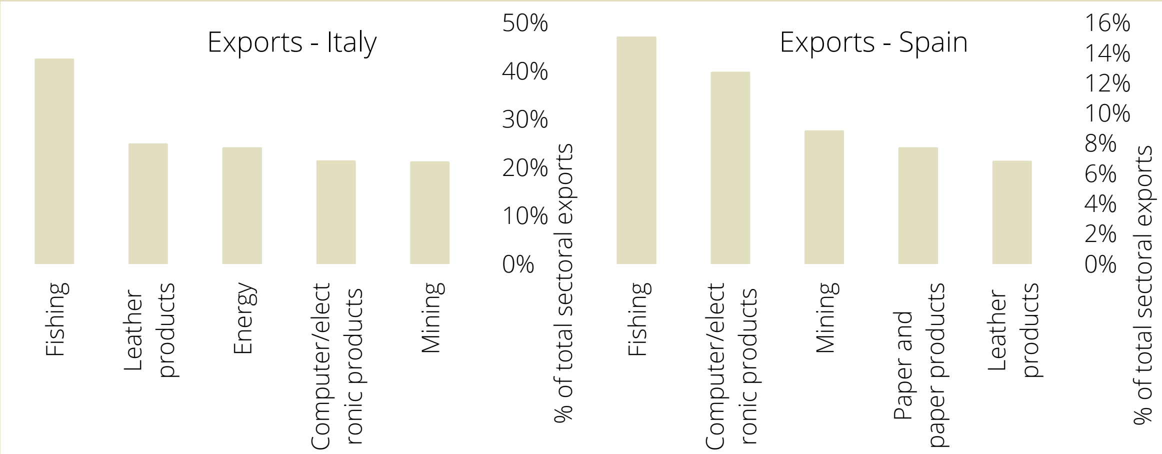
Source: Eurostat (EU trade by CPA)

Apart from the analysis of the main export and import sectors of the Greek economy, the current situation is of interest for sectors with large flows with Italy and Spain, regardless of their share of total domestic exports and imports. On the import side, a significant share of furniture imports, about 23%, are made from Italy. This is followed by imports of metal products, with 20.2% of their imports coming from Italy. About 16.5% of the Greek clothing imports come from Spain, as well as 8.8% of the imports of building materials.

In exports, domestic fishing is expected to be strongly affected, as Italy accounts for 43.6% of their exports, while the corresponding share for the leather goods industry is 25%. The domestic fisheries sector also has significant flows to Spain (15.1% of its exports), so cumulatively with Italy, about 60% of the sector's exports go to these two countries. Operators in the domestic fisheries sector already estimate a drop in their exports to these countries by around 40%. The electronics industry shows significant flows to Spain, with 12.8% of its exports absorbed by it, followed by mining exports with 8.9% (Figure 3.12).

Figure 3.12

Sectors with most exports to Italy – Spain (average 2017-2019)



Source: Eurostat (EU trade by CPA)

In conclusion, for the time being it is unknown how much the pandemic of the new coronavirus will affect economic activity, in addition to the human health . However, the cessation of a very large part of economic activity in Italy and Spain is probable from the above evidence that it can also affect the Greek economy, especially if the health crisis in these countries, as well as in other economies closely related to them, is ultimately prolonged. The potential impact will not only apply to domestic exports, in particular in the field of exports of capital goods, but also to the supply of raw materials produced by specific sectors.

3.4 Employment – Unemployment

According to the ELSTAT Labour Force Survey, in 2019 the unemployment rate in Greece decreased by two percentage points, to 17.3% from 19.3% in 2018. The number of unemployed decreased during the same period by 10.5% or 96.2k people, from 915.0k to 818.9k. About 86.3% of the decrease in unemployed (83.0k people) came from an increase in the number of employed and 13.4% (13.2k people) from a reduction of the labour force.

As regards the evolution of unemployment in the Eurozone, it has steadily fallen since 2014, and in 2019 it decreased further, to 7.6%, i.e. 0.6 percentage points lower than in 2018. In Spain, which after Greece has the highest unemployment rate, the corresponding figure stood at 14.1% in 2019, from 15.3% the previous year (a fall of 1.2 percentage points), while in Italy it fell to 10% from 10.6%. By contrast, the lowest unemployment rates in 2019 were observed in Germany (3.2% in 2019 from 3.4% in 2018), Malta (3.4% in 2019 from 3.7% in 2018) and the Netherlands (3.4% in 2019 from 3.9% in 2018). In Europe's other major economies, unemployment is also on a downward trajectory. In

France, the unemployment rate fell from 9% in 2018 to 8.5% in 2019 and in the UK from 4% to 3.7%. In Lithuania and Luxembourg alone, unemployment increased marginally by 0.1 percentage points (from 6.2% to 6.3% and from 5.5% to 5.6%, respectively).

Figure 3.13

Labour force participation and unemployment rates

Decline in unemployment in 2019 to 17.3%, from 19.3% in the previous year, slightly weaker than in 2018 (-2.2 points).

Sources: ELSTAT – Labour Force Survey, Eurostat

In terms of the gender composition of unemployment, in Greece in 2019 the unemployment rate for men (14%) was 7.5 percentage points lower than for women (21.5%) and 1.4 percentage points lower against 2018 (15.4%). The unemployment rate for women fell in 2019 by 2.8 percentage points compared to the previous year (24.2%). In the Eurozone, men's and women's unemployment rates fell by the same percentage last year (0.6 percentage points), but it was lower for men than for women (7.3% vs. 8.0%).

With regard to the age structure of unemployment, it fell in all age categories, while its rate falls with age. In detail, the biggest decrease in the unemployment rate occurred in 2019 among 15-19 year old, which stood at 43.4% from 50.3% in 2018, followed by the fall in 20-24 year old, where the unemployment rate declined by 4.2 percentage points, from 38.6% to 34.3%. The smallest drop in the unemployment rate in 2019 occurred in people aged over 65, at 9.8% from 10.6% in 2018 and in those aged 45-64, from 15.6% the year before last to 13.9% in 2019.

On the duration of unemployment, the long-term jobless rate was unchanged last year compared to 2018, at 70.4%. However, the number of long-term unemployed decreased last year, by 69.3k people or 10.8% compared to 2018, from 643.7k to 574.4k.

With regard to the level of unemployment based on the level of education, it is lower over time as its level increases, while in all categories of education except those who did not go to school at all, it fell last year. In detail, the largest drop in the unemployment rate occurred in 2019 in people who attended some primary school, at 35.1% from 39.5% a year earlier. The lowest unemployment rate was recorded in people with a doctorate or postgraduate degree, 8.7% from 9.9% in 2018, and the highest in those who did not go to school at all, where it rose to 54% in 2019 from 47.7% the year before last. The lowest drop in the unemployment rate occurred in 2019 among people with a primary school diploma, which stood at 20.6% from 21.6% a year earlier. In the other categories, the drop in the unemployment rate was between 2.0 (graduates of higher education - from 14.4% to 12.4%) and 2.4 percentage points (people with a degree in technical-vocational education - from 20.4% to 18%).

Table 3.11

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
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
2016	9,212.8	52.1	3,673.6	76.5	1,130.9	23.5
2017	9,176.9	52.1	3,752.7	78.6	1,027.1	21.5
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

Source: ELSTAT, Labour Force Survey

In relation to the regional dimension of employment, in ten regions of the country the unemployment rate decreased in 2019, in two regions it increased and in one it was unchanged. In particular, the lowest unemployment rate is found in Crete, where it fell to 11.7% in 2019 from 13.4% a year earlier, while the highest in Western Macedonia, where it stood at 24.5% from 27% in 2018. The largest drop in the unemployment rate last year was observed in the Northern Aegean by 4.7 percentage points, to 17.6%, and the smallest in Central Macedonia, where unemployment decreased by 1.1 percentage points, from 20.7% to 19.6%. In Western Greece, unemployment in 2018-2019 was unchanged (24.1%), while in the regions of Eastern Macedonia-Thrace and Thessaly it increased marginally, by 0.3 (from 15.9% to 16.2%) and 0.2 (from 18.3% to 18.5%) percentage points respectively. In Attica and Central Greece, the unemployment rate last year was similar to the national rate, at 17.0% (from 19.9% in 2018) and 17.2% (from 18.9%) respectively.

As regards unemployment at the level of key sectors, employment strengthened in all except for the Primary sector. In the tertiary sector, employment increased by 82.8k people (or 3.0%), from 2,774.7k in 2018 to 2,857.5k in the previous year, while in the Secondary sector it increased by 2.8%

or 16.2k employees, from 583.7k the year before last year to 599.9k last year. In contrast, in the Primary sector, employment fell by 16.0k people in 2019, to 453.6k from 469.6k in 2018, when it had risen by 16.3k people.

In five of the constituent branches of economic activity, employment decreased last year, while in the other 16 it increased. The biggest decline was recorded in Agriculture-Forestry-Fisheries, where jobs were cut by 16.0k people or 3.4%, followed by Activities of households as employers, with a decrease of 4.9k employees (from 29.9k in 2018 to 25.0k in 2019). Employment decreased less in Construction (-4.0k employees, from 151.6k to 147.6k) and Financial - Insurance Activities (-3.4k employees, to 84.2k). By contrast, the strongest growth in employment is found in Transport – Storage, by 22.2k employees (206.9k in 2019 from 184.7k in 2018), followed by Accommodation - Food Services, where employees increased by 20.2k, to 381.9k. There was a significant increase in employment in Manufacturing, by 19.3k from 357.8k the year before last to 377.1k in 2019, and in Education, by 17.7k (from 303.2k to 320.9k). Finally, in Wholesale-Retail Trade, the number of employees increased last year to 691.9k people from 688.6k in 2018.

To sum up, sectoral employment data show that its overall increase in 2019 mainly came from:

- The rise in the Transport-Storage sector (+22.2k employees).
- The increase in Tourism (+20.2k employees), in line with the increase in travel receipts in 2019 compared to 2018, by €2.093,0 million (+13%)
- The rise in the Manufacturing sector (+19.3k people), despite a marginal decrease in the seasonally adjusted Industrial Production Index by 0.9% last year.
- The rise in Education (+17.7k people),

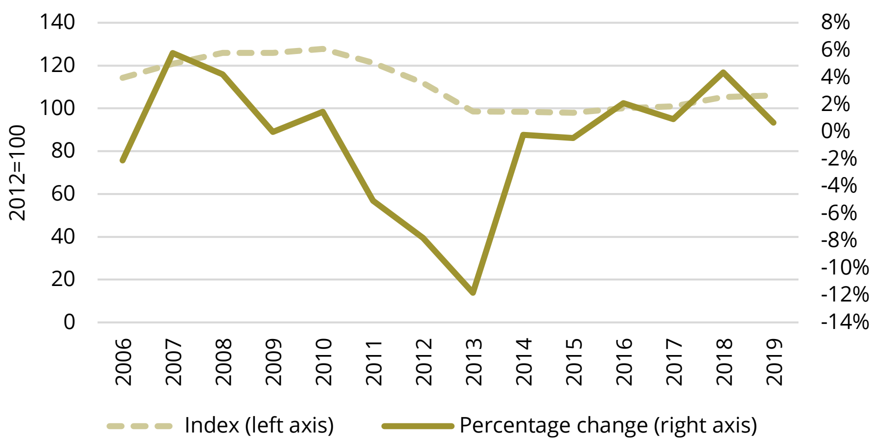
and despite declining employment in the Primary sector (-16.0k).

In terms of the trend of the seasonally adjusted wage cost index for the Greek economy as a whole, in 2019, it increased for the fourth year in a row, by 0.7%, well weaker than in the precious year (+4.4%).

Figure 3.14

Seasonally adjusted wage cost index and percentage point change (2006 - 2019)

Increase in the seasonally adjusted wage cost index by 0.7% in 2019, notably weaker than in 2018 (+4.4%)



Source: ELSTAT

Medium-term outlook

The unprecedented situation domestically and internationally since the pandemic of the new coronavirus (COVID-19) has completely altered the economic conditions, due to restrictive health protection measures and policy interventions to deal with their effects on economic activity. The pandemic is expected to be the most decisive factor for the macroeconomic figures of the Greek economy, with its impact dependent on its duration and the likelihood of a new outbreak of the virus later in the year, once the current wave subsides. As a result, it will have an impact on employment, both through foreign and domestic channels.

Regarding the first category of factors, the extensive restrictive measures on the operation of companies in major trading partners of Greece, such as Italy, Germany, Turkey, United Kingdom, Spain, USA, France, China, Netherlands (a total of more than 40% of Greek exports over time), as the coronavirus is rapidly spreading in the population, will affect strongly, as long as they last, the demand for Greek products, and therefore the employment of exporting manufacturing sectors of the Greek economy. In addition, for most of these countries there has been a suspension of passenger flights in both directions, which will significantly affect tourism and transport, two of the sectors with significant contribution to the decline in unemployment in recent years.

On the side of developments in Greece due to the health crisis which are already affecting employment and will continue to exert pressure, the government suspended the operation of educational establishments at all levels in early March. This measure was then gradually extended to tourist accommodation and the vast majority of retailers, with the exception of those covering basic needs (supermarkets, bakeries, petrol stations, pharmacies, butchers, fruit shops, banks, etc.). Other firms which continue to operate have been given the opportunity to employ workers remotely and to have rotating employment.

In parallel with the above measures, interventions were also taken to support businesses, self-employed persons, sole proprietors and employees who have been financially affected by the emergence and spread of the coronavirus. These measures include the suspension of payment of VAT under certain conditions, the suspension of collection of arrears and the extension of the deadline for payment of instalments to the tax authorities, the extension of the deadline for payment of social security contributions and instalments of related schemes, the exceptional financial assistance by €800 for employees with suspended employment contracts, the extension of the regular allowance for the unemployed that expired within the first quarter of 2020, the acceleration of income tax and VAT refunds up to the amount of €30k, etc. In addition to providing financial support, these measures aimed to maintain employment, curbing the rise in unemployment.

Despite the above measures to assist businesses and households, the effects on the demand of the vast majority of businesses in Greece from the restrictive administrative measures domestically, but also internationally in major export destinations, as well as the restrictions and prohibitions on international transport and trade, will lead to employment changes. Household demand will be constrained by the uncertainty about the evolution of the pandemic and health concerns, which will worsen the household expectations.

The negative effects of policy measures extend beyond current demand and activity, towards investment decisions. As investment plans are decided by assessing the possible trends and developments in the medium to long term, the current very high uncertainty about the prospects of the domestic, European and global economy has a particularly deterrent effect on their implementation, which is expected to have strong impact on construction projects, but also in industries that produce capital equipment (machinery, means of transport, etc.). Given these inhibitory effects, investment activity this year is expected to come mainly from public works and completed privatisations.

Under the above effects on employment from the health crisis and given that their intensity will depend mainly on how long it would take until the pandemic weakens significantly and treatment and prevention methods for new coronavirus are discovered, IOBE has developed alternative scenarios for estimating employment by quarter and sector. The scenarios differ from each other mainly in terms of the duration of the current pandemic and whether the virus will have a new outbreak in the autumn. Within each scenario, changes at the sectoral level differ significantly, while they are not negative in all sectors. Indicatively, in Public Administration-Defence-Compulsory Social Security and in Human Health - Social Work Activities, an increase in employment is now considered possible. In contrast, the sectors whose employment is expected to receive the most pressure are those of Tourism, Wholesale - Retail Trade, Education (where employment expanded significantly last year) and Professional - Scientific - Technical Activities. A common assumption in all scenarios is that in January-February this year the Greek economy operated smoothly and the labour market followed the trends expected before the crisis, i.e. unemployment falling year on year. As expected, as the duration of the pandemic and in general the effects of the new coronavirus on which the scenario is based worsen, the effects on employment intensify and unemployment rises further.

