The Greek Economy

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FOUNDATION FOR ECONOMIC & INDUSTRIAL RESEARCH

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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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Contents

Foreword

This is the fourth and final IOBE bulletin on the Greek economy for 2018. Its publication takes place during a period when the Greek economy has started its transition to a post-programme environment. The main current challenges are to maintain the achieved fiscal consolidation, continue the reforms, and restructure the loan portfolios of the banks. The upcoming elections constitute an additional major factor affecting the economic environment. As every IOBE quarterly bulletin, this report includes four chapters and an appendix with key structural indicators. The bulletin starts with an outline of economic policy challenges in the current, pre-election period. The rest of the report is structured as follows:

The first chapter presents a brief overview of the report. Chapter 2 examines the general economic conditions, including: i) an analysis of the global economic environment in the third quarter of 2018 and its outlook for the following quarter and for 2019, based on the latest report of the International Monetary Fund; ii) an outline of the economic climate in Greece in the final quarter of 2018, based on data from the latest IOBE business and consumer surveys; iii) an assessment of the execution of the State Budget in the first eleven months of 2018, together with a presentation of the 2019 Budget; iv) an outline of the developments in the domestic financial system between September and November 2018 and the outlook for the new year.

Chapter 3 focuses on the performance of the Greek economy in the third quarter of 2018. It includes an analysis of: the macroeconomic environment in the third quarter of 2018 and in the early 2019; the developments in key production sectors in the first nine or ten months of the year; the export performance of the Greek economy over the same period; the developments in the labour market in the third quarter; the trends in inflation in 2018 overall; and, finally, the trends in the balance of payments between January and November 2018.

Chapter 4 presents the findings of a study on the impact of the economic crisis and the demographic trends on the education system in Greece.

The report is based on data that were available up to 25/01/2019.

IOBE's next quarterly bulletin on the Greek economy will be published in mid-April 2019.

ECONOMIC POLICY BEFORE THE ELECTIONS

To examine closely the economic trends and to set the right economic policy priorities is crucially important currently. Following the conclusion of the third programme, having now less protection and with looser supervision, facing a pre-election period with many clashes and possibly an extended and acute polarisation, what could we anticipate about economic policy and its consequences?

Continued recovery, with a growth rate of 2%. However, growth is driven by consumption, rather than investment or the net contribution of the external balance

Currently, the fiscal and trade balance are trending towards stabilisation, while the economy continues to recover, with a growth rate of around 2% on average in both the previous and the current year. The overall growth momentum, however, is weaker compared to other European countries and to the rate needed in order to achieve a sustainable growth in the medium-term. For the current year, growth is mostly driven by consumption rather than investment or the net contribution of the external balance. As a result, the current trend will be hard to maintain in the medium term. At the same time, the weakening of growth and hence demand at the European and global level raises further concerns about the Greek economy. Aside from the more general pressure on the exports of goods and services, the recovery of competing tourism markets could weaken the momentum of a sector that had a significant positive impact on growth over the past few years.

Regarding the economic policy options, the degrees of freedom increased following the conclusion of the third programme in August, yet they are not unlimited. The individual choices made and the policy direction that they signal will have a pivotal significance, especially as the economy enters a period of elections. An extremely lengthy pre-election period, especially if there is extreme polarisation, is a cause of concern regarding the effective resolution of overdue challenges.

Concern regarding future developments

One relevant threat is the delay in the creation of the conditions that will enable the smooth financing of the country from the global markets. On this path, a lot of steps need to be taken in succession and thus this process should start as soon as possible. A significant amount of time has already elapsed since the conclusion of the programme and there does not seem to be a systematic trend towards lower bond yields and refinancing at least of the debt that currently bears high interest rates. The problems coming from the European environment are not a sufficient excuse, neither is it certain that in the future the relevant developments are going to be positive or negative. Every passing month of delay comes with a real cost, as the terms of financing the public debt are not improving, and the threat that the country will find itself in an adverse global financing environment or perhaps even in inability to finance itself increases. It is equally important to bear in mind that along the financing cost for the State, households, businesses and banks also bear a similar burden.

Concerns on the fiscal balance: relaxed oversight of tax collection and increased pre-election spending

Moving on from the issue of financing, the economic policy cannot afford losing precious time without directly tacking significant problems in the functioning of the economy. Without sustained reform efforts in the areas of state asset development, public administration and the wider business environment, investment will continue to find itself lower than the level needed in order to achieve the growth targets for the year overall and to effectively ease the possibility of a new crisis.

Fiscal stability may also raise some concerns. Even though there is a significant surplus planned, there is no margin for delay neither in the utilisation of the state assets nor with possible issues arising from court decisions that will rule on retroactive payments for pensioners and employees. The economic policy needs to be on the lookout in order not only to avoid current fiscal problems, but also to prevent a fiscal projection that would be difficult to manage in the future. In addition, decades-worth of experience shows that before every election there was a trend for a more relaxed oversight of tax collection and increased spending, along with a wait-and-see stance from businesses and investors. Even though this has always been a problematic policy with a large toll on the economy, given today's situation of a country that wants to take its first steps in the post-programme era, it could prove disastrous and must be avoided.

Consensus is needed to proceed with reforms. Other countries under a reform programme had a minimum level of cooperation

Finally, there is the issue of finding the needed consensus to proceed with pending reforms to further ameliorate possible threats. The upcoming few years will be absolutely crucial. If there is no improvement in productivity and the production model does not shift towards exports and innovation, a new crisis will be unavoidable. Extreme political confrontation is not a positive factor. In other European countries that needed to adopt similar programmes, a minimum level of accord was achieved. It is particularly worrying that after tumultuous ten years, with a high level of accumulated private and public debt and, more generally, with feeble households and businesses, the actions on the main political stage do not have as a top priority the creation of the conditions that would enable strong economic growth.

The rest of 2019 will be crucial. The risk of perceiving the current recovery as the end of the crisis is considerable

Overall, the rest of the year will be decisive with respect to the question whether the economy will indeed find itself on a path of growth or the conditions for a new crisis will start to brew. Despite the consolidation evident both in general and in particular indicators, such as unemployment, exports of certain goods, and housing, the possibility of the economy being left without global financing cannot be ruled out. Thus, with a low level of investment and productivity, and with a strong need to service private and public loans, it might find itself facing the need for rescue through another programme, and with falling consumption and prosperity. Given this perspective, the risk of perceiving the current recovery as the end of the crisis is considerable. We do not have the luxury to return to "normality", similar to the one that laid the ground for the crisis ten years ago. If "normality" means a return to an introverted, state-run model of development, in particular, a new wave of the crisis will be impossible to avoid.

Shadow economy and overregulation of the economy through public finances are the main concerns for 2019

The strong growth of imports in the last few quarters, which prevented the achievement of higher growth rates, is a major source of concern. To a certain extent, an increase in imports is expected and unavoidable. The Greek economy is recovering and as it is expanding, the demand for goods and services from abroad is going up as well. Besides, capital equipment takes up a significant share of imported goods, while Greece trades using a strong currency, which benefits imports. The fact that an increase in imports was unavoidable explains why the growth of exports was the most important success factor throughout the crisis. It should have been much stronger so as the overall trade balance would not be under pressure. There are two more specific reasons for being alarmed. Firstly, the change of the production model and the boost in global competitiveness, so as to have stronger exports and import substitution, have not been achieved yet. Secondly, there should be some concern regarding the trajectory of the shadow economy, as part of the momentum of imports is caused by non-declared income.

A second source of concern stems from the tendency towards overregulation of the economy through public finances and the dependency of households on ad hoc decisions with little economic coherence. The annulment of the cuts in older pensions (the younger employees will have much lower pensions while paying more social

The first post-programme period is reminiscent of the years before the programmes.

security contributions), the increase in the minimum wage (at a rate exceeding the increase in productivity or the growth of the economy, while unemployment is still very high), and the intention to boost public sector employment (in sectors where such needs should follow very meticulous planning, such as education) are certain to provide relief to significant parts of the population, amongst them many weak households, by boosting income and consumption. However, the goal is to have a regular, strong growth of income, which cannot be achieved without relevant reforms in the taxation, social security and education systems, and ultimately without investment. At the same time, the policy towards reducing unemployment and providing incentives for people to conduct business legally should be a top priority. The dichotomy observed in the assessment of the economic climate in recent months, where there is a systematic decline in business expectations (excluding retail trade), coupled with an increase in consumer confidence, is compatible with the current trends of the economy.

Overall, and mutatis mutandis, the first post-programme period does not seem to differ much compared to the situation in the years that preceded the crisis. Households and businesses turn to the State for their consumption and profit, investment is lower than desired, while the cost of external financing is high and the global economic climate is deteriorating. Of course, the imbalances back then were much more acute, as a lot of adjustment has taken place since then, but the inherited stock of public and private debt, the loss of crucial workforce and the accumulated disinvestment, render the whole system weak. A convincing growth programme that has gained wide acceptance is yet to be presented; as long as this remains a pending issue, a new crisis cannot be ruled out. Indeed, such a development should have been truly impossible to conceive, given the dramatic events of the past decade and taking into account the cost borne by households, businesses and the country as a whole.

1. BRIEF OVERVIEW

Weaker global economic growth in 2018 and 2019

According to the data available so far for the third quarter of last year, the world economy grew at a slower pace. The GDP of the OECD members increased by 2.2%, from 2.5% in the preceding quarter and 2.8% in the same quarter a year before. The slowdown was milder in the major developed economies, where the growth rate in July-September stood at 2.0% on average, from 2.2% a quarter before and 2.3% a year before, which was the highest in recent years. Among these economies, the growth rate accelerated quarter-on-quarter in the US and the UK by 0.1 and 0.3 percentage points respectively, to 1.5% and 3.0%. In contrast, the strongest slowdown occurred in Japan, from 1.3% to 0.1%, followed by Italy (0.7% from 1.2% in the preceding quarter). Among the major Asian developing economies, the growth of the Chinese economy marginally declined to 6.5%, after a 6.7% and 6.9% growth rate for at least ten quarters. The growth of the Indian economy decelerated to 7.2%, from 7.8%, higher however than a year ago (6.4%). In Latin America, Brazil grew by 1.3%, higher than in the preceding quarter (0.9%), but lower than in the same quarter a year before (1.7%).

The deceleration of the global economy in the third quarter of last year is expected to have carried over to the next one, as a result inter alia of the trade protectionism measures adopted by the US, and their countermeasures, mostly by China, the natural disasters in Japan, the worsening of the financial conditions in developed countries, the slowdown in credit expansion in China, the stricter limits of gas emissions for vehicles in Germany, and stronger recession in Turkey. The slowdown in the third quarter last year might have been moderated by an increase in exports in certain countries before the restrictive global trade policies came into effect.

Since the beginning of 2019, further developments heighten the concerns regarding the global economy. These developments originate mostly from Europe and include the conclusion of the expansion of the quantitative easing programme by the ECB, which will also reveal which countries have an "output gap", the difficulty in achieving an agreement with the United Kingdom on a gradual Brexit, given the recent rejection of the plan by the UK Parliament and the drop in daily oil production.

In the Eurozone, other causes of uncertainty come from the concern over the fiscal policy in Italy, as well as the outcome of the upcoming European elections, which are both linked with an increase in Euroscepticism. As all recent and possible developments that affect the Eurozone economy increase risks, its growth will slow down this year, perhaps more than projected in recent estimates.