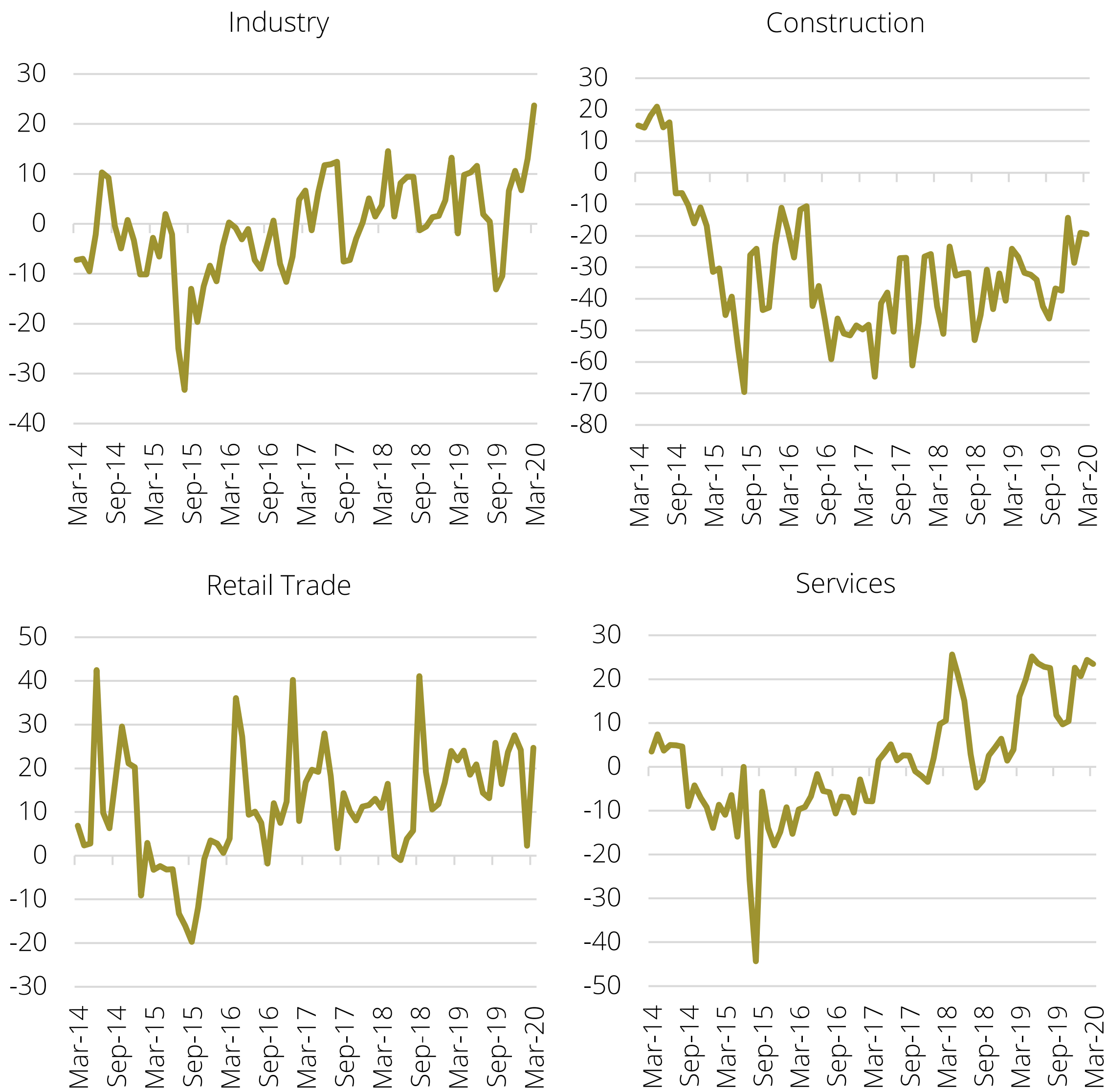
Following the above methodology, a range of estimates for the average unemployment rate emerged for this year. There was no scenario of unemployment continuing to fall for the seventh year in 2020. All scenarios resulted in an increase in unemployment, commensurate with the duration of the health crisis and the maintenance of public health measures, both domestically and internationally. Based on the results of the alternative scenarios, the unemployment rate will increase this year by around 2.0 to almost 4.0 percentage points, compared with last year's level (17.3%).

According to the latest IOBE Business and Consumer Surveys, in January -March 2020, the short-term employment expectations strengthened quarter on quarter, in all sectors except Retail trade. Compared to the same period of last year, there was a slight boost in Construction and Industry, slightly stronger in Services and a slight decline in Retail Trade. In detail:

In Industry, the average balance of +2 points in the previous quarter increased by 12 points in the first quarter of 2020. Compared to last year's performance, the average quarterly index was 9 points higher. In the quarter under review, the percentage of industrial enterprises predicting a decline in employment in the near future stood at 9%, while the percentage of those expecting an increase in the number of jobs increased to 23% (from 20%). However, the vast majority of companies in the sector (68% from 63%) were anticipating employment stability.

Figure 3.15

Employment expectations (difference between positive and negative responses)



Source: IOBE

In the January-March quarter of this year, short-term employment expectations strengthened in all sectors except Retail Trade.

In Construction, the forecasts indicate an improvement in the sector's low employment balance, which stood at -22 points (from -29 points), to a slightly higher level than in the same period of 2019 (-32 points). In the examined quarter, 36% (out of 49%) of the companies in the sector predicted job losses, while 14% (out of 20%) of the respondents expected an increase in employment. At the sub-sector level, the significant improvement of the relevant index in Public Works (-21 from -41 units) is not accompanied by a corresponding improvement of the index in Private Constructions (-24 from -16 units).

In Retail Trade, the employment expectations indicator fell slightly in the first quarter of the year compared to the previous quarter, to +17 points (from +23). Compared to last year, the indicator is lower by 5 points. Only 3% (from 2%) of the businesses in the sector were expecting job cuts, while 20% (from 25%) predicted an increase in employment, with those expecting job stability moving to 78% (from 73%) of the total. The balance of employment expectations declined in all sub-sectors except Department Stores, where it marginally increased.

In Services, the expectations strengthened notably in the examined quarter compared to the previous quarter, while in terms of the corresponding period of last year, the improvement was sharp. In particular, the relative balance of +14 points of the previous quarter, rose during the examined quarter to +23 points, while compared to the corresponding period of 2019 it increased by 16 points. Of the companies in this sector, 3% (from 9% in the previous quarter) expected a decrease in employment, with the percentage of those predicting an increase coming to 26% (from 24% in the previous quarter). At sub-sector level, the trend is positive in IT Services and Hotels-Restaurants and negative in the remaining sub-sectors.

3.5 Consumer and Producer Prices

- Inflation 0.5% in the first two months of 2020, of the same rate as in the corresponding period of 2019
- Negative effect on prices from indirect taxes, marginally positive effect from energy products
- The rate of change of CPI at constant taxes and excluding energy reached 1.8% in the first two months of this year, from 0.9% in the corresponding period of 2019, reflecting boosting effect of domestic demand on prices
- Following the outbreak of the coronavirus pandemic and the imposition of restrictive public health protection measures, in Greece and internationally, the domestic Consumer Price Index is forecast to decline by at least 2.0% in 2020. It will come mainly from falling energy prices and the negative impact of domestic demand.
- If the health crisis is prolonged or resurges later this year, deflation will be between 3.0-3.5%.

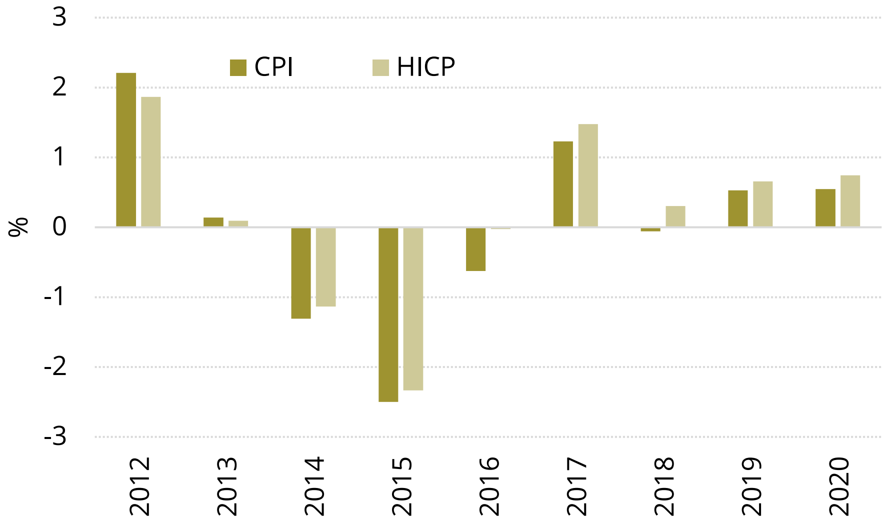
Recent Developments

In the first two months of 2020, the average rate of change in the domestic Consumer Price Index (CPI) was positive for the second consecutive year. In particular, CPI increased in January - February this year compared to the corresponding period of the previous year by 0.5%, at the same rate as it had increased then compared to 2018. The Harmonized Index of Consumer Prices (HICP) strengthened by 0.7% in the first two months of the year, also posting the same rate as in the same period of the previous year (Figure 3.16). According to the latest data, in March this year the domestic CPI was unchanged from a year ago, when it had increased by 0.9% (Figure 3.17).

Looking at the contribution of the CPI components, inflation in January - February was largely driven by the recovery in domestic demand, as the change in the price index with fixed taxes and excluding energy goods stood at 1.8%, much higher than the overall CPI change. Note that an increase in prices excluding energy and taxes is recorded for the third year after seven consecutive years of negative change (2011-2017, Figure 3.18).

Figure 3.16

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

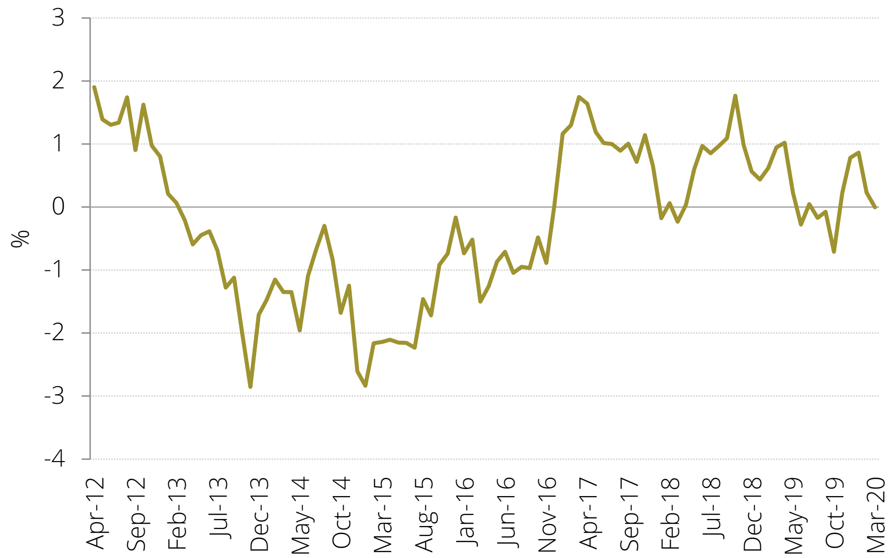


Unchanged CPI inflation from last year in the first two months of 2020 compared to the corresponding period a year ago, at 0.5%

Source: ELSTAT, Data processing IOBE

Figure 3.17

CPI in Greece (annual percentage change per month)



Unchanged domestic CPI in March 2020 (0.0%), +0.9% in the corresponding month of 2019. Up by 0.4% in the first quarter, from 0.7% a year ago

Source: ELSTAT, Data processing IOBE

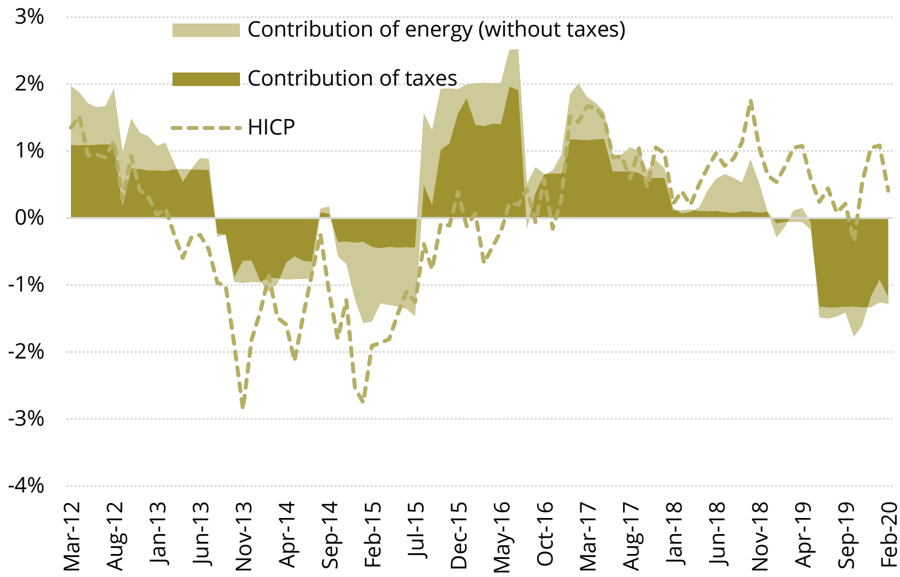
The effect of taxation on the change in consumer prices was negative in the first two months of this year. Specifically, the contribution of indirect taxes to the annual change of the HICP in January-February 2020 was -1.3 percentage points, from marginally negative in the corresponding period of the previous year (-0.1 percentage points - Figure 3.18). This result came mainly from the reduction in indirect tax rates in May 2019.

With regard to developments in energy commodity prices, the average international oil price in January-February of this year weakened compared to the first two months of 2019. In particular, the average price of Brent oil in the first two months of 2020 stood at $59.9/barrel, from $61.6/barrel in the corresponding period last year, falling by 2.8%.[34] The relatively stronger decline in the euro's average exchange rate against the dollar over the same period a year earlier, by 3.3%, to 1.10 against 1.14, has had a significant impact on the change in the price of oil in euro terms. Subsequently, the average price of oil in euros stood at €54.4/barrel, 0.5% higher than in the first two months of 2019. The marginal rise in oil prices, which is a key component of energy costs, also explains the marginal positive average effect of energy prices on the rate of change in domestic prices in the first two months of this year, by 0.2% (Figure 3.18).

Figure 3.18

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

Negative impact of taxes on prices in the first two months of 2020, by 1.3 p.p., compared with marginally negative effects a year earlier (-0.1%)



Source: Eurostat, Data processing IOBE

The percentage change in the general price level in Greece based on the HIPC in the first two months of 2020 was lower than the Eurozone average, at 0.7% against 1.3%, a growth rate that ranks the country in the penultimate position among the Euro area countries, higher only than Italy (0.3%).

Harmonised inflation stood to the same level as Greece in Denmark and Portugal, while in Cyprus it was slightly higher (0.9%). Domestic demand was the main trigger of price growth in the Eurozone as the price index at constant taxes and excluding energy goods increased by 1.3% compared to the corresponding period of 2019, when the rise was 0.9% (Figure 3.19).

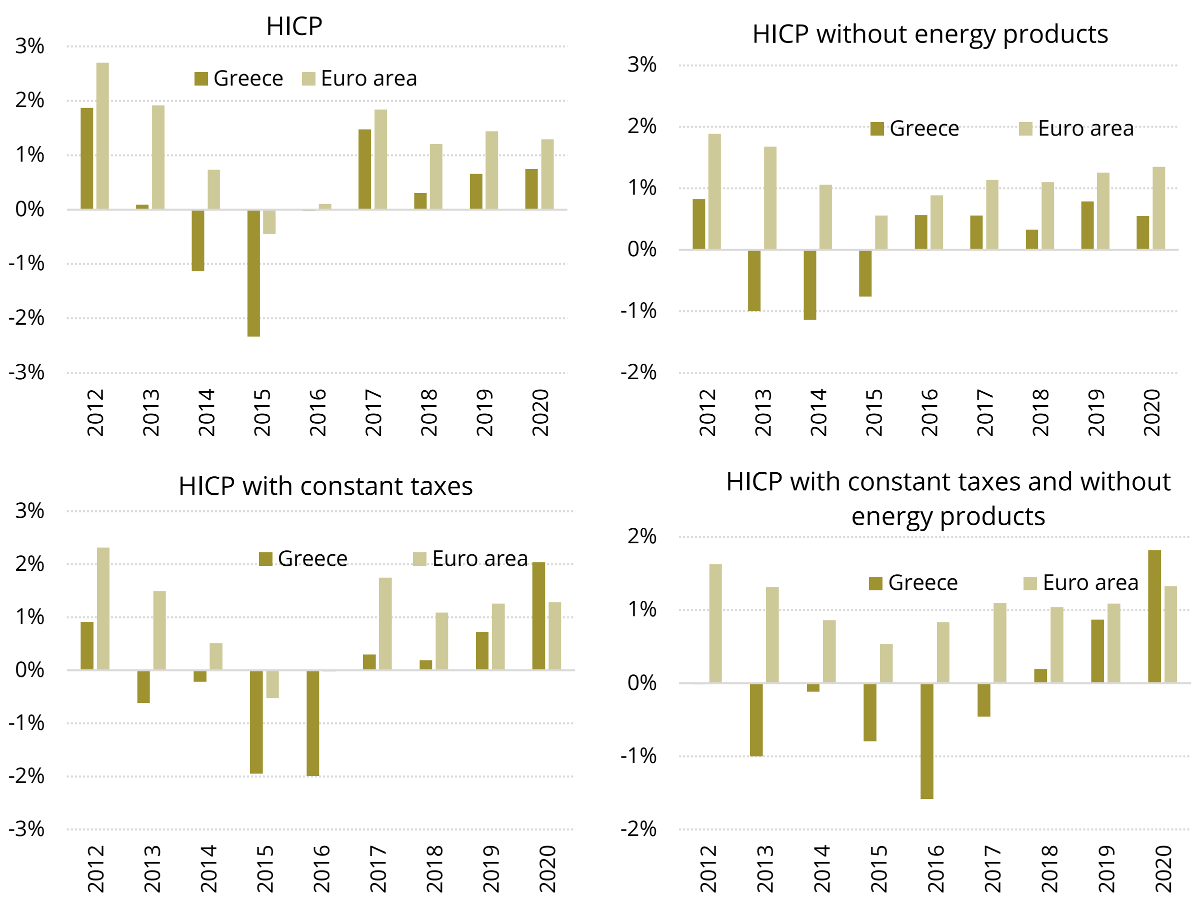
Looking at the trends in the categories of products and services included in the CPI, the highest increase in the first two months of 2020 was recorded in Transport, by 4.3%, after a 1.0% decline

[34] 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

in the same period of the previous year. Prices in Health and Hotels, cafes, restaurants increased slightly, by 1.5% and 0.8% respectively, from a milder rise of 0.7% in the first two months of 2019 in both categories. Prices in Communications marginally increased, by 0.1%, against much stronger growth a year ago (5.6%), while prices in Alcoholic Beverages – Tobacco were unchanged, compared with a 1.2% increase in the first two months of 2019. In contrast, the largest decline in prices occurred in early 2020 in Recreation - Culture, by 1.2%, following last year's decline in prices by 1.6%. Price declines were recorded in Other goods and services, by 0.7%, from a similar change a year ago (-0.8%), while slightly weaker was the fall of prices in Clothing and Household Equipment, by 0.6% in both, following a decline of 1.4% and 1.7% respectively in the first two months of 2019. The mildest price decline occurred in Housing and Food - Non-alcoholic Beverages, -0.5% and -0.1% respectively, compared with an increase of 1.0% and 2.0% a year earlier.