It is now considered possible that growth will also weaken in the US. Apart from the negative impact its trade policy will have, the boost from the fiscal measures will subside this year. Besides, imports of goods and services, apart from those with increased tariffs, have already increased from the fiscal stimulus. The extended shutdown of the Federal government will also thwart economic activity. At the same time, the trade protectionism measures will be offset in part by the bilateral agreement with China for a 90-day delay of their implementation, starting from 1/12/2018.

Regarding the developments in the major developing economies, the Chinese economy is trying to counteract the slowdown of credit supply by limiting the capital reserve requirements of the banks. The monetary policy in India remains accommodative, by extending liquidity to non-banking financial businesses. Last year's recovery in Russia is undermined by its participation in the latest cap on daily oil production.

Given these developments and prospects of the world economy, IOBE estimates that the growth of global GDP in 2018 has stood at 3.7%, while for 2019 it will be slightly lower at approximately 3.5%.

Stronger growth in Q3 last year, GDP growth of 2.1% over January-September, from 1.2% in 2017

The Greek economy grew by 2.2% year-on-year in the third quarter of 2018, 0.5 percentage points faster than in the preceding quarter. The GDP growth rate for the first three quarters of 2018 stood at 2.1% on average, from 1.2% in January-September 2017.

Regarding the trends in individual components of GDP in the first three quarters of last year, domestic consumption increased marginally, by 0.1%, at a lower rate than a year ago (0.9%). Its increase came from growth in the first semester (+0.4%), as it dropped by 0.3% in the third quarter. Among the components of total consumption, the increase was driven by private consumption, with a rise by 0.8%, albeit smaller than a year before (1.3%). Public consumption was always dropping since the beginning of last year, with the drop reaching 4.0% from the second quarter on. Overall, in the period under examination, private consumption expenditure was 3.0% lower than a year before.

Investment expenditure in January-September of last year increased by 1.5% compared with the corresponding period of 2017, when it had increased strongly, by 7.4%. The increase came exclusively from a sharp surge by 42.2% in the summer quarter. However, this result is due to the different trend in depreciation over this period compared to a year before (upwards from downwards). Gross fixed capital formation dropped sharply in the third quarter, by 23.2%. Given this development, gross fixed capital formation receded in the first three quarters last year by 6.2%, from an 8.3% expansion a year earlier. The decline of fixed capital formation came mainly from a fall in Other Construction, by 15.6% and Transport – Weapon Systems, by 22.3%. As mentioned in previous IOBE reports on the Greek economy, this change was due to a sharp increase in investment in ships in the first half of 2017 (81.8% or €1.06 billion increase of imports), which led to a negative "base effect" a year later. All other types of fixed investment increased over the first nine months, with the strongest one, in relative and absolute terms, observed in Other Machinery – Weapon Systems (+20.4% or +€648 million).

In the external sector of the economy, exports continued to expand in the third quarter. As a result, they increased year on year by 8.3% in the first nine months of last year, stronger than a year before, when their growth rate stood at 7.3%. Both key export components contributed to this increase over the summer quarter, with the positive impact from the exports of goods slightly stronger than the impact from the exports of services, by 8.9% against 8.3%. However, in the corresponding period of 2017, the ranking in terms of contribution to the growth of exports was the opposite, as the international demand for services from Greece had increased by 10.4%, while the exports of goods had increased by 4.8%.

The continued expansion of exports over the third quarter was overshadowed by a stronger increase in imports. Imports of goods increased for the first time in a 2018 quarter, a development related to the trend change in the imports of ships in comparison to previous quarters, from negative to positive. Overall in the first nine months of 2018, imports increased by 3.1% year on year, slowing down strongly in comparison with the corresponding period of last year (8.9%). Given the drop in the imports of goods in the first half of the year, the expansion of domestic demand for services from abroad over January-September by 14.6%, was the main reason that led to an increase in total imports, exceeding even that of 2017 (14.6% from 9.4%). Over the same period, the imports of goods increased only by 0.6%, while a year before they were expanding by 8.8%. The much stronger increase in exports resulted in a significant restriction of the trade balance deficit, by 47.2% or €2.2 billion, standing at €2.45 billion or 1.7% of GDP.

Growth of the Greek economy in 2018 by 2.0%, sustained growth this year at a similar or slightly higher rate

The Greek economy recently entered the first year since 2010 when no Economic Adjustment Programme is being implemented. The positive effects of this development are so far evident in the trend of expectations, especially those of households. The Consumer Confidence Index was continuously increasing in the second half of 2018, reaching its highest level since March 2015 at the end of last year. However, on the side of businesses, these trends vary. A steady increase from September till November was present in the expectations index in Construction. In Retail Trade, expectations are marginally stronger than in August last year, when the third programme was concluded. That said, expectations have weakened in Industry and Services.

Even though no new Programme of Economic Adjustment was signed, the Greek government has committed in the Medium-Term Fiscal Strategy 2019-2022 to implement fiscal measures and achieve targets for the primary surplus of the General Government. At the same time, an extensive reform plan was drafted, with an implementation period from the second half of 2018 until 2021. Without a doubt, achieving the fiscal targets and implementing the reform plan are the major challenges for economic policy in the post-programme period. The progress is monitored through the enhanced surveillance process of the European Commission, without the strong immediate consequences of non-compliance that were present during the period of the Economic Adjustment Programmes, such as the withholding of funding provided as part of the respective lending agreements. The creation of a cash buffer of the Greek state, amounting to €24.1 billion is sufficient to service public debt up until the end of the first half of 2020. Nevertheless, any divergence from the commitments (especially permanent ones, such as cancellation of key reforms) prevent the recovery of confidence in the implemented economic policy and hinder the access of the Greek State to the capital markets, under sustainable terms, in order to refinance its debt. In addition, the cash buffer of the Greek state does not guarantee its access to funds for the private sector.