Figure 3.19

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



Domestic price increase in the first two months of 2020 mainly due to the strengthening of demand, which contributed 1.8 p.p. to inflation, from 0.9 p.p. in the corresponding period of the previous year

Source: Eurostat, Data processing IOBE

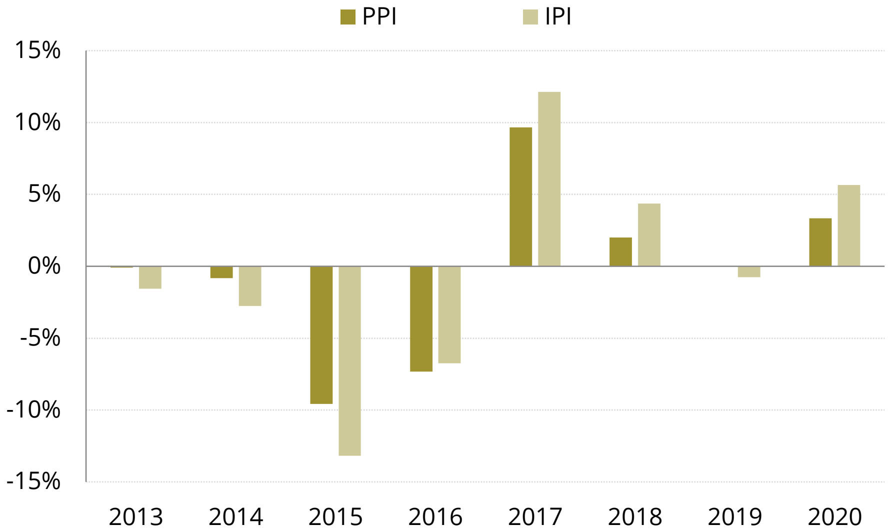
As for the price trends on the production side, in the first month of this year the Producer Price Index (PPI), in the domestic and external markets as a whole, increased by 3.3% compared to the corresponding month of last year, for the fourth year in a row. In detail, PPI without energy marginally increased again, by 0.1%, in the first month of 2020, at the same rate as that in the same month of 2019. Regarding the prices of industrial products, the biggest rise was recorded in Coke - Refined Petroleum Products, by 13.2%, from a decline of 3.6% a year earlier, followed at a distance by Electricity - Natural Gas and Electrical Equipment, both by 2.0%, in contrast to a strong increase of 7.5% and 3.3% respectively in the corresponding month of 2019. Tobacco Products and Wood Products had a lower rise in prices, by 1.3% each, compared to an increase of 1.4% and 0.7% a year ago. By contrast, the trend in producer prices in coal and lignite production was strongly negative, following their even sharper fall at the beginning of 2019 (-4.7% from -11.3%). The deflationary trend in Base Metals was milder, at -1.3%, compared to a rise by 1.9% in the previous year.

The Import Price Index (IPI) increased by 5.7% in January 2020, in contrast to a decrease of 0.8% in the corresponding month of the previous year. Marginally lower was the relevant index in the Eurozone compared to last year (-0.1%), compared with a rise of 0.7% in the first month of 2019. The strong rise in Greece ranks the country in the first place in terms of import price inflation between ten Eurozone countries for which data are available at this time, followed by Estonia (+1.7%). At the other end is Slovakia, with a fall in IPI by 2.3%, followed by Latvia (-2.1%).

Figure 3.20

Annual change of PPI and IPI in Greece (January)

Strong rise in import prices (+5.7%), mainly due to impact from the prices of energy commodities. Weaker rise in producer prices in January 2020.



Source: ELSTAT, Data processing IOBE

Of the individual categories of imported products, the largest increase in the first month of 2020 was recorded in Refined Petroleum Products, by 22.3%, compared to a decline of 0.4% in the corresponding period of 2019. Significantly weaker was the rise in Furniture, by 2.7%, from a decline in the same month of 2019 (-0.3%), but also in Food, by 1.5% (from -0.1%). Prices for Wood Products increased by 1.2% in the first month of this year, compared to a slight increase of 0.6% in the corresponding month of 2019. In contrast, the largest decrease in import prices was recorded in Base Metals, by 3.6%, from a marginal increase in the first month of 2019 (+0.2%), and in Paper Products, by 2.9%, compared to an increase by 2.4% a year ago.

Medium-term outlook

Looking at the trends in the main components of the Consumer Price Index in the first two months of 2020, it emerged that its rise came mainly from a domestic demand boost. Indirect taxation had a negative impact on price growth, while that of energy goods was marginally positive. Inflationary pressures from indirect taxation are not expected for the remainder of 2020. The trend in prices will depend almost exclusively on the effects of the coronavirus pandemic on energy prices and domestic demand.

In detail, as to the expected impact of indirect taxes on CPI, the negative effect of the May 2019 fiscal interventions will carry over into this year until April. Their deflationary effects will ease later this year. The 2020 budget included the reduction of indirect taxation on specific products (VAT reduction from 24% to 13% on baby goods, child seats and motorcycle helmets), which do not have a significant impact on the CPI, and therefore on inflation. Therefore, for the time being, the negative effect of indirect taxation on prices this year is now likely.

As regards developments in energy costs, last December OPEC and its partner countries, together with Russia, agreed to extend the restriction on daily oil production until March 2020.[35] However, the price of Brent oil in March 2020 stood at $32.4/barrel, down by 51.1% compared to the corresponding month of 2019 ($66.1/barrel), while in February last year the decrease was markedly stronger, 72.9% (from $55.7/barrel). The sharp weakening of the international oil price is mainly due to the effects of the pandemic. Its rapid spread has brought considerable uncertainty, about first the prospects of the Chinese and then for the European and the global economies. Restrictive measures on the operation of many sectors, even industrial ones that use more energy goods, combined with the disruption of international passenger transport, will put very intense pressure on global oil demand. Oil prices continue to be impacted by large supply of US oil companies.

The new agreement between Saudi Arabia and Russia to limit oil production by 8.5 million barrels / day each for the next 2-3 months, if implemented, may act counter to these downward pressures on oil prices. The aim of the agreement is to reduce the effects on prices from reduced demand due to the coronavirus pandemic. The agreement on a global production reduction excludes Iran, Libya and Venezuela, while the US position on limiting production is still pending. However, given the decline in demand and the uncertainty about the outlook for the global economy due to the health crisis, which will continue to some extent until the pandemic subsides, no significant upward effect of the agreement on oil prices is expected.

More broadly, the factor that seems to be the most likely to affect the change in the international price of oil over the next year is the pandemic of the new coronavirus, through measures to limit its spread internationally. Many analysts[36] have strongly revised down their previous estimates for

[35] Source: US Energy Information Administration, www.eia.gov

[36] Goldman Sachs Group Inc. Citigroup Inc., Morgan Stanley, Barclays

the average price of oil this year, noting that it could even be as low as $30 per barrel, from the oversupply combined with the effects of the pandemic that significantly reduce its demand. According to the latest forecasts of international organizations, the international oil price in 2020 is estimated to reach $33/barrel, recording an average decrease of 48% compared to last year.[37] A similar decline has occurred in the past, in 2009, during the global financial crisis, and in 2015. Indicatively, energy goods have had a negative contribution to CPI change in recent years of about one percentage point of the index.

Regarding the euro against the dollar exchange rate, in February it fell to 1.07 from 1.11 a month ago, marking its lowest level since May 2017. This development is estimated to have stemmed mainly from the rapid spread of the new coronavirus in Italy, but also the inability of the Euro area members to agree to address the needs in the health sector and the economy. Subsequently, the spread of the virus in the US in March, reversed the trend of appreciating dollar against the euro, resulting in a rate of 1.12. The announcement by the US President of a $2 trillion economic support package has significantly restored confidence in the US economy's outlook, further highlighting weaknesses in the Eurozone policy making, resulting in a further fall in the euro rate against the dollar. Positive effects on the US economy are also expected from the prospect of a gradual easing of the trade protectionist measures due to the trade agreement with China on 15 January. Overall, the effect of this year's likely depreciation of the euro against the dollar on the energy cost of oil will be mildly inflationary.

Regarding the effects on prices from domestic factors, the imposition of restrictive measures to protect public health (suspension of retailing, restriction of movements), is expected to severely depress private consumption by at least 4.0% compared to last year, if the pandemic subsides significantly domestically and internationally towards the end of the second quarter. If it continues strong during the summer months or is resurges within the year, the decline in consumption will be more pronounced. In any case, the pandemic will significantly reduce demand, which will have a restrictive impact on prices.

The closure of the physical retail stores led many businesses with online stores to offer discounts in March, possibly to avoid stockpiling seasonal products, a deflationary development, which may also happen in the coming months. However, inflationary pressures on the supply side are also likely, especially if the current crisis is prolonged or repeated in the autumn. Mandatory suspension of operations in branches or the permanent closure of some businesses due to inability to survive the crisis, are quite likely to result, after some time, in limited availability or lack of certain products and services. Such developments will lead to price increases.

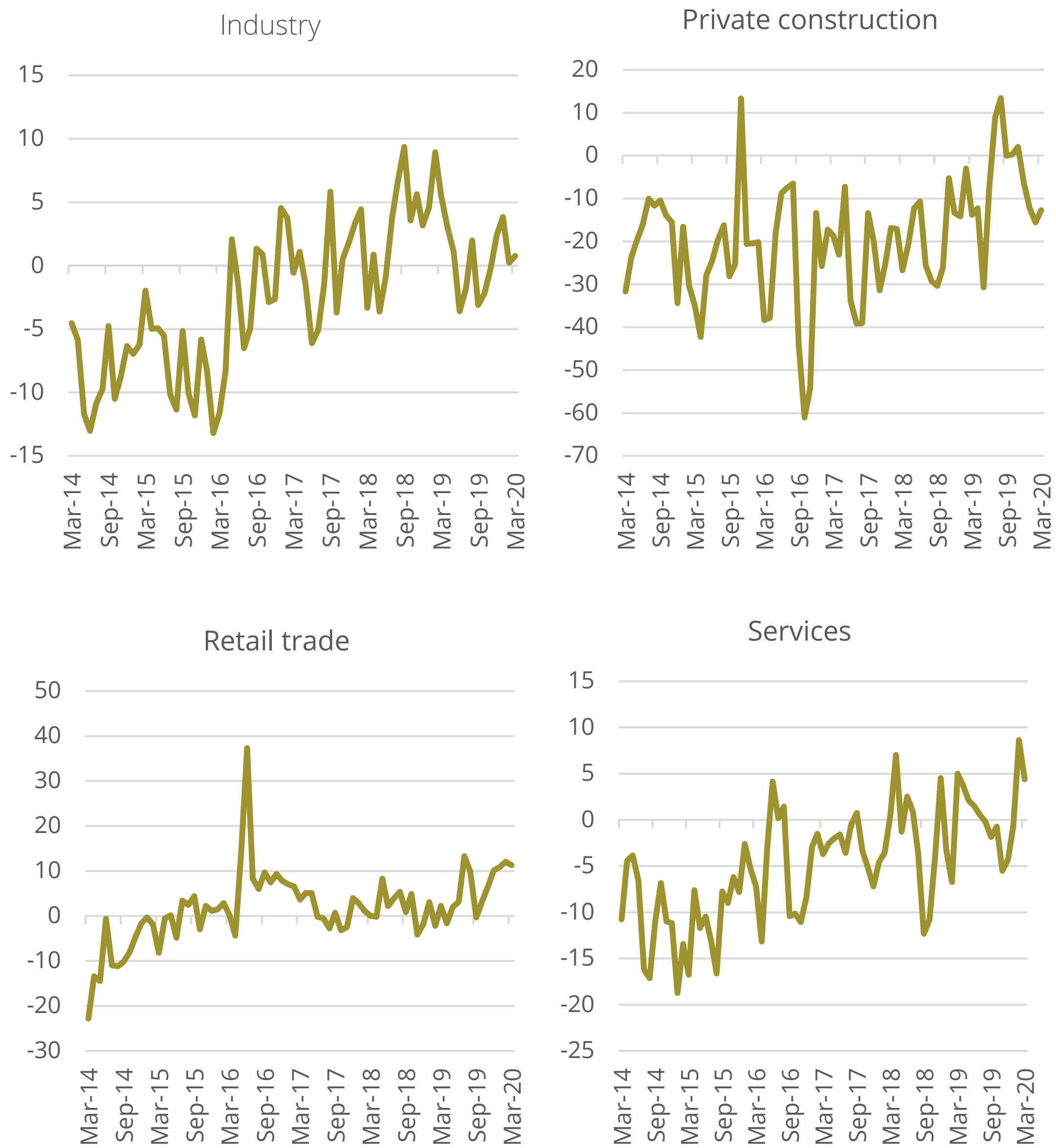
Taking into account the presented developments and expected trends, their effects on changes in key components of the CPI in periods of the past that saw similar developments as those expected this year and taking into account that inflation of 0.4% occurred in the first quarter of 2020, the Consumer Price Index is projected to fall by at least 2.0%. If the health crisis is prolonged or recovers later this year, deflation will range between 3.0-3.5%.

[37] Short-Term Energy Outlook, US Energy Information Administration, April 2010

Valuable insight on the price trends in the coming period is also provided by IOBE's monthly business surveys, the results of which serve as leading indicators of price developments on the supply side.

Figure 3.21

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



Source: IOBE

The price expectations strengthened in most sectors in the first quarter of 2020 compared to the fourth quarter of the previous year, as the balance of price expectations increased in three sectors (Industry, Services and Retail Trade) and decreased sharply in Construction.

The price expectations strengthened in most sectors in the first quarter of 2020 compared to the fourth quarter of the previous year. In particular, the balance of price expectations increased in three sectors (Industry, Services and Retail Trade) and decreased sharply in Construction. Against the corresponding quarter of last year, the expectations for the evolution of prices also eased in Construction and strengthened in the remaining sectors. In more detail:

In Industry, the balance of price expectations in the first quarter of the year was slightly higher than in the previous quarter. In particular, the indicator increased by two points in the quarter under consideration and stood at +2 points, while it moved 4 points lower than the corresponding quarter of last year. Of the companies in the sector, 7% consistently expect prices to fall in the short term, while 8% (from 7%) anticipated their increase, with the remaining 85% (from 87%) expecting price stability.

In Retail Trade, the balance of +7 points in the price expectations of the companies in the sector during the previous quarter increased by 4 points, 10 points higher than in the corresponding period of 2019. Of the companies in the sector, 4% (from 3%) expected prices to fall in the short term, while the percentage of those who predicted their rise significantly increased to 15% (from 10%), with the remaining 81% (from 86%) expecting price stability. In the retail sub-sectors, the price expectations mildly declined quarter on quarter in the first quarter in Food – Beverages – Tobacco and Textiles – Footwear, stronger in Vehicles - Spare parts, while in Household equipment the price expectations strengthened mildly and in Department Stores they remained virtually unchanged.

The average price expectations indicator in Services in the examined quarter increased significantly compared to the previous quarter and stood at +4 (from -4) points, while it moved to a much higher level than its corresponding average performance last year (-2 units). In the current quarter, 5% (from 10%) of the companies of this sector expected a decrease in prices and 9% of them (from 6%) a rise. In the sub-sectors examined, the indicator decreased sharply in Hotels, Restaurants, Travel Agencies, remained almost unchanged in Financial Intermediaries, marginally strengthened in Various business activities and Land Transport and declined in the IT Services.

Finally, in the Private Construction sector, the marginally negative balance of -1 point of the previous quarter fell sharply to -13 points, having also changed slightly down compared to the corresponding level of the previous year (-10 points). In addition, 14% (up from just 3%) of the businesses in the sector foresaw a decline in industry prices, while the proportion of those expecting price growth declined by one point (+1 from +2 points), and 85% (from 95%) expected price stability.

3.6 Balance of payments

- The Current Account deficit shrank in 2019, with stronger boost of exports than imports
- The balance in the Services and Income accounts improved, which was partially offset by the small increase in the deficit of the Goods account

Current Account

In January 2020, the current account deficit widened by €108.4 million due to a deficit in the Secondary Income account and a decrease in the surpluses of the Services and Primary Income accounts. In contrast, the trade deficit declined.

Overall in 2019, the Current Account (CA) was in deficit, at €2.6 billion, against double that amount in 2018, at 1.4% of GDP last year, versus 2.8% the year before last. The deficit narrowed due to the significant improvement in the Services and Income accounts, while the increase in the trade deficit only partially affected the outcome.

Regarding the trends in the individual components, the deficit of the Goods Account stood at €22.8 billion in 2019, higher by €344.2 million, due to the larger increase in imports compared to exports. Note that the deficit had increased much stronger in 2018, by €2.6 billion. Exports remained at almost €32.4 billion (up by €60.8 million),[38] with a significant decrease in fuels (-9.4%), due to a fall in international prices in oil, and ships (-30.1%), while the exports of other products increased (€1.04 billion). The deficit in the Goods Account, excluding fuel and ships, stood last year at €17.4 billion, slightly higher by 1.1%, as in parallel with the strengthening of exports by €1.0 billion, imports increased by €1.2 billion.