The upcoming consecutive rounds of elections, and particularly the parliamentary polls, constitute another factor affecting the socio-economic environment and the economic policy in the current year. The party proclamations, and in particular those pertinent to fiscal measures (such as on tax relief, allowances, recruitment etc.) change the expectation of the economic agents. Yet, at the same time, they cause uncertainty regarding the stability of the components of the tax and social security systems, the regulatory framework for entrepreneurship, etc. As a result, the elections in 2019 will hinder to a certain degree economic decision-making, pending possible changes in the implemented economic policy by a new government.

Important changes are occurring or are expected to occur in the global environment as well, most of which are expected to have a detrimental effect. The aftermath of the US protectionist trade policy and the counter-measures adopted by the EU, China and other countries, along with the increase in Euroscepticism, as demonstrated in Italy and the United Kingdom, which is nearing its exit from the European Union (Brexit) are among the major global politico-economic developments. The conclusion of the quantitative easing measures by the ECB, at the end of 2018, after approximately four years, also constitutes a significant challenge for the European economic policy. The recent decision made by OPEC and partner countries to reduce daily oil production by 1.2 million barrels starting in 2019, halted the intense price drop, in excess of 30%, of the preceding quarter (October-December).

In more detail, the smooth transition into the post-programme environment is a key issue of economic policy in the current year. This implies that there should be no slippage from the set medium-term fiscal targets and the reforms planned over the same period. Any developments in the opposite direction will arrest the recovery of the confidence in the Greek State and economy and will reflect on the cost of borrowing for the public sector. Of course, policy revisions that do not affect the above targets and use any available "fiscal space" are legitimate, for example in the direction of reducing the high direct and indirect taxation and social security contributions. Such interventions are included in the State budget for 2019 amongst the new measures to be implemented this year, instead of interventions included in the MTFS 2019-2022 (reduction of the social security contributions for the self-employed and farmers, a 50% subsidy of the contributions for young employees, and reduction of the property tax ENFIA on average by 10%).

The initially planned €2.07 billion pension cut will not be implemented after all. In the short-term, this implies that no pressure will be exerted on the disposable income and the demand of households. However, most of the offsetting measures will also not be executed, except the reform of family allowances, with a total budget of €1.73 billion. The medium-term impact of the annulment of these measures on the sustainability of the social security system and social inequality is difficult to assess at this stage. Such an assessment is deemed to be necessary before a change or annulment of reforms. The new measures in the State Budget for 2019, some of which were presented earlier, include tax relief worth €437 million and €473 million in additional expenses. The total negative fiscal impact of the measures adopted for this year amounts to €1.25 billion, limiting the projected primary surplus (according to the methodology of the enhanced surveillance) from 3.96% of GDP last June to 3.6%, against 3.5% target. As a result, the Budget should be executed with utmost care, so as to avoid any divergence from the target.

The list of measures taken will boost the disposable income of households. Adding on to income and consumer expenses, at least at the beginning of the year, the impact of the "social dividend" and the retrospective payment of special wage brackets in the public sector is expected to be positive, the total amount of which exceeds the "social dividend" for 2017 (€1.6 from €1.3 billion). Other developments projected to impact household income in 2019 are: a) the upwards readjustment of the minimum wage and the abolition of the sub-minimum wage for workers up to 24 years old, b) the decision of the Ministry on Employment last September on the expansion of sector-specific collective bargaining agreements in four sectors, a practice which could possibly expand to other sectors. The consequences of the proposals on the minimum and sub-minimum wage have not been estimated at the moment and can only be done so after thorough examination. Such developments, like the expansion of collective bargaining agreements, might initially boost the income of those already in work, yet their medium-term consequences on employment and therefore the total employment income might be negative if they do not reflect a positive trend in productivity and hence output, as in such a case this would imply an increase in labour costs which is not covered by sales.

In order to achieve the primary balance target for this year, despite the negative impact of the new measures, certain categories of expenses and revenue were adjusted. One of the most important of these adjustments is the decrease of the budget for the Public Investment Programme by €550 million in relation to the MTFS 2019-2022, resulting in it standing, for yet another year, at €6.75 billion. The under-implementation of the PIP last year, for yet another year, is a harbinger for a similar development in 2019.

As noted repeatedly in the IOBE quarterly reports, the smooth financing of the Greek economy, in sustainable terms, is one of the most significant prerequisites for the continuation and acceleration of its recovery. As long as there is uncertainty on political developments and on the implementation of agreed measures and reforms, the access to international capital markets on favourable terms is deemed difficult, given the external factors which also negatively impact such a development. This implies that the Greek state will need to use the cash buffer to service public debt. Political uncertainty might recede once the elections reveal a new government.

Given the above, together with the projections for the PIP, the importance of the domestic banking system for collecting and allocating the funds needing by households and businesses is strengthened further. The stress test of last May, which did not indicate the need for further capital assistance, followed by the upgrade of the credit rating of the four largest banking institutions by the Standard & Poor's, contributed to an easing of concerns regarding their capital adequacy. Another development which could positively impact the flow of deposits to the banking system is the full lifting of all limitations on capital flows within Greece and their further easing for international transactions last September. The reduction of the Non-Performing Exposures (NPEs) in the second half of 2019 prevented a stronger boost of confidence in the banks in Greece, as it has a negative impact on assets, net capital and profitability (mostly loan write-offs and sales), rending their financial results lower than expected.

Despite the above positive overall developments in the banking system, the deposits seems to have ceased to return to the system between September 2018, right after the completion of the third programme, up until last November. From August till November last year, the deposits of the private sector (households and non-financial businesses) stood at around €129.3 – 130 billion. This inertia is considered to be one of the main factors that led further contraction of credit to businesses and households over the same period, by 0.5% and 2.1% respectively, marginally lower than in January-August (-0.8% and -2.2%). According to the banks, the negative trend of business lending is also due to a weak demand for bank credit. Besides, many existing businesses continue to have problems with legacy bank credit.