The surplus in the Services Account increased by €1.8 billion in 2019 and stood at €21.1 billion, with a simultaneous rise in receipts and payments. In detail, last year total receipts from services stood at €40.2 billion, up by 8.1% compared to 2018. In the individual categories, receipts from travel services stood at €18.2 billion, higher by 13.0%, revenues from transport services increased by 4.0%, to €17.3 billion, while other services reached €4.7 billion, up by 5.3%. In 2019, tourist receipts accounted for 9.7% of the country's GDP, reaching their highest level since 2002, with a steady increase in their share since 2016. Total payments for services stood at €19.1 billion last year, up from €17.9 billion the year before last year. Payments for travel services increased by 25.2% to € 2.7 billion, payments for transport services increased by 3.0% to € 11.4 billion, while payments for other services reached € 4.9 billion, an increase of 6.6% compared to 2018.

The deficit of the Primary Income Account was corrected in 2019, by €299.6 million, and stood at €1.4 billion. Receipts stood at €6.0 billion, slightly reduced, while payments fell by 4.3%, to €7.5 billion. In greater detail, receipts increased from labour by 10.7%, to €246.9 million, and from investments by 4.9%, to €2.9 billion, while from other primary incomes (subsidies and taxes on production) they decreased by 6.3% to €2.9 billion. Income payments increased for labour to €1.4 billion (+3.5%), decreased for investments by € 6.5% to € 5.6 billion, while in other primary incomes they marginally increased, close to €410.0 million.

The Secondary Income Account had a surplus for the first time since 2013, at €583.5m, with receipts amounting to €3.8 billion, up from €2.2 billion the year before last, and payments at €3.2 billion, compared with €2.5 billion in 2018. The main reason for the strengthening of the receipts was the payment of the first (May) and the second (December) tranche of the profits from Greek government bonds which are held by the Eurosystem (SMPs / ANFAs) and the return of the interest margin, while the 2013 revenue growth occurred for the same reason.

[38] The amounts in brackets reflect the absolute change in relation to the corresponding period of the previous year, unless otherwise stated.

Figure 3.22

Imports-Exports of Goods and Services, 2002-2019

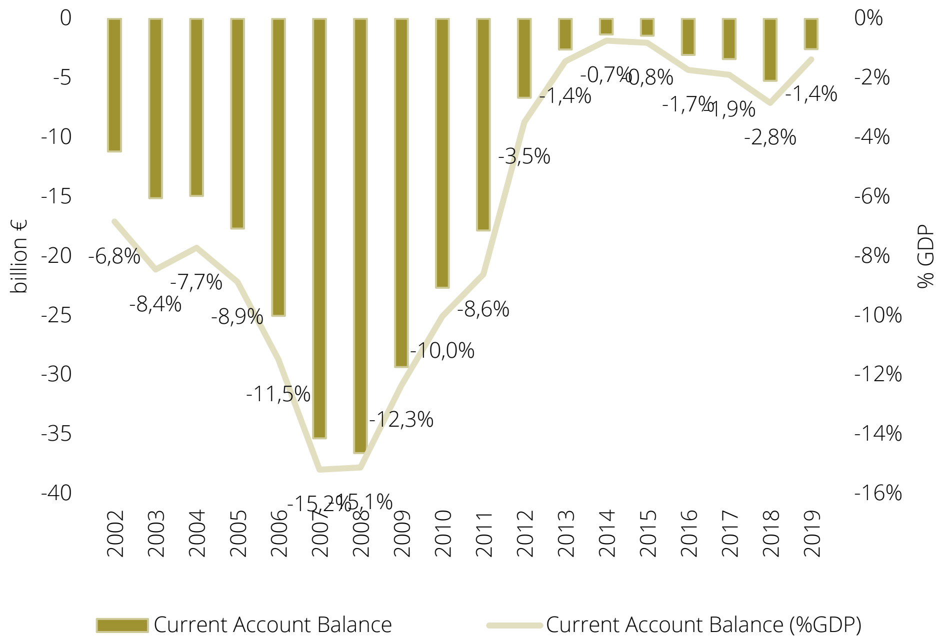
Fall of the Goods and Services Account deficit last year, to €1.7 billion, after its expansion by €1.4 billion to €3.2 billion in 2018

Source: Bank of Greece, Data processing IOBE

Figure 3.23

Current Account 2002-2019

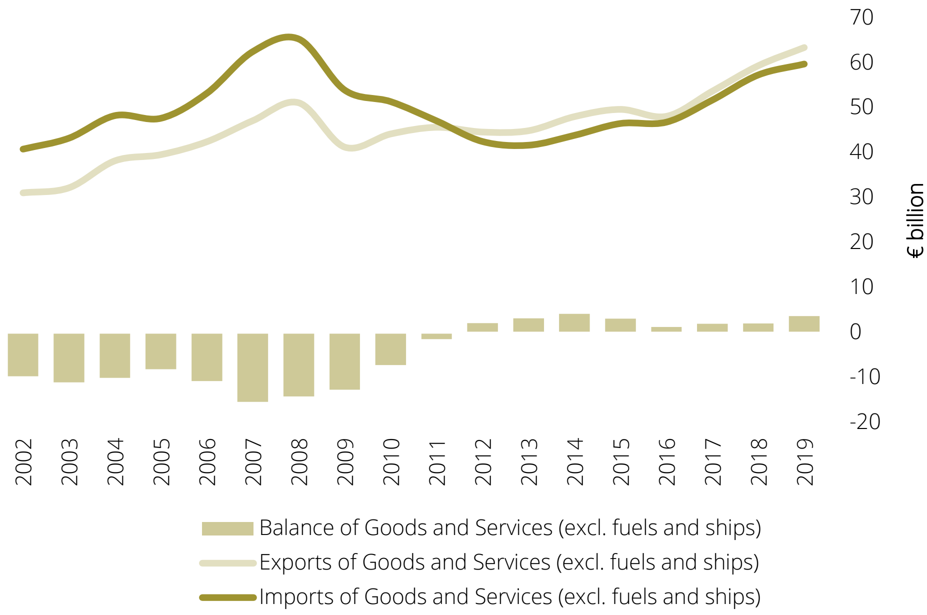
At 1.4% of GDP the current account deficit in 2019, compared with 2.8% of GDP in 2018



Source: Bank of Greece, Data processing IOBE

Figure 3.24

Imports-Exports of Goods excluding fuel and ships, 2002-2019



Significant boost of the surplus of the Goods and Services Account excluding fuels and ships, to €3.7 billion, from €2.1 billion

Source: Bank of Greece, Data processing IOBE

Capital Account

The Capital Account surplus [39] increased in 2019, to €679.8m, compared with €353.2m in 2018, with an increase in receipts by €171.4m and a reduction in payments by €155.3m.

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 €1.9 billion, against €4.9 million in 2018.

Financial Account

The Financial Account was in a deficit last year of €355.2 million, compared to a deficit of €3.9 billion in 2018.

In the constituent accounts, the net receivables of residents from direct investment abroad increased by €380.6 million, while net liabilities to non-residents (investments in Greece by non-residents) increased significantly, by €4.1 billion. According to BoG data, the largest transaction was the participation of Consolidated Lamda Holdings S.A. in the increase of the share capital of Lamda Development S.A. by €679 million.

[39] 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 portfolio investment category, the claims of residents vis-à-vis abroad increased by €25.9 billion, as according to the BoG holdings of residents in foreign bonds and treasury bills increased due to securitisation of loans of systemic credit institutions. Liabilities to non-residents increased less, by €1.7 billion.

In the category of other investments, the claims of residents to non-residents decreased by €1.6 billion, as the deposits and repos of residents (credit institutions and institutional investors) abroad decreased by €7.8 billion in net terms. Liabilities increased by €19.3 billion, reflecting the increase in deposits and repos of non-residents in Greece by €21.5 billion (including the TARGET account), while these amounts include the securitisation of loans of the portfolio account. Public and private sector debt obligations to non-residents also decreased, by €4.9 billion. Finally, the Reserve Assets of the country totalled €7.6 billion at the end of December 2019, up by €1.0 billion from December 2018.

Table 3.12 Balance of payments (€ million).

		January - December			January		
		2017	**2018**	**2019**	**2018**	**2019**	**2020**
I	**CURRENT ACCOUNT (I.A + I.B + I.C + I.D)**	**-3,406.2**	**-5,232.2**	**-2,560.7**	**-530.9**	**-1,182.6**	**-1,291.0**
	GOODS AND SERVICES ACCOUNT (I.A + I.B)	**-1,790.2**	**-3,184.7**	**-1,717.4**	**-1,608.7**	**-1,738.3**	**-1,613.9**
I.A	**GOODS ACCOUNT (I.A.1 - I.A.2)**	**-19,833.9**	**-22,489.1**	**-22,833.3**	**-1,987.1**	**-2,200.3**	**-1,997.3**
	Oil balance	-3,717.6	-5,180.7	-5,040.5	-591.7	-644.6	-543.2
	Trade balance excluding oil	-16,116.3	-17,308.4	-17,792.8	-1,395.4	-1,555.7	-1,454.1
	Ships balance	-39.9	-56.8	-345.1	-5.2	-85.2	-19.5
	Trade balance excluding ships	-19,794.0	-22,432.3	-22,488.2	-1,981.9	-2,115.1	-1,977.8
	Trade balance excluding oil and ships	-16,076.3	-17,251.6	-17,447.7	-1,390.3	-1,470.5	-1,434.6
I.A.1	**Exports of Goods**	**28,040.5**	**32,372.8**	**32,433.6**	**2,464.5**	**2,403.2**	**2,718.3**
	Oil	7,887.8	10,016.9	9,078.8	781.0	659.9	744.0
	Ships (sales)	102.0	130.9	91.5	2.2	1.7	3.5
	Goods excluding oil and ships	20,050.7	22,225.0	23,263.4	1,681.3	1,741.7	1,970.8
I.A.2	**Imports of Goods**	**47,874.4**	**54,861.9**	**55,266.9**	**4,451.6**	**4,603.5**	**4,715.6**
	Oil	11,605.4	15,197.5	14,119.3	1,372.7	1,304.5	1,287.2
	Ships (buying)	141.9	187.7	436.6	7.3	86.8	23.0
	Goods excluding oil and ships	36,127.0	39,476.7	40,711.1	3,071.6	3,212.2	3,405.4
I.B	**SERVICES ACCOUNT (I.B.1-I.B.2)**	**18,043.7**	**19,304.4**	**21,115.9**	**378.4**	**462.0**	**383.5**
I.B.1	**Receipts**	**33,661.3**	**37,159.3**	**40,162.6**	**1,785.6**	**2,036.3**	**2,035.0**
	Travel	14,630.1	16,085.8	18,178.8	151.7	230.4	286.6
	Transportation	14,473.8	16,629.9	17,303.1	1,250.6	1,393.2	1,394.0
	Other services	4,557.3	4,443.6	4,680.7	383.4	412.7	354.4
I.B.2	**Payments**	**15,617.6**	**17,854.9**	**19,046.8**	**1,407.2**	**1,574.3**	**1,651.6**
	Travel	1,904.7	2,191.0	2,743.8	138.1	167.3	206.5
	Transportation	9,520.6	11,044.3	11,377.4	878.0	924.7	991.7
	Other services	4,192.3	4,619.6	4,925.5	391.1	482.3	453.4
I.C	**PRIMARY INCOME ACCOUNT (I.C.1-I.C.2)**	**-1,057.3**	**-1,726.4**	**-1,426.8**	**713.7**	**450.1**	**405.1**
I.C.1	**Receipts**	**6,184.1**	**6,058.5**	**6,021.1**	**1,060.9**	**810.2**	**811.7**
	From work (wages, compensation)	216.6	223.0	246.9	18.1	21.5	18.1
	From investments (interest, dividends, profit)	3,148.0	2,731.4	2,864.9	256.1	242.2	252.8
	Other primary income	2,819.5	3,104.1	2,909.3	786.8	546.4	540.8
I.C.2	**Payments**	**7,241.3**	**7,784.9**	**7,447.9**	**347.2**	**360.1**	**406.6**
	From work (wages, compensation)	1,343.7	1,363.7	1,411.6	110.2	117.8	121.1
	From investments (interest, dividends, profit)	5,492.3	6,019.1	5,629.3	228.9	218.6	239.6
	Other primary income	405.4	402.1	407.0	8.1	23.7	45.9
I.D	**SECONDARY INCOME ACCOUNT (I.D.1-I.D.2)**	**-558.7**	**-321.1**	**583.5**	**364.1**	**105.7**	**-82.2**
I.D.1	**Receipts**	**1,949.9**	**2,177.6**	**3,827.9**	**480.8**	**362.3**	**314.3**
	General government	939.8	1,034.7	2,361.2	262.3	182.1	180.3
	Other sectors	1,010.1	1,142.9	1,466.8	218.5	180.2	134.1
I.D.2	**Payments**	**2,508.6**	**2,498.8**	**3,244.5**	**116.7**	**256.6**	**396.5**
	General government	1,792.7	1,702.8	1,830.3	45.9	134.3	259.9
	Other sectors	715.9	796.0	1,414.2	70.8	122.3	136.6
II	**CAPITAL ACCOUNT (II.1-II.2)**	**914.5**	**353.2**	**679.8**	**183.9**	**260.0**	**33.4**
II.1	**Receipts**	**1,133.8**	**1,007.4**	**1,178.7**	**198.6**	**311.8**	**65.4**
	General government	1,040.2	627.5	1,023.0	184.0	306.9	60.0
	Other sectors	93.6	379.8	155.8	14.6	4.9	5.4
II.2	**Payments**	**219.3**	**654.2**	**498.9**	**14.7**	**51.7**	**32.0**
	General government	3.0	4.1	4.9	0.2	0.2	0.4
	Other sectors	216.3	650.1	494.0	14.5	51.5	31.5
	BALANCE OF CURRENT AND CAPITAL ACCOUNT (I+II)	***-2,491.7***	***-4,879.1***	***-1,880.9***	***-347.0***	***-922.5***	***-1,257.6***
III	**FINANCIAL ACCOUNT (III.A+III.B+III.C+III.D)**	**-1,949.1**	**-3,923.7**	**-355.2**	**-363.3**	**-1,191.3**	**-1,718.9**
III.A	**DIRECT INVESTMENT***	**-2,935.8**	**-2,960.7**	**-3,745.7**	**184.9**	**-262.8**	**-352.6**
	Assets	143.0	437.8	380.6	359.2	18.7	-49.5
	Liabilities	3,078.8	3,398.5	4,126.3	174.3	281.5	303.1
III.B	**PORTFOLIO INVESTMENT***	**-20,117.7**	**73.8**	**24,231.5**	**-3,429.7**	**-1,558.7**	**912.6**
	Assets	-19,392.1	1,377.7	25,927.1	-2,437.7	-1,024.0	-5.8
	Liabilities	725.7	1,303.9	1,695.6	992.0	534.7	-918.4
III.C	**OTHER INVESTMENT***	**20,986.4**	**-966.8**	**-20,925.0**	**2,840.6**	**782.1**	**-1,995.9**
	Assets	-11,744.7	-5,801.8	-1,609.6	35.7	-1,160.8	1,692.2
	Liabilities	-32,731.0	-4,835.0	19,315.4	-2,804.9	-1,942.9	3,688.1
	(Loans of general government)	5,693.7	19,555.0	-4,444.8	-437.4	-455.1	-12.0
III.D	**CHANGE IN RESERVE ASSETS****	**118.0**	**-70.0**	**84.0**	**41.0**	**-152.0**	**-283.0**
IV	**BALANCE ITEMS (I +II +IV +V = 0)**	**542.5**	**955.4**	**1,525.7**	**-16.3**	**-268.8**	**-461.3**
	RESERVE ASSETS (STOCK)***				**6,529**	**6,586**	**7,596**

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. Conversely, they do not include claims in euro from residents of countries outside the euro area, claims in foreign currency and in euros from residents of euro area countries and the participation of the Bank of Greece in the capital and the reserve assets of the ECB..

4 THE ROLE OF MOBILE COMMUNICATIONS AND BROADBAND IN THE NEW GROWTH MODEL FOR GREECE

- At the current juncture due to the pandemic, a rapid digital transformation is taking place so that economic functions and processes are restructured and adapted quickly to a digital environment.
- Greece ranks 26th in the EU in terms of the digital economy and society index DESI in 2018
- Average consumption of mobile data in Greece in 2018 was just over 1GB per subscriber per month. The EU average is around 4GB.
- Benefit for the Greek economy of up to €2.6 billion or 1.4% in GDP by doubling the consumption of data via mobile communications, with the existing service usage characteristics. The benefit can go up to €6.8 billion or 3.7% of GDP, if the doubled demand concerns digital services (e-government, e-banking, e-commerce).
- Investments are needed in improved broadband infrastructure and the development of the fifth generation (5G) network in Greece. The regulatory framework should help attract and implement these investments.

4.1 Introduction

The global health crisis is already dramatically shaping the year we are going through, both socially and economically, creating unprecedented conditions in most countries, including Greece. Measures of immediate suspension of economic activity in many sectors, but also travel restrictions, create new conditions both on the production and the demand side of the economy. At the same time, the need to continue activity in some functional way at various operational levels has led to an increase in Internet use, utilizing a range of tools and services that were either already available or rapidly improved to meet the increased use needs.

Already based on some initial estimates from telecommunications service providers, the increase in March 2020 compared to February in data and voice usage is significant. In mobile, there is an increase of 21.3% in data and 14.5% in minutes of voice use, while in fixed telephony the increase is even greater: 36% in data and 46% in minutes of voice use, under the conditions of suspension of economic sectors and travel restrictions that have been in effect since March.

As a result, a swift digital transformation seems to be taking place, in an effort to transform traditional economic functions and processes into a digital environment. Tele-education, tele-working, electronic transaction services with the State (e-government), e-commerce and the financial sector (e-banking) are currently receiving an increasing number of users trying to exploit these possibilities to meet their needs.

To date, both the private and public sectors have adapted rather rapidly and relatively efficiently. However, the effectiveness of these services is based, on the one hand, on the skills of users, existing and potentially new, and on the other, on already made investments in broadband infrastructure. All of these new broadband-supported services depend directly on the level of investment made and on the ability of both the information and communications technology (ICT) sector to improve its services and on businesses in other sectors to integrate functionally these services into their processes. The ultimate link of the chain is the individuals-users who are called to use these services on a professional and personal level in order to improve the difficult current daily circumstances.

At the research and study level, IOBE has been actively involved in the past with the issues of wider digital transformation, with a number of studies on Cloud Computing, digital signatures, digital skills, e-government actions, etc. Very recently (December 2019) it published another relevant study, which it prepared on behalf of the Greek Mobile Operators Association (EEKT) entitled " *The role of mobile communications and broadband in the new growth model for Greece*". The aim of the study was to highlight the role of mobile communications and broadband in the new growth model of the Greek economy. At the heart of the study was the quantification of both the overall contribution of the sector to the domestic economy and the potential impact on the economy of a substantial increase in the use of mobile communications in a number of digital functions, in which the country lags based on the Digital Economy and Society Index (DESI).

The following is a summary of the key points of the study.[40]

4.2 Greece's digital identity

A first comparative picture of the evolution of digital transformation in Greece is highlighted by the European Commission's annual Digital Economy & Society Index (DESI). It is a complex index that compares key figures per country in five areas:

[40] The full text as well as a presentation of the study are available in Greek here: http://iobe.gr/research_dtl.asp?RID=192

A. Connectivity,

B. Human capital/digital skills,

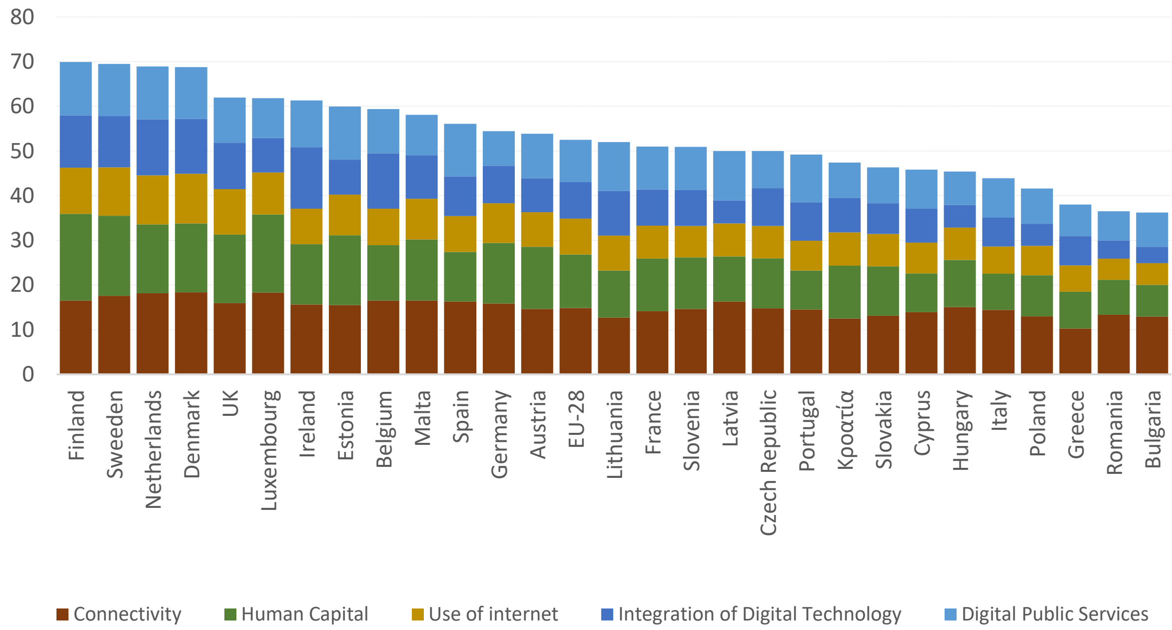
C. Use of Internet Services by citizens,

D. Integration of Digital Technology by businesses,

E. Digital Public Services.

Figure 4.1

Digital Economy and Society Index (DESI), 2019



Source: DESI

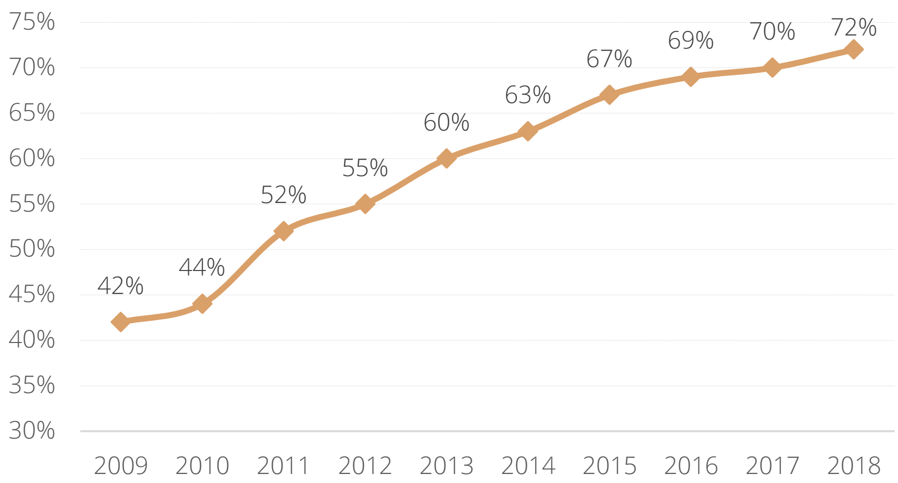
According to the 2019 report, Greece ranks 26th among EU member states above only Romania and Bulgaria. This is undoubtedly a very poor performance, indicative of the difficulties that exist in the country's digital transformation, with poor performance in almost all the individual categories of the index. For example, in *connectivity* Greece ranks last among EU countries, as despite the improvement in the availability of fixed broadband connections, the penetration is moving at a slower pace than the EU average. As regards the *human capital* dimension, in 2017 46% of people aged 16 to 74 in Greece had basic digital skills compared to 57% in the EU.

A similar lag is observed in the use of online services. In recent years, people's familiarity with the internet has been increasing, thanks more to the possibilities offered by the use of new devices, as well as technological applications. In 2018, the proportion of people using the internet exceeded 70% of the population. Despite this increase, the rate remains one of the lowest in the EU (average at 85%).

But there is another issue, which concerns the so-called 'qualitative' characteristics of this use. Searching for information about products-services, e-mail and entertainment are the main reasons for using the internet in Greece (Figure 4.3). By contrast, although it is improving, the use of online banking services or shopping is lower than the corresponding European average. Therefore, the internet is being used more as a tool for recreation and information (infotainment) rather than as a tool to improve the efficiency and effectiveness of some of our daily operations. This standard of use differs from the European average, where more people are looking for information not only about products and services but also about specialised information. In addition, they choose the internet to carry out transactions with banks and make more intensive use of e-Government services.

Figure 4.2

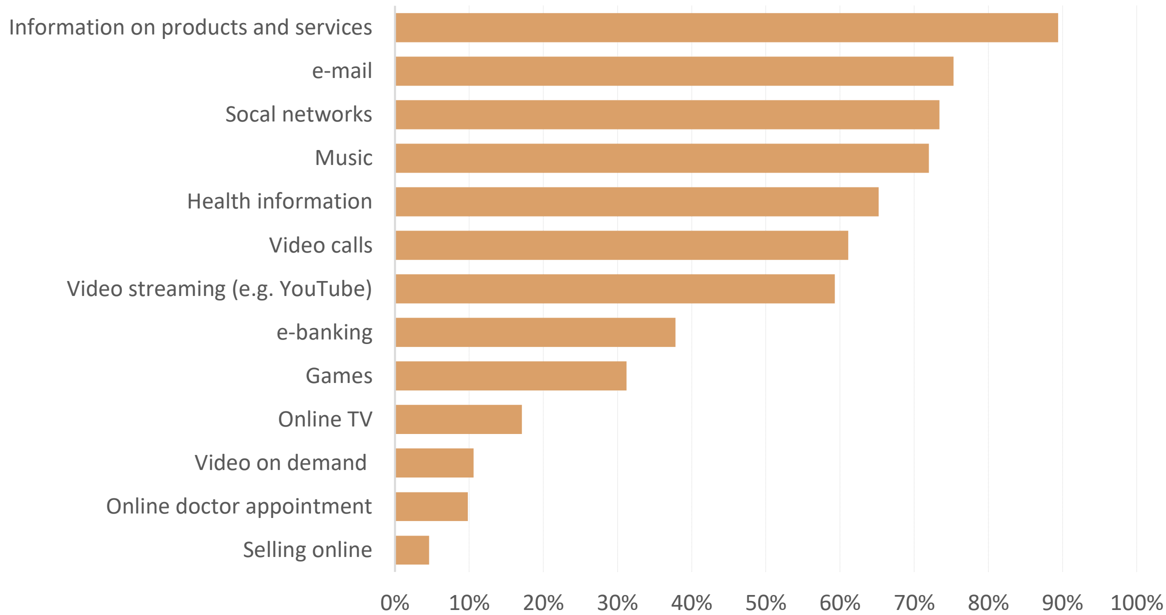
Percentage of the population in Greece with internet access, 2009-2018



Source: ELSTAT (Use of information and communication technologies)

Figure 4.3

Main reasons for internet access in Greece, 2018



Source: ELSTAT

On the business side, 86% of the companies in Greece had internet access in 2018. Compared to the EU, this is the second lowest level, higher only than that of Romania. Online sales account for only 4% of turnover of the Greek businesses compared to 17% in the EU-28. In addition, only 14% of the businesses in Greece buy raw materials and products online, compared to 45% on average in the EU, and even fewer sell through e-commerce applications (12% versus 20% in the EU). Regarding e-government services, although the availability of digital public services has improved, only one in three Internet users take advantage of them, compared to 64% in the EU.

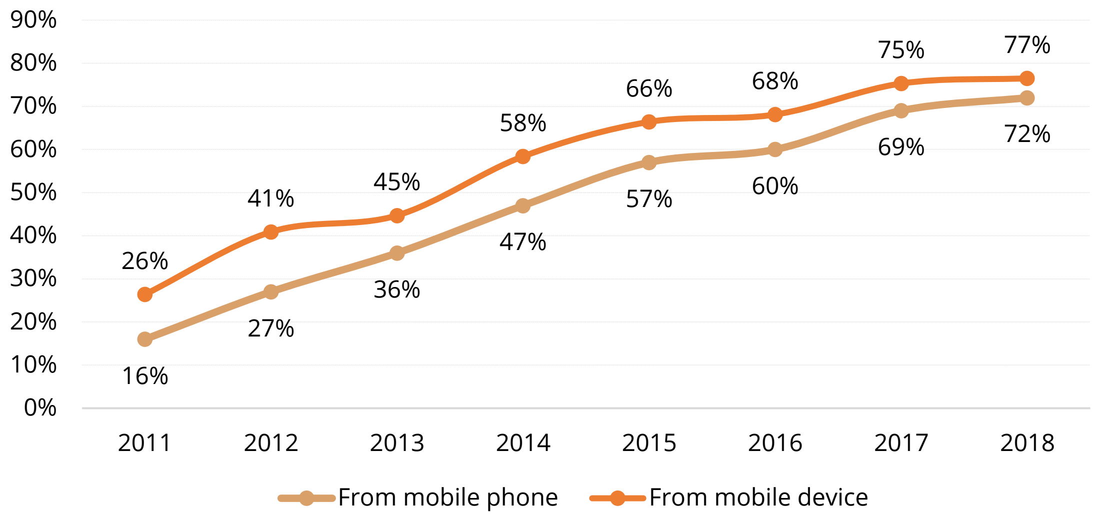
Therefore, Greece is significantly lagging behind in various dimensions of digital transformation, as key parameters remain at fairly low levels. Although a significant percentage of the population and businesses in Greece use technology, there is still a segment that does not follow the relevant developments, substantiating the so-called "digital divide" in population and businesses: part of the population (younger and more educated) but also medium and large businesses show a remarkable dynamic by adopting new technologies faster. However, a large part of both the population and the business community lags behind, without incorporating technology into its daily lives and operations.

4.3 Mobile broadband penetration

According to all relevant research, the mobile phone is the main means of internet access. Nearly 4 in 5 people who used the internet in 2018 were connected outside their home or workplace, a ratio that has increased fivefold compared to 2010. In most cases the internet connection was made via mobile phone, while a lower percentage was connected to a laptop, tablet or other mobile device.

Figure 4.4

Percentage of the population who access internet from a mobile device or a mobile phone, 2011-2018

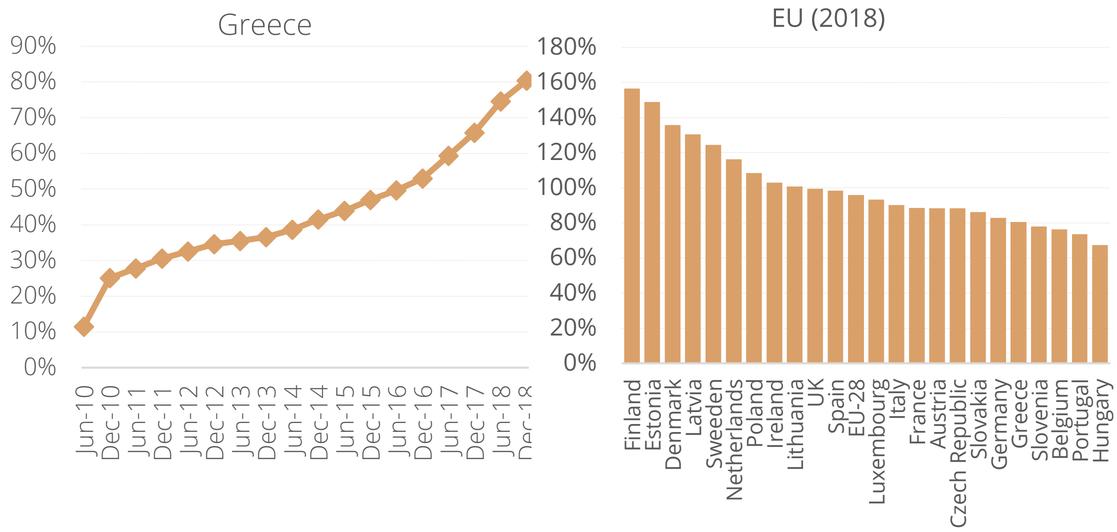


Source: ELSTAT

The trend towards mobile internet access is more pronounced among younger people, where the use of computers, the internet and "smart" phones is more widespread than in older age groups. However, despite the upward trend in recent years, Greece lags behind the rest of the EU member states. With 80 mobile broadband connections per 100 inhabitants at the end of 2018 Greece ranks higher only compared to Slovenia, Belgium, Portugal and Hungary, when the EU average is 96 connections per 100 inhabitants.

Figure 4.5

Mobile broadband penetration*

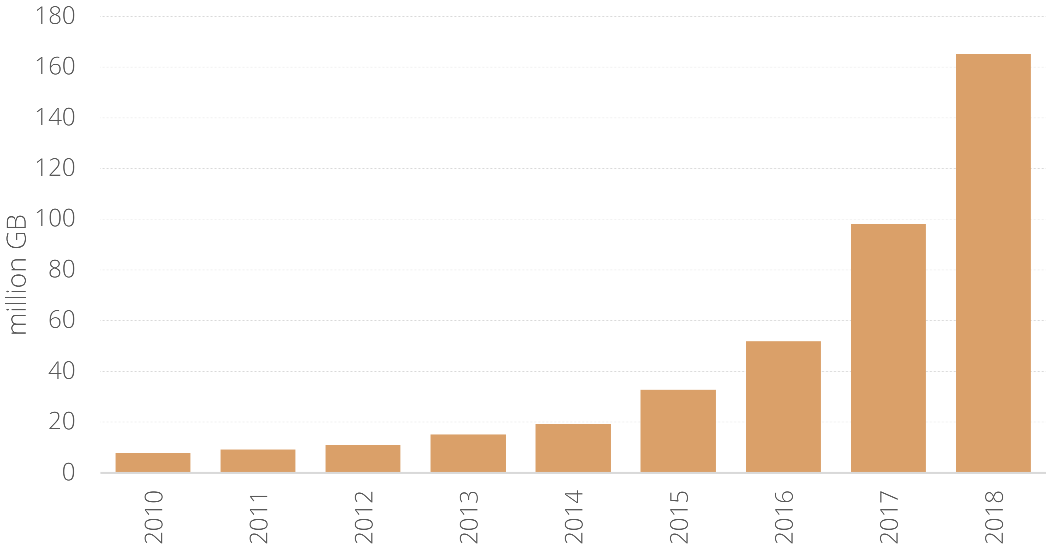


*Note: Mobile broadband per 100 inhabitants

Source: OECD. Data processing: IOBE.