The recent trend change in deposits constitutes yet another factor that hinders the gradual shift in the credit policy of banks into credit expansion, at least for the most part of the first half of 2019. A steady and accelerating expansion of deposits would help to boost bank credit. In order to shift to a credit expansion, some other developments are needed, such as a more rapid decrease of the non-performing loans and easier access of banks to the international capital markets. Regarding the first issue, as indicated in previous IOBE research, their management should be done in a way that does not hurt the bank fundamentals. In order to achieve this, more emphasis should be placed on the quality aspect of the NPL reduction by strengthening the collection and liquidation of loans, making use of the electronic platforms of out-of-court settlement and auctions, while limiting loan write-offs and sales at low prices. The processing of the relevant proposals made by the Financial Stability Fund and the Bank of Greece may lead to major developments.

The continued scarcity of bank credit, together with an overall easing since 2018 of the caution on the prospects of the Greek economy, will induce many enterprises to utilise financing tools available through the capital markets, something which many did utilise in the past two years. The Folli Follie Group case shook the trust of investors in the Greek capital market and in Greek enterprises at the end of the third and the beginning of the fourth quarter, causing a temporary market slump, as projected in the previous IOBE bulletin. By the end of last year, the attempts at raising capital through the market were rekindled, with a number of equity public offerings (e.g. Motodynamiki, Unibios, Diversa). Provided that no events that would shake up confidence in the Greek economy and the capital market occur, the financing possibilities that the latter offers will continue to be utilised in 2019. Businesses that have already found funding through these means will proceed to the implementation of their investment plans.

The evident significant increase in exports of goods and services, based on National Accounting data for the first nine months of last year, for the second consecutive year, helped export businesses with their access to liquidity. However, it is now considered possible that the international trade environment will not be as positive in 2019 compared to previous years. The main reason behind this development is the implementation of trade protectionism measures by the EU and the reactions they have caused, leading to counter-measures being taken by the EU, China and Canada. Within the Euro area, the completion of the expansion of the quantitative easing programme by the European Central Bank will also contribute to the slowdown of international trade. Still, due to the small share in domestic exports of aluminium and steel products, on which restrictions were imposed, with their value amounting to €130 million in 2017 (0.4% of exports), the direct effect of the measures will not be significant. However, their indirect effect is expected to be more pronounced, through their impact on EU exports and those of third countries, which will in turn affect the demand for Greek products in these countries.

Regarding the developments in other components that affect export activity, a small fluctuation in the euro/dollar exchange rate is projected for the current semester, at slightly lower levels than in the second half of last year. For this reason, it will not affect negatively the competitiveness of the Eurozone goods and services. That said, at this level of the exchange rate, it does not ease the inflationary effects of oil prices, which are rising since January, but are still lower than a year before. The slowdown in global economic growth will prevent an extended, significant increase in the oil prices, with the Brent oil prices for the first half of 2019 expected to stand at approximately $61/barrel, or 14% lower on average compared to 2018.

Moving on to features of the domestic investment environment that are affected by the public sector, privatisation deals and concessions that were completed in previous years provide greater impetus to investment activity this year. Overall, seven major competitions were concluded last year, including the sale of 5% of OTE, 66% of DESFA, 67% of the Port of Thessaloniki, 100% of ROSCO, the land in the Afantou Region of Rhodes, the concession of 1800 MHz radio frequencies for 2018-2035, and the 20-year expansion of the AIA concession contract. According to the Budget for 2019, the revenue from the programme last year amounted to €1.13 billion, much lower than the target set in the Budget for 2018 (€2.74 billion), which would have been much higher (€2.15 billion) if the fee for the 20-year expansion of the concession contact of the Athens International Airport (AIA), which was approved in December by the DG-COMP of the European Commission, were paid by the end of the year. The stimulus from the deals concluded last year will mostly manifest in investment in the upcoming years and only some of them are expected to contribute to investment from this year on, such as the concession extension of the AIA which had its first expansion phase starting last year, and the rights for the radio frequencies.

Investment recovered in the first nine months of 2018, after many years of strong decline, in Construction as well. It came almost exclusively from construction activity for residential and business use by the private sector, as output in civil engineering, which includes all categories of public works, increased slightly only in the fourth quarter. This increase is deemed to be linked significantly with the renovation of already-existing residences, to be rented through short-term lease platforms, such as Airbnb.

Taking into account the above trends in economic components and indicators of activity, as well as the recent development and the prospects they have created, mostly the changes in the fiscal policy for 2019, the gradual entry into an election period, the developments regarding wages and allowances, and the worsening global environment, in order to make projections on the GDP components, the recovery of household consumption is estimated to have slightly accelerated in the final quarter of last year. Aside from the continued drop in unemployment since the beginning of 2018, the main driver of household spending was the steady improvement in household expectations, due to the lifting of the pre-legislated pension cuts, and the disbursement of ad-hoc allowances ("social dividend") and retroactive payments. The drop in prices in the final quarter boosted purchasing power. Accordingly, it is estimated that the increase in private consumption accelerated in October-December last year, resulting in an increase by 0.9% compared to a year before.

The changes in the 2019 Budget in the fiscal measures for the current year, which result in higher social expenditure and tax relief measures, and the impact of the upcoming increase of the minimum wage, will be the main drivers for stronger rise of household consumption demand this year. The pre-election climate will also boost expectation. Consumer spending will also be supported by a further increase in employment, considerably less, however, compared to previous years, due to the aforementioned developments in the labour market regulations, but also from a weakening of the boost from international trade. The negative impact of inflation will be similar to that of last year, if not milder. Under the influence of these factors, consumption demand of the private sector is projected to increase faster this year than in 2018, by 1.4%.

Regarding the trend of public consumption, its drop in the first three quarters of last year will probably give way to growth in the following quarter. The reason behind this change is the retrospective payment for special wage categories last December, which is estimated to have led to an increase in public consumption in the last quarter of 2018. Following this development, public consumption expenditure is estimated to have been on average approximately 2.0% lower than in 2017.