Figure 4.6

Total consumption of data through mobile communications, 2010-2018



Source: Industry estimates

Regarding mobile services, the use of SMS and MMS among subscribers is decreasing over time, as it has gradually been replaced by other written communication technologies (e.g. Viber). These are based on the existence of an internet connection to the mobile phone or mobile device and provide sophisticated capabilities (e.g. multimedia content, voice calls), resulting in this communication channel being gradually prevailing.

By contrast, the consumption of data through mobile communications has been growing sharply since 2014. In 2018, total consumption amounted to 165.2 million GB, recording an increase of 71% compared to the previous year, while compared to 2015 it has increased fivefold. The significant reduction in the price for this service has contributed to this development, among other factors. However, with average data consumption per subscriber per month in Greece in 2018 at 1.05 GB, up from 0.6 GB in 2017, our country has the lowest data usage in the EU.

4.4 The impact on GDP of the use of data services from mobile communications

In recent years, the mobile operators in Greece have been active in the development of mobile broadband with innovative services for all their customer categories. After all, as shown earlier, despite the ever-increasing internet penetration among the population and the development of mobile applications that lead to increased data usage, Greece is ranked last in the average data consumption with mobile device in Europe. Based on the latest available data, but before the recent health crisis, the average consumption in Greece in 2018 was just over 1GB per subscriber/month, with the European average hovering around 4GB. The use of e-Government services and other electronic transactions across Europe is 1.5 times higher than in Greece.

With the use of mobile data now being the service with the highest growth prospects in the activity of mobile operators, significant benefits are emerging for the industry and the economy in general. For mobile operators it can help increase revenue from retail services, while for the economy the benefits are related to boosting activity in those sectors where the internet affects their operations, for example in e-commerce, public administration and education.

The benefits to the economy are not just about increasing data usage. The increase in consumption that comes from the current pattern of internet use in Greece (entertainment, social media, communication) is expected to have a different effect compared with the consumption of data for transactions related to e-government and the use of applications such as online file storage and remote work, which save time and money and improve productivity.

In this context, the IOBE study conducted a quantitative assessment of the benefits that could arise in the economy from the greater use of data from mobile communications. Specifically, two scenarios were prepared:

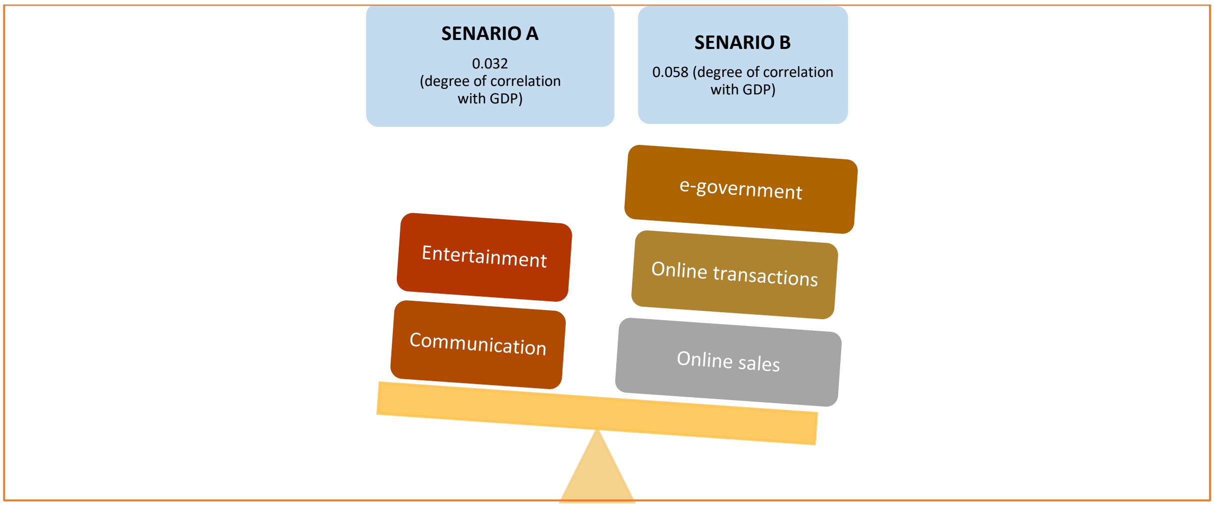
- Scenario (A) where there is an increase in the use of data via mobile communications but service usage characteristics do not change and

- Scenario (B) where there is an increase in the use, but with a qualitative upgrade of the use of e-government, e-banking and e-commerce services at the levels of the European average.

Scenario B	**Scenario A**
under the assumption that DESI indicators for e-government, e-banking and e-commerce are equal to the European average	*under the assumption that the DESI indices for e-government, e-banking and e-commerce remain close to their current level in Greece*

Figure 4.7

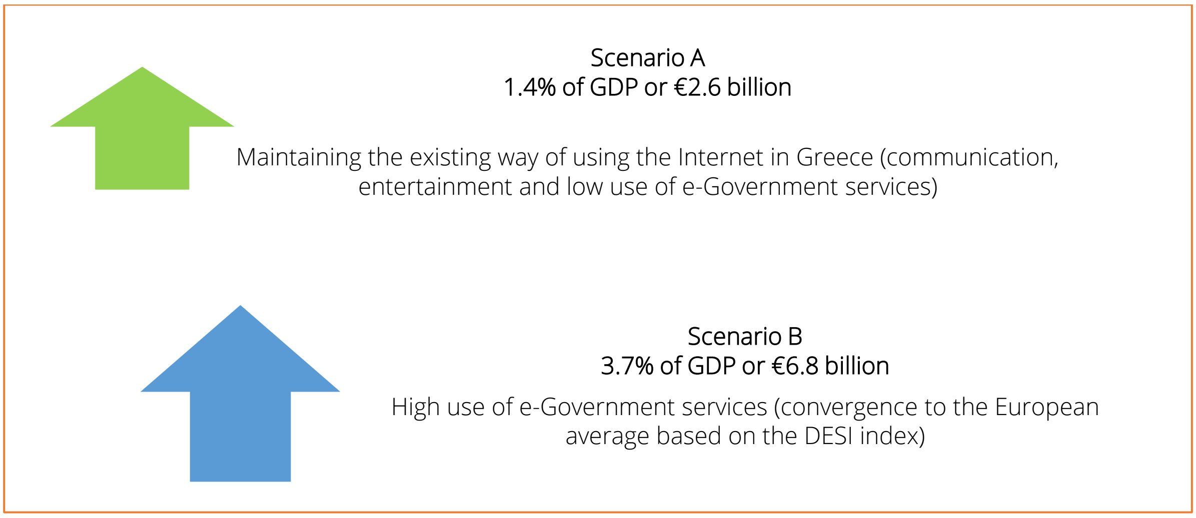
Impact on GDP from the use of mobile data



Source: IOBE

Figure 4.8

Potential benefits to the Greek economy, in GDP terms, from doubling the use of mobile data



Source: IOBE estimates

Using the adopted econometric approaches, it was found that the use of data is positively linked with economic activity to a statistically significant extent in both scenarios. However, this effect is greater when mobile internet usage is significantly driven by the demand for online services rather than just for infotainment.

According to IOBE estimates, the benefits to the Greek economy, in terms of GDP, can reach up to €2.6 billion or 1.4% to GDP. This result is obtained from Scenario A, i.e. by maintaining the existing way of using the internet, which is more related to communication and entertainment, while the use of other digital services is low. The benefits more than double in Scenario B, i.e. when the increased demand for data from mobile communications in Greece is fuelled by the use of digital services, such as e-government, e-banking and e-commerce, to an extent that Greece converges on the European average based on the DESI index. In this case, GDP could be higher by 3.7% or €6.8 billion.

4.5 Conditions and obstacles to the development of mobile communications

However, in order for the country's digital transformation to be possible and for our economy to "enjoy" these quantitative benefits, a strong domestic branch of telecommunications and broadband service providers is needed, who together with other technology providers will contribute actively to this transformation. Therefore, in the medium term, the prospects of the sector are positively affected by the increasing use of data services through mobile communications, as well as by the development of mobile broadband services by operators with innovative services for all categories of customers. At the same time, investments in improved broadband infrastructure and the development of the fifth generation network (5G) are also needed in Greece. Previous generations of networks aimed mainly at serving consumers, with voice and text services (2G), internet browsing (3G) and high-speed and video data transmission (4G). But the fifth generation network is shaping a new environment with multiple benefits for society and entrepreneurship. With greater capacity than today's networks, 5G enables technologies such as the internet of things, artificial intelligence, cloud computing and big data analysis, creating new challenges for businesses and the population.

However, the development of these networks will require significant investments initially by the mobile operators. The regulatory framework should help attract and implement these investments. Issues such as the release of new spectral ranges, of appropriate frequency, and the concession of bands need to be clarified, as should specific issues (e.g. land use permits, antenna installation points, technical characteristics) affecting the licensing of antenna systems.

The public sector's contribution is also essential, both on the infrastructure side (e.g. fibre optic infrastructure) as well as in mobilising investments in cooperation with other sources of funding (e.g. programmes combining EU funds, national resources, and funding from banking institutions). The implemented public policies affect directly or indirectly the demand for mobile communications, but also they shape the environment in which businesses in the sector operate.

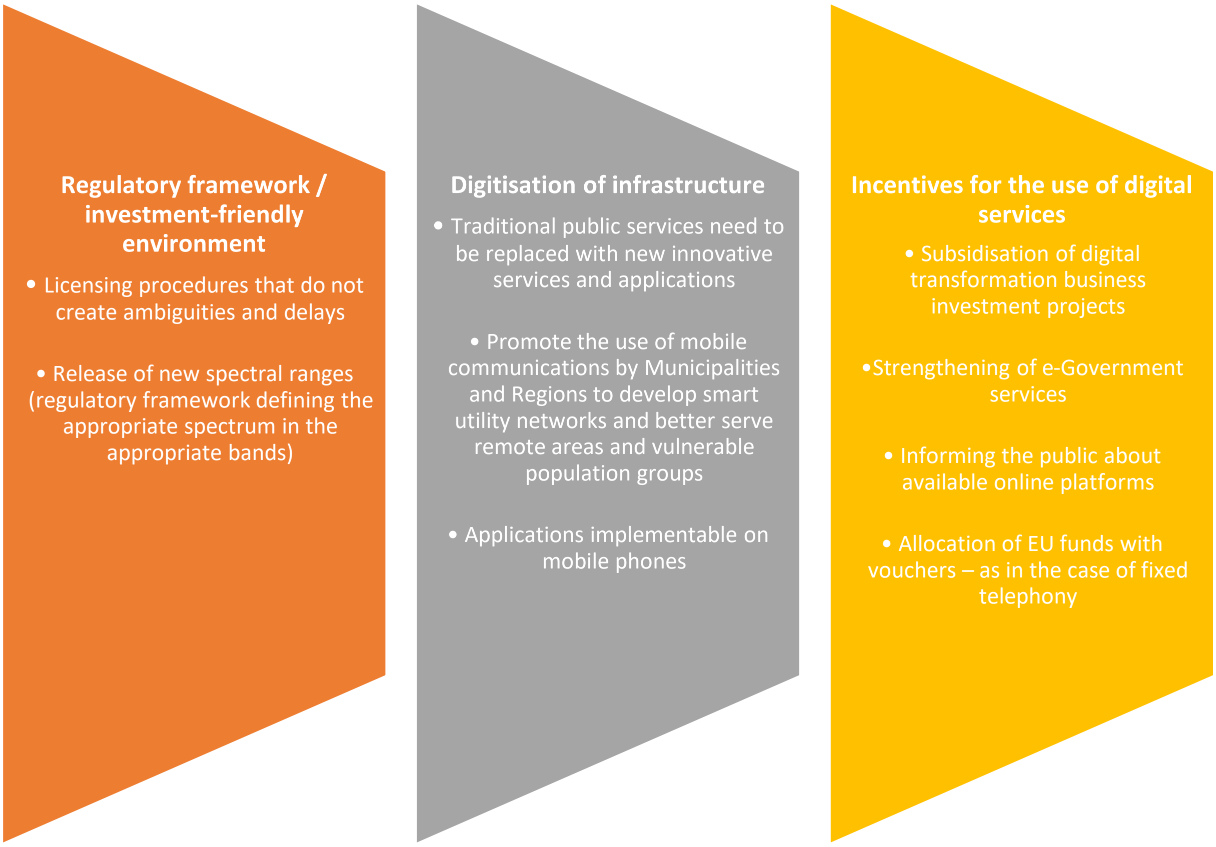
In this context, a major success factor is the digital transformation of the state itself. Traditional Public Administration services should be replaced with new innovative services and applications that facilitate business operation and improve the daily lives of the people. More e-government projects will also create the conditions for new investments and high-skilled jobs. In this respect, the digitisation of services should aim at simplifying procedures, i.e. avoiding the transfer of existing bureaucracy to digitised services. In this way, applications will be easier to use and implement through a mobile device, which is now the main means of access to the Internet.

Appropriate incentives should therefore be sought to enhance the use and access to public sector web applications. The rapid adjustment made in the current health crisis may be used as an opportunity to maintain the momentum of this use after the situation returns back to normal and the socio-economic functions of the country are restored. After all, the mandatory use of electronic applications of an albeit small but key number of services has shown to be working despite the initial difficulties (taxisnet, e-prescriptions, etc.).

Finally, the need to bridge the digital divide with those citizens or businesses that lag behind in these skills should not be overlooked. It is not an option to ignore their education needs or to treat them as "technologically illiterate" with a problem that they alone must solve. On the contrary, it should be a strategic priority for the country. Emphasis must therefore be placed on building digital skills for the entire population, but also on continuous relevant training. Given the proliferation and familiarity of the population with mobile phones, mobile communications are the appropriate means of a faster transition to the digital age.

Figure 4.9

Conditions for the development of mobile communications in Greece



Source: IOBE

APPENDIX

Table 1: GDP Rate of Change

	Annual Data (%)						
	2012	2013	2014	2015	2016	2017	2018
Austria	0.7	0	0.7	1	2.1	2.5	2.4
Belgium	0.7	0.5	1.6	2	1.5	2	1.5
Bulgaria	0.4	0.3	1.9	4	3.8	3.5	3.1
France	0.3	0.6	1	1.1	1.1	2.3	1.7
Germany	0.4	0.4	2.2	1.7	2.2	2.5	1.5
Denmark	0.2	0.9	1.6	2.3	3.2	2	2.4
Czech Republic	-0.8	-0.5	2.7	5.3	2.5	4.4	2.8
EU 27	-0.7	-0.1	1.6	2.3	2.1	2.7	2.1
Greece	-7.3	-3.2	0.7	-0.4	-0.2	1.5	1.9
Estonia	3.1	1.3	3	1.8	2.6	5.7	4.8
Euro area	-0.9	-0.2	1.4	2.1	1.9	2.5	1.9
Ireland	0.2	1.4	8.6	25.2	3.7	8.1	8.2
Spain	-3	-1.4	1.4	3.8	3	2.9	2.4
Italy	-3	-1.8	0	0.8	1.3	1.7	0.8
Croatia	-2.2	-0.5	-0.1	2.4	3.5	3.1	2.7
Cyprus	-3.4	-6.6	-1.9	3.4	6.7	4.4	4.1
Latvia	4.1	2.3	1.9	3.3	1.8	3.8	4.3
Lithuania	3.8	3.6	3.5	2	2.6	4.2	3.6
Luxembourg	-0.4	3.7	4.3	4.3	4.6	1.8	3.1
Malta	2.8	4.8	8.8	10.9	5.8	6.5	7.3
Netherlands	-1	-0.1	1.4	2	2.2	2.9	2.6
Hungary	-1.5	2	4.2	3.8	2.2	4.3	5.1
Poland	1.6	1.4	3.3	3.8	3.1	4.9	:
Portugal	-4.1	-0.9	0.8	1.8	2	3.5	2.6
Romania	2.1	3.5	3.4	3.9	4.8	7.1	4.4
Slovakia	1.9	0.7	2.8	4.8	2.1	3	4
Slovenia	-2.6	-1	2.8	2.2	3.1	4.8	4.1
Sweden	-0.6	1.1	2.7	4.4	2.4	2.4	2.2
Finland	-1.4	-0.9	-0.4	0.5	2.7	3.1	1.6

Table 2: General Government Debt as % of GDP

	Annual Data (%)						
	2012	2013	2014	2015	2016	2017	2018
Austria	81.9	81.3	84	84.9	82.9	78.3	74
Belgium	104.8	105.5	107	105.2	104.9	101.8	100
Bulgaria	16.7	17.1	27.1	26	29.3	25.3	22.3
France	90.6	93.4	94.9	95.6	98	98.4	98.4
Germany	81.1	78.7	75.7	72.1	69.2	65.3	61.9
Denmark	44.9	44	44.3	39.8	37.2	35.5	34.2
Czech Republic	44.5	44.9	42.2	40	36.8	34.7	32.6
EU 27	84.7	86.4	86.5	84.7	83.9	81.6	79.7
Greece	159.6	177.4	178.9	175.9	178.5	176.2	181.2
Estonia	9.8	10.2	10.6	10	10.2	9.3	8.4
Euro area	90.7	92.6	92.8	90.8	90	87.8	85.9
Ireland	119.9	119.9	104.4	76.7	73.9	67.8	63.6
Spain	86.3	95.8	100.7	99.3	99.2	98.6	97.6
Italy	126.5	132.4	135.4	135.3	134.8	134.1	134.8
Croatia	70.1	81.2	84.7	84.4	81	78	74.8
Cyprus	80.3	104	109.2	107.5	103.4	93.9	100.6
Latvia	41.6	39.4	40.9	36.7	40.2	38.6	36.4
Lithuania	39.8	38.7	40.6	42.7	39.9	39.3	34.1
Luxembourg	22	23.7	22.7	22	20.1	22.3	21
Malta	67.7	68.4	63.4	57.8	55.5	50.3	45.8
Netherlands	66.2	67.7	67.8	64.6	61.9	56.9	52.4
Hungary	78.5	77.3	76.8	76.1	75.5	72.9	70.2
Poland	53.7	55.7	50.4	51.3	54.2	50.6	48.9
Portugal	129	131.4	132.9	131.2	131.5	126	122.2
Romania	37	37.6	39.2	37.8	37.3	35.1	35
Slovakia	51.8	54.7	53.5	51.9	52	51.3	49.4
Slovenia	53.6	70	80.3	82.6	78.7	74.1	70.4
Sweden	37.7	40.5	45.2	43.9	42.3	40.7	38.8
Finland	53.6	56.2	59.8	63	62.6	60.9	59

Table 3: General Government Balance as % of GDP

	Annual Data (%)						
	2012	2013	2014	2015	2016	2017	2018
Austria	-2.2	-2.0	-2.7	-1.0	-1.5	-0.7	0.2
Belgium	-4.3	-3.1	-3.1	-2.4	-2.4	-0.7	-0.7
Bulgaria	-0.3	-0.4	-5.4	-1.7	0.1	1.1	1.8
France	-5.0	-4.1	-3.9	-3.6	-3.5	-2.8	-2.5
Germany	0.0	0.0	0.6	0.9	1.2	1.2	1.9
Denmark	-3.5	-1.2	1.1	-1.2	0.2	1.7	0.8
Czech Republic	-3.9	-1.2	-2.1	-0.6	0.7	1.6	1.1
EU 27	-3.6	-2.9	-2.4	-1.9	-1.3	-0.8	-0.4
Greece	-8.9	-13.2	-3.6	-5.6	0.5	0.7	1.0
Estonia	-0.3	0.2	0.7	0.1	-0.5	-0.8	-0.6
Euro area	-3.7	-3.0	-2.5	-2.0	-1.4	-0.9	-0.5
Ireland	-8.1	-6.2	-3.6	-1.9	-0.7	-0.3	0.1
Spain	-10.7	-7.0	-5.9	-5.2	-4.3	-3.0	-2.5
Italy	-2.9	-2.9	-3.0	-2.6	-2.4	-2.4	-2.2
Croatia	-5.4	-5.3	-5.3	-3.3	-1.1	0.8	0.3
Cyprus	-5.6	-5.8	-8.7	-1.0	0.1	1.7	-4.4
Latvia	-1.2	-1.2	-1.4	-1.4	0.1	-0.5	-0.7
Lithuania	-3.1	-2.6	-0.6	-0.3	0.2	0.5	0.6
Luxembourg	0.3	1.0	1.3	1.4	1.8	1.4	2.7
Malta	-3.5	-2.4	-1.7	-1.0	0.9	3.4	1.9
Netherlands	-3.9	-2.9	-2.2	-2.0	0.0	1.3	1.5
Hungary	-2.3	-2.5	-2.8	-2.0	-1.8	-2.4	-2.3
Poland	-3.7	-4.2	-3.6	-2.6	-2.4	-1.5	-0.2
Portugal	-6.2	-5.1	-7.4	-4.4	-1.9	-3.0	-0.4
Romania	-3.7	-2.1	-1.2	-0.6	-2.6	-2.6	-3.0
Slovakia	-4.4	-2.9	-3.1	-2.7	-2.5	-1.0	-1.1
Slovenia	-4.0	-14.6	-5.5	-2.8	-1.9	0.0	0.8
Sweden	-1.0	-1.4	-1.5	0.0	1.0	1.4	0.8
Finland	-2.2	-2.5	-3.0	-2.4	-1.7	-0.7	-0.8

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

	Annual Data (%)					January - February			Change (%)	
	2015	2016	2017	2018	2019	2018	2019	2020	2020/19	2019/18
Austria	0.8	1.0	2.2	2.1	1.5	1.9	1.6	2.2	0.6	-0.4
Belgium	0.6	1.8	2.2	2.3	1.2	1.6	1.9	1.2	-0.7	0.3
Bulgaria	-1.1	-1.3	1.2	2.6	2.5	1.4	2.4	3.2	0.9	0.9
France	0.1	0.3	1.2	2.1	1.3	1.4	1.5	1.6	0.1	0.1
Germany	0.7	0.4	1.7	1.9	1.4	1.3	1.7	1.7	0.0	0.3
Denmark	0.2	0.0	1.1	0.7	0.7	0.5	1.1	0.7	-0.4	0.6
Czech Republic	0.3	0.6	2.4	2.0	2.6	1.8	2.2	3.8	1.5	0.4
EU 27	0.1	0.2	1.7	1.9	1.5	1.3	1.5	1.7	0.1	0.2
Greece	-1.1	0.0	1.1	0.8	0.5	0.3	0.7	0.7	0.1	0.3
Estonia	0.1	0.8	3.7	3.4	2.3	3.4	2.3	1.8	-0.5	-1.1
Euro area	0.2	0.2	1.5	1.8	1.2	1.2	1.4	1.3	-0.2	0.2
Ireland	0.0	-0.2	0.3	0.7	0.9	1.0	1.1	1.0	-0.1	0.1
Spain	-0.6	-0.3	2.0	1.7	0.8	0.9	1.0	0.3	-0.7	0.1
Italy	0.1	-0.1	1.3	1.2	0.6	1.1	0.7	1.5	0.8	-0.4
Croatia	-0.3	-0.6	1.3	1.6	0.8	-0.9	1.5	0.9	-0.6	2.4
Cyprus	-1.5	-1.2	0.7	0.8	0.5	1.9	2.9	2.2	-0.7	1.0
Latvia	0.2	0.1	2.9	2.6	2.7	3.4	1.8	2.9	1.0	-1.6
Lithuania	-0.7	0.7	3.7	2.5	2.2	1.2	1.9	2.2	0.3	0.7
Luxembourg	0.1	0.0	2.1	2.0	1.6	1.3	1.1	1.2	0.1	-0.1
Malta	1.2	0.9	1.3	1.7	1.5	1.4	2.3	1.5	-0.8	0.9
Netherlands	0.2	0.1	1.3	1.6	2.7	2.0	3.0	4.6	1.6	0.9
Hungary	0.1	0.4	2.4	2.9	3.4	1.1	0.9	3.9	3.0	-0.2
Poland	-0.7	-0.2	1.6	1.2	2.1	0.9	0.8	0.7	-0.1	-0.1
Portugal	0.5	0.6	1.6	1.2	0.3	3.6	3.6	3.4	-0.2	0.0
Romania	-0.4	-1.1	1.1	4.1	3.9	2.4	2.2	3.2	0.9	-0.1
Slovakia	-0.3	-0.5	1.4	2.5	2.8	1.6	1.2	2.1	0.9	-0.3
Slovenia	-0.8	-0.2	1.6	1.9	1.7	1.6	1.9	1.4	-0.5	0.3
Sweden	0.7	1.1	1.9	2.0	1.7	0.7	1.2	1.2	-0.1	0.5
Finland	-0.2	0.4	0.8	1.2	1.1	1.9	1.6	2.2	0.6	-0.4

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

	Annual Data (%)						
	2012	2013	2014	2015	2016	2017	2018
Austria	1.10	1.11	1.11	1.11	1.12	1.13	1.13
Belgium	1.11	1.12	1.12	1.11	1.12	1.13	1.13
Bulgaria	0.94	0.94	0.92	0.94	0.96	0.99	1.01
France	1.14	1.13	1.13	1.12	1.12	1.12	1.11
Germany	1.07	1.07	1.07	1.08	1.08	1.08	1.09
Denmark	10.24	10.20	10.23	10.16	10.20	10.03	9.96
Czech Republic	18.00	17.72	17.73	18.00	18.11	18.11	18.23
EU 27	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Greece	0.93	0.88	0.85	0.85	0.85	0.84	0.83
Estonia	0.71	0.72	0.74	0.75	0.76	0.78	0.80
Euro area	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Ireland	1.11	1.12	1.14	1.13	1.14	1.16	1.16
Spain	0.94	0.94	0.92	0.92	0.93	0.92	0.93
Italy	1.01	1.02	1.03	1.03	1.01	1.00	1.00
Croatia	4.96	4.96	4.95	4.89	4.87	4.87	4.90
Cyprus	0.96	0.95	0.95	0.92	0.90	0.90	0.90
Latvia	0.69	0.69	0.69	0.69	0.70	0.71	0.72
Lithuania	0.61	0.61	0.62	0.62	0.63	0.65	0.66
Luxembourg	1.23	1.24	1.23	1.23	1.23	1.24	1.24
Malta	0.78	0.80	0.82	0.83	0.84	0.85	0.86
Netherlands	1.12	1.11	1.13	1.13	1.15	1.14	1.15
Hungary	170.07	173.26	180.64	184.38	190.13	196.62	203.13
Poland	2.43	2.44	2.47	2.46	2.50	2.54	2.58
Portugal	0.82	0.81	0.81	0.81	0.82	0.84	0.85
Romania	2.12	2.23	2.27	2.31	2.30	2.35	2.45
Slovakia	0.68	0.68	0.68	0.68	0.72	0.74	0.74
Slovenia	0.82	0.82	0.83	0.83	0.83	0.83	0.84
Sweden	11.72	11.92	12.18	12.32	12.70	12.76	12.98
Finland	1.23	1.26	1.27	1.26	1.27	1.26	1.26

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

	Annual Data (%)						
	2012	2013	2014	2015	2016	2017	2018
Austria	117.9	117.3	116.7	117.3	117.9	116.4	116.4
Belgium	130.1	130.2	131.2	131.6	131.1	130.2	129.9
Bulgaria	43.7	42.9	44	44.5	45.8	46.1	47.4
France	115.4	116.8	116.1	115.7	115.3	115.1	115.1
Germany	105.1	104.3	106.3	105.3	105.6	105.3	104.5
Denmark	114.7	115.5	115.5	114.9	114.6	116	116
Czech Republic	76.3	76.8	79.3	79.9	80	81.6	83
EU 27	100	100	100	100	100	100	100
Greece	86.1	87.2	86.4	83.5	81.4	80.3	80.2
Estonia	73.9	73.8	75.4	72.4	73.6	74.9	77.9
Euro area	107.5	107.5	107.6	107.3	107.2	106.9	106.3
Ireland	147.1	143	146.4	188.6	182.2	188.4	194.5
Spain	103	103.4	103.3	102.2	101.7	101.2	99.8
Italy	111	109.4	107.7	106.6	108.1	107.4	106.3
Croatia	72.5	73.5	70.8	70.7	72.3	72	72.2
Cyprus	88.7	86	84	84.9	85.7	84.4	84.3
Latvia	63.1	62.6	64.7	64.4	64.7	66.7	68.9
Lithuania	72.9	74.1	74.4	72.8	71.7	74.9	76.3
Luxembourg	162.5	163.8	169.7	169.6	170.1	165	163.5
Malta	90.3	89.6	91.3	94.9	95.9	94.5	93.4
Netherlands	113.5	115.4	113.5	112.8	110.5	110.6	110.4
Hungary	73	73.1	71.4	71	67.4	67.8	69.4
Poland	74.2	74.1	73.8	74.5	74	75.4	77.5
Portugal	76.8	79.9	79	78.3	77.9	76.1	74.6
Romania	55.6	56.2	56.7	58.6	63.1	65.5	68.2
Slovakia	83.5	84.1	84.3	83.5	81.5	80.1	80.9
Slovenia	80.6	81.1	81.5	80.6	80.7	81.7	82.1
Sweden	118	115.5	114.8	116.4	113.2	112.6	113.3
Finland	109.6	108.3	107.7	107.6	107.9	108.8	108

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

	Annual Data (%)							
	2012	2013	2014	2015	2016	2017	2018	2019
Austria	74.4	74.6	74.2	74.3	74.8	75.4	76.2	76.8
Belgium	67.2	67.2	67.3	67.2	67.7	68.5	69.7	70.5
Bulgaria	63	63.5	65.1	67.1	67.7	71.3	72.4	75.0
France	69.4	69.5	69.2	69.5	70	70.6	71.3	71.6
Germany	76.9	77.3	77.7	78	78.6	79.2	79.9	80.7
Denmark	74.3	74.3	74.7	75.4	76	76.6	77.5	78.3
Czech Republic	71.5	72.5	73.5	74.8	76.7	78.5	79.9	80.3
EU 27	67.6	67.5	68.2	69	70.1	71.3	72.3	73.1
Greece	55	52.9	53.3	54.9	56.2	57.8	59.5	61.2
Estonia	72.2	73.3	74.3	76.5	76.6	78.7	79.5	80.2
Euro area	68	67.7	68.1	68.9	69.9	70.9	71.9	72.6
Ireland	64.5	66.5	68.1	69.9	71.4	73	74.1	75.1
Spain	59.6	58.6	59.9	62	63.9	65.5	67	68.1
Italy	60.9	59.7	59.9	60.5	61.6	62.3	63	63.5
Croatia	58.1	57.2	59.2	60.6	61.4	63.6	65.2	66.7
Cyprus	70.2	67.2	67.6	67.9	68.7	70.8	73.9	75.7
Latvia	68.1	69.7	70.7	72.5	73.2	74.8	76.8	77.4
Lithuania	68.5	69.9	71.8	73.3	75.2	76	77.8	78.2
Luxembourg	71.4	71.1	72.1	70.9	70.7	71.5	72.1	72.8
Malta	63.9	66.2	67.9	69	71.1	73	75.5	77.2
Netherlands	76.6	75.9	75.4	76.4	77.1	78	79.2	80.2
Hungary	61.6	63	66.7	68.9	71.5	73.3	74.4	75.3
Poland	64.7	64.9	66.5	67.8	69.3	70.9	72.2	73.0
Portugal	66.3	65.4	67.6	69.1	70.6	73.4	75.4	76.2
Romania	64.8	64.7	65.7	66	66.3	68.8	69.9	70.9
Slovakia	65.1	65	65.9	67.7	69.8	71.1	72.4	73.4
Slovenia	68.3	67.2	67.7	69.1	70.1	73.4	75.4	76.5
Sweden	79.4	79.8	80	80.5	81.2	81.8	82.4	82.1
Finland	74	73.3	73.1	72.9	73.4	74.2	76.3	77.2

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

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

	Annual Data (%)							
	2012	2013	2014	2015	2016	2017	2018	2019
Austria	41.6	43.8	45.1	46.3	49.2	51.3	54.0	54.5
Belgium	39.5	41.7	42.7	44.0	45.4	48.3	50.3	52.1
Bulgaria	45.7	47.4	50.0	53.0	54.5	58.2	60.7	64.4
France	44.5	45.6	46.9	48.7	49.9	51.3	52.3	53.0
Germany	61.6	63.6	65.6	66.2	68.6	70.1	71.4	72.7
Denmark	57.9	58.8	60.7	63.0	65.8	68.2	69.2	71.3
Czech Republic	49.3	51.6	54.0	55.5	58.5	62.1	65.1	66.7
EU 27	47.4	48.8	50.5	52.1	54.2	56.1	57.8	59.1
Greece	36.5	35.6	34.0	34.3	36.3	38.3	41.1	43.2
Estonia	60.5	62.6	64.0	64.5	65.2	68.1	68.9	72.5
Euro area	48.6	50.0	51.7	53.3	55.3	57.1	58.8	60.0
Ireland	49.3	51.2	52.6	55.4	56.8	58.4	60.4	61.8
Spain	43.9	43.2	44.3	46.9	49.1	50.5	52.2	53.8
Italy	40.3	42.7	46.2	48.2	50.3	52.2	53.7	54.3
Croatia	37.5	37.8	36.2	39.2	38.1	40.3	42.8	44.0
Cyprus	50.7	49.6	46.9	48.5	52.2	55.3	60.9	61.1
Latvia	52.8	54.8	56.4	59.4	61.4	62.3	65.4	67.3
Lithuania	51.7	53.4	56.2	60.4	64.6	66.1	68.5	68.4
Luxembourg	41.0	40.5	42.5	38.4	39.6	39.8	40.5	43.1
Malta	34.7	37.1	39.5	42.3	45.8	47.2	50.2	51.6
Netherlands	57.6	59.2	59.9	61.7	63.5	65.7	67.7	69.7
Hungary	36.1	37.9	41.7	45.3	49.8	51.7	54.4	56.7
Poland	38.7	40.6	42.5	44.3	46.2	48.3	48.9	49.6
Portugal	46.5	46.9	47.8	49.9	52.1	56.2	59.2	60.4
Romania	41.6	41.8	43.1	41.1	42.8	44.5	46.3	47.8
Slovakia	43.1	44.0	44.8	47.0	49.0	53.0	54.2	57.0
Slovenia	32.9	33.5	35.4	36.6	38.5	42.7	47.0	48.6
Sweden	73.0	73.6	74.0	74.5	75.5	76.4	78.0	77.7
Finland	58.2	58.5	59.1	60.0	61.4	62.5	65.4	66.8