The changes in the fiscal interventions for 2019 include recruitment in the public sector and change in the status of individuals already working in this sector, as per the implementation of the “1 departure – 1 recruitment” rule, and therefore they are not expected to increase the consumption expenditure of the public sector. Besides, the newly hired individuals usually have lower wages than those that have departed. However, retrospective payments are included in the budget for the current year as well, slightly more than in the previous year (€982 million against €800 million). The three election campaigns constitute perhaps the most important factor strengthening public consumption this year. As a result, public consumption is anticipated to increase by 2.0% in 2019.

In the field of investment, the pause in private sector deposit growth in late 2018, but mostly the developments with respect to limiting the NPLs in the current half of the year, with the execution of the ongoing actions by the banks and the evaluation of the possibility to implement the proposals of the FSF and the Bank of Greece, are estimated to constitute the determining factors on credit flow towards the non-financial sector of the economy at least for the first half of 2019, if not for most of its duration. On the business side, over the years, the pre-election period gives rise to expectations of change in the policies that affect them, with a negative impact on investment. Under the influence of factors on the side of supply and demand of credit, the credit crunch to businesses will continue at least for the first half of the current year. The search of financing solutions through the capital market recovered recently, despite the side-effects of the Folli Follie scandal and the financial results of the banks in the first half of last year and will most likely continue this year, at a similar rate as last year.

The new increase in exports in the first nine months of 2018, which boosted the investment activity in the export-oriented sectors of Manufacturing and Tourism, seems to have weakened by the end of the year, due to slower growth in the main destination for its exports - the Eurozone. The overall slowdown in international trade last year, from that of the Eurozone and as a result of the trade protectionism measures, will limit the support of investment through exports. Even though PIP expenditure was higher than in 2017, its implementation was less frontloaded than in the preceding year, and for this reason its contribution to investment in 2018 was weaker. Grants are not anticipated to increase in comparison to previous years, however there is the possibility that PIP implementation will be faster, slightly boosting investment. The indirect contribution of the public sector to investment, through investment projects in completed privatisations-concessions, is also expected to be greater, mostly due to the commencement of the investment in the old airport area of Hellinikon.

The latest data on construction activity point to continuing growth. This trend means that changes in property assessed values in June had no impact on construction activity and instead might have eased the uncertainty pending their announcement. The decrease in the property tax ENFIA for 2019 by 10% on average, included in the new fiscal measures, will be an additional incentive for doing building works in 2019. However, the Airbnb-driven boost will not be higher this year and might be lower than last year. Combining the observed and expected trends in factors that affect investments, they are projected to have been around 4.7% higher than the year before, an increase that is mostly due to accumulation of stocks and to a lesser extent due to stronger gross fixed capital formation. It is now considered possible that investment activity will intensify in 2019, with its rate of increase reaching double digits (10-12%).

In the external sector of the Greek economy, the continued strong growth in the EU and the US in 2018, and the accelerated growth in developing-emerging economic regions with an increasing share in Greek exports (e.g. North Africa, BRICS) continued fuelling a strong increase of exports last year. However, it is likely that this increase weakened in the last quarter of last year as growth in the EU showed signs of “fatigue” already from the third quarter on. The effects from the US protectionist measures and their countermeasures are one more reason for the slowdown. It is now considered likely that the pressures on international trade by such policies will become more pronounced in 2019. Export expansion will also be affected by the significantly lower growth in the Eurozone, which now has to face significant challenges such as the end of the ECB quantitative easing programme, Brexit and heightened Euroscepticism, especially in Italy. Following the multiannual increase in international tourism and its revenues and given how last year competing tourist destinations started recovering, its growth is quite likely not slow down or even cease in the current year. Despite the recovery of oil prices since the beginning of January, with global and EU growth weakening, its average price this year is not projected to be higher than last year and the demand for petroleum products, which have a large share in exports, will drop.

Taking into account the trends in international trade and related developments, in Greece and abroad, it is estimated that the increase in exports slowed down over the final quarter of last year, standing at approximately 7.7% overall in 2018. In 2019, exports will continue to grow, but at a lower rate, by about 5.0%-5.5%.

The expected strengthening of consumption demand in the final quarter of 2018 will boost the imports of goods. Their strengthening was also supported by the lower euro/dollar exchange rate. In contrast, the strong imports of ships in the last quarter of 2017 have set a high base of comparison for the same period in the following year, which dampened import growth. The domestic demand for travel services is estimated to have strengthened over the festive period (Christmas, New Year). As a result, the drop in imports in the first half of 2018 was overcompensated and in 2018 overall they were 4.0% higher than in 2017. In conjunction with the much larger increase in exports, the external balance improved last year. Stronger domestic demand in 2019, due to significant increase in both investment and consumption, will affect the demand for imports, which are expected to be about 6 – 6.5% higher this year.

Taking into account the estimates for the final quarter of last year and the projected developments and trends for this year in drivers of GDP components, output is projected to have increased by 2.0% in 2018, with a similar or slightly higher growth anticipated in the current year.

State Budget: Marginally lower primary surplus than the target in 2018, mostly due to lower PIP revenue

According to the State Budget execution data overall for 2018, the total balance had a deficit of €2.31 billion, €1.95 billion less than in 2017, yet €406 million more than the target (-€1.91 billion). The primary surplus exceeded that of 2017 by €1.3 billion, reaching €3.24 billion, yet it was €367 million lower than the target. The year-on-year increase in the primary surplus stemmed exclusively from the revenue side, mostly due to higher net revenue of the State Budget (+€2.08 billion), as a result of an increase in revenue before tax refunds by €1.45 billion, as well as €1.68 billion less in tax refunds. The revenue from the Public Investment Programme was also slightly higher than the year before (+190 million). The primary expenditure of 2018 exceeded that of the preceding year by about €670 million.

The lower than the target primary balance of the State Budget in 2018 also came from the revenue side, mostly from the Public Investment Programme revenue, by €1.22 billion (-31.5% against the target), and less from the net revenue of the Ordinary Budget (-€267 million). The net revenue of the Ordinary Budget was lower mostly due to the lower-than-the-target proceeds from privatisations (-€1.13 billion), which were largely counteracted by lower tax refunds (-€962 million). The primary expenditure of the Ordinary Budget were €603 million lower than the target, while the Public Investment Programme expenditure was lower than initially planned by €513 million.

2019 Budget: Primary surplus marginally higher than the target due to changes in the fiscal interventions set in the MTFS 2019-2022

The pension cut, amounting to €2.07 billion, was not implemented as planned in the MTFS 2019-2022. The European Commission did not raise any objections to this change in its report on the draft budgets for the current year last November, in the context of the Stability and Growth Pact. However, according to the Budget for 2019, almost all counteracting measures, with a budget of €1.73 billion, were also not implemented, with the exception of a readjustment in family allowances. These measures would have mostly impacted households with low or no income (rent subsidy, readjustment of family and children allowances, active employment policies, subsidy for prescription pharmaceuticals etc.), which will not see the originally envisioned support. Therefore, their income will not be boosted, something which, from the perspective of social policy, is not certain to have a smaller impact than the pension cut.

Instead of these measures, the policies included in October in the alternate scenario of the State Budget Draft for 2019 will be implemented, with small changes. These policies include €437 million worth of tax reliefs and €473 in additional expenses. The gradual drop in the income tax rate for businesses by 1% each year for four years (from 29% to 25%) and in the tax rate on dividends by 1% annually for five years (from 15% to 10%), included in the new fiscal interventions, will have a fiscal impact from 2020 onwards.

The total negative impact on the fiscal balance from the scrapping of the measures in the MTFS 2019-2022 and the implementation of the new policies will amount to €1.25 billion, constituting the main reason behind the lower projection for the primary surplus (estimated according to the enhanced surveillance methodology) from €7.52 billion, or 3.96% of GDP, in the MTFS 2019-2022 last June to €6.75 billion, or 3.6% of GDP, just €200 higher than the relative target (3.5% of GDP). Hence, a very meticulous execution of the Budget is needed in order to avoid any divergence from the target. It should be noted that due to the changes in the measures and in order to achieve the primary surplus target, another change in relation to the MTFS 2019-2022 is a reduction in PIP expenditure by €550 million, standing at €6.75 million for yet another year, despite the under-implementation of the PIP last year and an accumulated need for investment.

Unemployment at 19.5% last year, weaker reduction in 2019

The continuation for a second quarter over the summer months of the strong increase of employment in Education, which given the time when it occurs is difficult to explain, together with the expansion in the primary sector were the main reasons behind a new drop in unemployment in the third quarter last year, in comparison to the same quarter in 2017. In particular, the unemployment rate dropped to 18.3%, the lowest percentage for that period of the year for the first time since 2012, 1.9 p.p. lower than a year before. The decline in unemployment came mainly from a rise in employment by 1.8% or 68,000 people (63.3% of the reduction of unemployment) and secondarily from a decline of the labour force (-39,500). Sectors with significant contribution to employment in 2017, such as Tourism and Manufacturing, had a much milder increase last year (+6,200 against +13,800 a year before, and +700 from +9,100). The unemployment rate stood at 19.5% on average in the first three quarters of 2018, two percentage points lower year on year.

As the tourist season gradually drew to an end in the fourth quarter of last year, the boost coming from tourism declined. As it was weaker in the previous quarters than in previous years, it is possible that the number of jobs in this sector declined year on year at the end of the previous year. Employment in Wholesale-Retail Trade is expected to continue to expand notably over the same period, as a result of the significant improvement of consumer confidence. The largest boost in employment for this period is expected to stem from the public sector, through temporary social employment programmes run by OAED, and mainly the programme with 26.800 beneficiaries in municipalities, regional authorities and social welfare centres. Due to their duration, their impact will carry over to the first half of 2019. Following these sector-specific developments, the year-on-year unemployment reduction is estimated to have slowed down slightly at the end of 2018. As a result, it is estimated to have reached 19.5% overall in 2018, slightly higher than our previous projection (19.3%) and two p.p. lower than in 2017.

In 2019, aside from a boost in temporary employment in the public sector through the OAED initiatives, the announced recruitment of permanent staff is not expected to have an impact on total employment, as the "one departure – one recruitment" rule will be followed. Employment in Retail – Wholesale Trade is expected to increase significantly due to higher year on year increase in private consumption. An increase in employment is also expected in the Construction sector, mostly due to investment in completed privatisations-concessions, as well as from construction activity in renovation or building of residences. That said, the weaker growth of exports will slow down employment expansion in export-oriented sectors, such as Manufacturing and Tourism. Given these and other factors that affect employment, unemployment is expected to decline less in 2019, to 18.0%.

Lower inflation in 2018

In the final quarter of last year, the rate of change of the domestic Consumer Price Index stood overall at 1.1%, about the same as in the third quarter (1.0%), but higher than in the same period in 2017 (0.8%). Amongst the categories of goods and services that make up the CPI, the sharpest increase was recorded in Communication (+4.6%), Transport (2.5%) and Housing (+2.4%). The increase in the last two categories is due to the continuous growth in oil prices up until September last year, and despite its drop in the last quarter of 2018, it remained higher year-on-year up until mid-November. In the case of Communications, the price increase came from a hike in phone service prices, according to ELSTAT. In four more categories, prices were higher year on year in the final quarter of the year, by up to 1.1%, while in five categories prices dropped by between -0.5% and -1.6%. For 2018 overall, inflation stood at 0.6%, half a percentage point lower than in 2017. The disinflation last year and the trends in the CPI components indicate that domestic demand has remained sluggish and that the increase in prices are largely due to external to the Greek economy factors, such as the fluctuations in oil prices.