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

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

	Annual Data (%)							
	2012	2013	2014	2015	2016	2017	2018	2019
Austria	0.8	0.4	0.1	0.8	1.8	1.0	1.3	0.9
Belgium	0.2	0.1	0.3	0.0	0.9	1.0	2.4	1.5
Bulgaria	-1.1	-0.2	1.3	1.6	-0.6	4.0	-0.1	2.2
France	0.0	-0.1	2.2	0.1	0.5	0.8	0.8	0.2
Germany	0.7	0.8	0.7	0.7	2.5	0.8	0.4	1.0
Denmark	-0.9	-0.3	0.8	1.7	1.7	1.1	1.5	1.5
Czech Republic	0.3	0.7	0.8	1.0	1.7	1.6	1.0	0.1
EU 27	-0.5	-0.5	1.1	1.0	1.5	1.4	1.1	0.9
Greece	-8.6	-4.9	0.6	2.0	1.8	2.0	1.9	2.0
Estonia	1.6	0.9	0.5	2.3	-0.1	2.2	0.7	0.6
Euro area	-0.7	-0.6	0.9	1.0	1.7	1.3	1.2	1.0
Ireland	-0.5	3.0	2.5	3.2	3.6	2.8	2.6	2.7
Spain	-4.3	-2.7	1.2	2.9	2.6	2.6	2.6	2.3
Italy	-0.3	-1.8	0.2	0.7	1.2	0.9	0.6	0.4
Croatia	-3.5	-2.3	3.2	1.1	0.5	2.3	1.7	1.2
Cyprus	-2.9	-4.9	-0.4	-1.4	1.1	4.5	5.4	3.5
Latvia	1.3	1.7	-0.9	1.1	-0.6	0.0	1.3	-0.3
Lithuania	1.5	1.6	1.9	1.0	1.3	-0.9	1.4	0.0
Luxembourg	5.1	1.0	2.8	5.1	1.6	4.0	3.1	3.2
Malta	3.8	4.6	4.6	4.1	5.2	6.0	8.1	5.5
Netherlands	0.3	-0.9	-0.9	1.1	1.3	1.9	2.0	1.7
Hungary	1.8	1.8	5.4	2.6	3.2	1.5	0.9	0.6
Poland	0.2	-0.2	1.8	1.4	0.6	1.1	0.3	-0.2
Portugal	-4.4	-2.3	2.3	1.3	1.4	3.3	2.2	0.8
Romania	1.0	-0.5	0.9	-0.2	-0.8	2.4	0.2	0.3
Slovakia	0.6	0.0	1.4	2.4	2.8	1.2	1.2	0.4
Slovenia	-0.9	-2.0	0.5	1.0	0.1	4.5	2.0	0.8
Sweden	0.3	1.0	0.9	1.4	1.6	2.1	1.6	0.6
Finland	0.1	-1.1	-0.7	-0.8	0.5	1.0	2.6	0.9

Table 11: Unemployment Rate – Total Population

	Annual Data (%)							
	2012	2013	2014	2015	2016	2017	2018	2019
Austria	4.9	5.4	5.6	5.7	6	5.5	4.9	4.5
Belgium	7.6	8.4	8.5	8.5	7.8	7.1	6	5.4
Bulgaria	12.3	13	11.4	9.2	7.6	6.2	5.2	4.2
France	9.8	10.3	10.3	10.4	10	9.4	9	8.5
Germany	5.4	5.2	5	4.6	4.1	3.8	3.4	3.2
Denmark	7.8	7.4	6.9	6.3	6	5.8	5.1	5
Czech Republic	7	7	6.1	5.1	4	2.9	2.2	2
EU 27	10.9	11.4	10.9	10.1	9.1	8.2	7.3	6.7
Greece	24.5	27.5	26.5	24.9	23.6	21.5	19.3	17.3
Estonia	10	8.6	7.4	6.2	6.8	5.8	5.4	4.5
Euro area	11.4	12	11.6	10.9	10	9.1	8.2	7.6
Ireland	15.5	13.8	11.9	10	8.4	6.7	5.8	5
Spain	24.8	26.1	24.5	22.1	19.6	17.2	15.3	14.1
Italy	10.7	12.1	12.7	11.9	11.7	11.2	10.6	:
Croatia	15.8	17.4	17.2	16.1	13.4	11	8.4	6.7
Cyprus	11.9	15.9	16.1	15	13	11.1	8.4	7.1
Latvia	15	11.9	10.8	9.9	9.6	8.7	7.4	6.3
Lithuania	13.4	11.8	10.7	9.1	7.9	7.1	6.2	6.3
Luxembourg	5.1	5.9	6	6.5	6.3	5.6	5.5	5.6
Malta	6.2	6.1	5.7	5.4	4.7	4	3.7	3.4
Netherlands	5.8	7.3	7.4	6.9	6	4.9	3.8	3.4
Hungary	11	10.2	7.7	6.8	5.1	4.2	3.7	3.4
Poland	10.1	10.3	9	7.5	6.2	4.9	3.9	3.3
Portugal	15.8	16.4	14.1	12.6	11.2	9	7	6.5
Romania	6.8	7.1	6.8	6.8	5.9	4.9	4.2	3.9
Slovakia	14	14.2	13.2	11.5	9.7	8.1	6.5	5.8
Slovenia	8.9	10.1	9.7	9	8	6.6	5.1	4.5
Sweden	8	8	7.9	7.4	6.9	6.7	6.3	6.8
Finland	7.7	8.2	8.7	9.4	8.8	8.6	7.4	6.7

Table 12: Unemployment Rate among Men

	Annual Data (%)							
	2012	2013	2014	2015	2016	2017	2018	2019
Austria	5.0	5.4	5.9	6.1	6.5	5.9	5.0	4.6
Belgium	7.7	8.7	9.0	9.1	8.1	7.1	6.3	5.7
Bulgaria	13.5	13.9	12.3	9.8	8.1	6.4	5.7	4.5
France	9.8	10.4	10.5	10.8	10.2	9.5	9.0	8.5
Germany	5.6	5.5	5.3	5.0	4.5	4.1	3.8	3.5
Denmark	7.8	7.1	6.7	6.1	5.6	5.6	4.9	4.8
Czech Republic	6.0	5.9	5.1	4.2	3.4	2.3	1.8	1.7
EU 27	10.7	11.3	10.7	9.9	8.9	7.9	7.0	6.4
Greece	21.6	24.5	23.7	21.8	19.9	17.8	15.4	14.0
Estonia	10.9	9.1	7.9	6.2	7.4	6.2	5.4	4.1
Euro area	11.2	11.9	11.5	10.7	9.7	8.7	7.9	7.2
Ireland	17.8	14.9	12.7	10.8	9.1	7.1	5.8	5.2
Spain	24.6	25.6	23.6	20.8	18.1	15.7	13.7	12.5
Italy	9.8	11.5	11.9	11.3	10.9	10.3	9.7	:
Croatia	15.8	17.6	16.6	15.6	12.7	10.3	7.6	6.2
Cyprus	12.6	16.6	17.1	15.1	12.7	10.9	8.1	6.3
Latvia	16.2	12.6	11.8	11.1	10.9	9.8	8.4	7.2
Lithuania	15.2	13.1	12.2	10.1	9.1	8.6	6.9	7.1
Luxembourg	4.5	5.6	5.8	5.9	6.1	5.6	5.3	5.6
Malta	5.6	6.1	6.1	5.4	4.4	3.8	3.8	3.3
Netherlands	5.5	7.2	7.2	6.5	5.6	4.5	3.7	3.4
Hungary	11.3	10.2	7.6	6.6	5.1	3.8	3.5	3.4
Poland	9.4	9.7	8.5	7.3	6.1	4.9	3.9	3.0
Portugal	15.9	16.3	13.8	12.4	11.1	8.6	6.6	5.9
Romania	7.4	7.7	7.3	7.5	6.6	5.6	4.7	4.3
Slovakia	13.5	14.0	12.8	10.3	8.8	7.9	6.1	5.6
Slovenia	8.4	9.5	9.0	8.1	7.5	5.8	4.6	4.0
Sweden	8.2	8.2	8.2	7.5	7.3	6.9	6.4	6.7
Finland	8.3	8.8	9.3	9.9	9.0	8.9	7.4	7.2

Table 13: Unemployment Rate among Women

	Annual Data (%)							
	2012	2013	2014	2015	2016	2017	2018	2019
Austria	4.8	5.3	5.4	5.3	5.6	5.0	4.7	4.4
Belgium	7.4	8.2	7.9	7.8	7.6	7.1	5.6	4.9
Bulgaria	10.8	11.8	10.4	8.4	7.0	6.0	4.7	3.9
France	9.8	10.2	10.0	9.9	9.8	9.4	9.1	8.4
Germany	5.2	4.9	4.6	4.2	3.8	3.3	2.9	2.7
Denmark	7.8	7.7	7.1	6.5	6.4	6.1	5.4	5.3
Czech Republic	8.2	8.3	7.4	6.1	4.7	3.6	2.8	2.4
EU 27	11.0	11.6	11.1	10.2	9.4	8.5	7.6	7.1
Greece	28.2	31.4	30.2	28.9	28.1	26.1	24.2	21.5
Estonia	9.1	8.2	6.8	6.1	6.1	5.3	5.3	4.8
Euro area	11.6	12.2	11.8	11.1	10.4	9.5	8.6	7.9
Ireland	12.8	12.4	10.9	8.9	7.6	6.3	5.7	4.7
Spain	25.1	26.7	25.4	23.6	21.4	19.0	17.0	16.0
Italy	11.8	13.1	13.8	12.7	12.8	12.4	11.8	:
Croatia	15.8	17.2	18.0	16.7	14.2	11.9	9.3	7.4
Cyprus	11.1	15.2	15.1	14.8	13.4	11.3	8.8	8.0
Latvia	14.0	11.1	9.8	8.6	8.4	7.7	6.4	5.4
Lithuania	11.6	10.5	9.2	8.2	6.7	5.7	5.4	5.5
Luxembourg	5.8	6.2	6.4	7.1	6.5	5.6	5.7	5.5
Malta	7.2	6.1	5.1	5.4	5.2	4.3	3.5	3.6
Netherlands	6.2	7.3	7.8	7.3	6.5	5.3	4.0	3.4
Hungary	10.6	10.1	7.9	7.0	5.1	4.6	4.0	3.5
Poland	10.9	11.1	9.6	7.7	6.2	4.9	3.9	3.6
Portugal	15.6	16.6	14.5	12.9	11.3	9.5	7.4	7.2
Romania	6.1	6.3	6.1	5.8	5.0	4.0	3.5	3.4
Slovakia	14.5	14.5	13.6	12.9	10.8	8.4	7.0	6.0
Slovenia	9.4	10.9	10.6	10.1	8.6	7.5	5.7	5.0
Sweden	7.7	7.9	7.7	7.3	6.5	6.4	6.2	6.9
Finland	7.1	7.5	8.0	8.8	8.6	8.4	7.3	6.2

Table 14: Long-Term Unemployment Rate (*)

	Annual Data (%)					Q3(%)			Change (%)	
	2014	2015	2016	2017	2018	2017	2018	2019	2019/18	2018/17
Austria	27.2	29.2	32.2	33.3	28.9	36.4	28.3	26.2	-2.1	-8.1
Belgium	49.9	51.7	51.6	48.8	48.7	44.2	47.6	42.9	-4.7	3.4
Bulgaria	60.3	61.1	58.9	54.9	58.3	55.7	62.3	62.8	0.5	6.6
France	44.2	44.2	45.7	45.4	42.0	48.0	42.6	40.9	-1.7	-5.4
Germany	44.3	44.0	41.1	41.9	41.3	43.3	42.7	40.0	-2.7	-0.6
Denmark	24.3	25.7	20.4	20.5	19.1	21.5	19.9	18.1	-1.8	-1.6
Czech Republic	43.6	47.4	42.1	35.0	30.6	34.3	30.4	28.1	-2.3	-3.9
EU 27	50.8	49.9	48.5	46.7	44.9	48.1	45.9	42.8	-3.1	-2.2
Greece	73.4	73.0	71.8	72.6	70.1	76.0	71.9	73.6	1.7	-4.1
Estonia	45.2	38.8	31.6	33.2	23.7	41.3	23.1	16.6	-6.5	-18.2
Euro area	52.6	51.5	50.1	48.9	46.9	50.2	47.8	45.0	-2.8	-2.4
Ireland	56.1	55.0	52.2	46.4	37.1	42.7	38.8	30.6	-8.2	-3.9
Spain	52.8	51.6	48.3	44.4	41.7	44.8	43.1	38.2	-4.9	-1.7
Italy	61.4	58.9	58.3	58.7	59.0	59.7	60.7	58.7	-2.0	1.0
Croatia	58.5	63.1	50.6	41.0	40.2	45.0	43.9	40.0	-3.9	-1.1
Cyprus	47.7	45.6	44.5	40.7	31.6	44.6	32.7	31.6	-1.1	-11.9
Latvia	43.0	45.5	41.5	37.4	42.0	40.3	43.8	37.7	-6.1	3.5
Lithuania	44.6	42.8	38.2	37.7	32.2	38.7	31.6	32.8	1.2	-7.1
Luxembourg	27.3	28.4	34.9	38.1	24.7	39.7	29.2	21.0	-8.2	-10.5
Malta	51.0	50.2	50.0	50.8	48.1	47.4	38.9	23.6	-15.3	-8.5
Netherlands	39.4	43.2	42.4	40.0	36.8	44.4	40.7	33.5	-7.2	-3.7
Hungary	47.4	45.5	46.5	40.4	38.6	39.0	38.0	32.6	-5.4	-1.0
Poland	42.7	39.3	34.9	31.0	26.9	33.6	26.8	20.0	-6.8	-6.8
Portugal	59.5	57.2	55.2	49.6	43.4	51.4	45.0	46.7	1.7	-6.4
Romania	41.1	43.9	50.0	41.5	44.1	41.9	46.6	41.1	-5.5	4.7
Slovakia	70.2	65.8	60.2	62.4	61.7	62.7	63.2	56.9	-6.3	0.5
Slovenia	54.5	52.3	53.3	47.5	42.9	49.4	43.6	44.0	0.4	-5.8
Sweden	19.0	20.8	19.4	19.6	18.3	21.9	20.9	14.6	-6.3	-1.0
Finland	22.4	24.6	25.9	24.4	21.9	29.1	23.0	22.0	-1.0	-6.1

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

Table 15: Unemployment Rate among Youth 15-24

	Annual Data (%)							
	2012	2013	2014	2015	2016	2017	2018	2019
Austria	9.4	9.7	10.3	10.6	11.2	9.8	9.4	8.5
Belgium	19.8	23.7	23.2	22.1	20.1	19.3	15.8	14.2
Bulgaria	28.1	28.4	23.8	21.6	17.2	12.9	12.7	8.9
France	24.4	24.9	24.2	24.7	24.5	22.1	20.8	19.6
Germany	8.0	7.8	7.7	7.2	7.1	6.8	6.2	5.8
Denmark	15.7	14.8	14.2	12.1	12.2	12.4	10.5	10.0
Czech Republic	19.5	18.9	15.9	12.6	10.5	7.9	6.7	5.6
EU 27	23.8	24.5	23.5	21.8	20.1	18.0	16.1	15.1
Greece	55.3	58.3	52.4	49.8	47.3	43.6	39.9	35.5
Estonia	20.9	18.7	15.0	13.1	13.4	12.1	11.9	11.0
Euro area	23.6	24.4	23.7	22.3	20.9	18.8	16.9	15.7
Ireland	30.8	26.7	23.4	20.2	16.8	14.4	13.8	12.5
Spain	52.9	55.5	53.2	48.3	44.4	38.6	34.3	32.5
Italy	35.3	40.0	42.7	40.3	37.8	34.7	32.2	:
Croatia	42.2	49.9	44.9	42.3	31.8	27.2	23.3	17.0
Cyprus	27.7	38.9	36.0	32.8	29.1	24.7	20.2	16.6
Latvia	28.5	23.2	19.6	16.3	17.3	17.0	12.2	12.4
Lithuania	26.7	21.9	19.3	16.3	14.5	13.3	11.1	11.9
Luxembourg	18.0	16.9	22.3	16.6	19.1	15.5	14.1	16.9
Malta	13.8	12.7	11.7	11.6	10.7	10.6	9.1	9.2
Netherlands	11.7	13.2	12.7	11.3	10.8	8.9	7.2	6.7
Hungary	28.2	26.6	20.4	17.3	12.9	10.7	10.2	11.4
Poland	26.5	27.3	23.9	20.8	17.7	14.8	11.7	9.9
Portugal	38.0	38.1	34.7	32.0	28.2	23.8	20.3	18.2
Romania	22.6	23.7	24.0	21.7	20.6	18.3	16.2	16.8
Slovakia	34.0	33.7	29.7	26.5	22.2	18.9	14.9	16.1
Slovenia	20.6	21.6	20.2	16.3	15.2	11.2	8.8	8.1
Sweden	23.7	23.6	22.9	20.4	18.9	17.8	17.4	20.0
Finland	19.0	19.9	20.5	22.4	20.1	20.1	17.0	17.2

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

http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=DSP_GLOSSARY_NOM_DTL_VIEW&StrNom=CODED2&StrLanguageCode=EN&IntKey=16664385&RdoSearch=BEGIN&TxtSearch=&CboTheme=36940331&IsTer=TERM&IntCurrentPage=4&ter_valid=0

http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=DSP_GLOSSARY_NOM_DTL_VIEW&StrNom=CODED2&StrLanguageCode=EN&IntKey=27697382&RdoSearch=BEGIN&TxtSearch=&CboTheme=36940331&IsTer=TERM&IntCurrentPage=44&ter_valid=0