As no new indirect taxes or an increase in already existing ones are included in the fiscal measures for 2019, and with oil prices expected to be lower compared to last year, inflationary pressures this year may come only from the strengthening of demand. The expected increase in household consumption spending will stem from a boost in their income due to fiscal measures (social transfers and tax reliefs), wage developments (increase in the minimum wage, abolition of the sub-minimum wage), as well as from a further, milder expansion in employment. However, as evident from the analysis in box 3.3 in section 3.5 of this report, the changes in the CPI observed since 2010 came primarily from hikes in indirect taxation and to a lesser extent from fluctuations in the oil prices. For this reason, a change of demand in the current year is not anticipated to create major inflationary pressures. Of course, if currently unexpected developments in the major inflation drivers take place, such as a sustained increase in the oil prices after the drop in daily production from the beginning of the year, the rate of price increase will accelerate. Under the current conditions, the CPI rate of change is anticipated to be similar to last year, at around 0.6%-0.8%.

Study: Crisis, demographic changes and impact on education

A recent IOBE study examined the effects of the crisis and the ensuing fiscal adjustment on the functioning of the education system. In particular, the study analysed the trends in key figures of the education system, before and after the outbreak of the crisis, and the impact of demographic changes and the drop in the student population on the evolution of its operation. To understand better the future impacts and challenges that education is currently facing, this research includes various scenarios pertaining to the future of the education system, along alternative education policy interventions in the upcoming years (inaction scenario, scenario of adjustment to current rates and European convergence scenario).

2. ECONOMIC ENVIRONMENT

2.1 Trends and Prospects of the World Economy

A. The Global Environment

- Global economic growth weakened slightly in 2018 to 3.7% from 3.8% in 2017
- Further weakening of the growth in 2019 to 3.5%, mostly due to similar trends in the developed economies (US, Italy, Spain)
- Possible sources of negative developments for the global economy are a further slowdown in China, as well as no agreement between the EU and the UK on a soft Brexit, worsening economic expectations, threats from trade protectionism escalation, high public and rising private debt, and instability in certain emerging economies.

The growth of global economic activity in 2018 came mainly from a boost of domestic demand in developed and developing economies, with its rate gradually slowing down as the year progressed. In the developed economies, the ample liquidity supply by the central bank (Euro area, Japan) and the expansionary fiscal policy in the US continued to provide a strong boost. In the developing economies, growth came mainly from countries like China, Brazil and Mexico, while recession was recorded in Turkey and Argentina.

According to the latest IMF projections, the world economy grew at an average rate of 3.7% overall in 2018, compared to 3.8% in 2017.[1]In addition, the growth of the world economy is expected to weaken to 3.5% in 2019 and 3.6% in 2020. Note, however, that the forecast for 2019 was revised downwards by 0.2 p.p., compared to the previous IMF projections (October 2018), while many economies, especially in the EU, have already begun to slow down since the third quarter of 2018. A series of factors, such as the «output gap» in many developed economies, the gradual increase in US interest rates, the intense pressure on the price level and the value of the currencies of several emerging economies, have led to this trend. The ongoing "trade war" between major economies and the possibility of a no deal between the European Union and the UK on Brexit, which became more acute after the rejection of the respective agreement by the British Parliament, have exerted pressure on the momentum of global trade since the second quarter of 2018. Moreover, the instability in emerging markets increases the perceived risk and hampers investment trust, ten years after the financial crisis of 2008. The uncertainty has already afflicted short-term indicators of economic expectations, which are often good leading indicators of economic activity.

Table 2.1

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

Economy	2018	2019		2020	
		Forecast	Difference from previous forecast*	Forecast	Difference from previous forecast*
World	3.7	3.5	-0.2	3.6	-0.1
Developed	2.3	2.0	-0.1	1.7	0.0
Developing	4.6	4.5	-0.2	4.9	0.0
USA	2.9	2.5	0.0	1.8	0.0
Japan	0.9	1.1	0.2	0.5	0.2
Canada	2.1	1.9	-0.1	1.9	0.1
United Kingdom	1.4	1.5	0.0	1.6	0.1
Eurozone	1.8	1.6	-0.3	1.7	0.0
Germany	*1.5*	*1.3*	*-0.6*	*1.6*	*0.0*
France	*1.5*	*1.5*	*-0.1*	*1.6*	*0.0*
Italy	*1.0*	*0.6*	*-0.4*	*0.9*	*0.0*
Emerging Europe	3.8	0.7	-1.3	2.4	-0.4
Turkey	*3.3*	*-0.4*	*-0.8*	*2.7*	
Developing Asia	6.5	6.3	0.0	6.4	0.0
China	*6.6*	*6.2*	*0.0*	*6.2*	*0.0*
India	*7.3*	*7.5*	*0.1*	*7.7*	*0.0*
Commonwealth of Ind. States	2.4	2.2	-0.2	2.3	-0.1
Russia	*1.7*	*1.6*	*-0.2*	*1.7*	*-0.1*
Middle East & North. Africa	2.4	2.4	-0.3	3.0	0.0
Latin America	1.1	2.0	-0.2	2.5	-0.2
Brazil	*1.0*	*1.4*	*-0.9*	*2.4*	*-0.1*
Sub-Saharan Africa	2.9	3.5	-0.3	3.6	-0.3
World Trade	4.0	4.0	0.0	4.0	-0.1

* Difference in percentage points compared with the IMF estimates from October 2018

[1] World Economic Outlook Update, IMF, January 2019

Source: World Economic Outlook Update, IMF, January 2019 and OECD Economic Outlook, November 2018 for Turkey

A development which started in 2018 and constitutes a noteworthy threat for the weakening of the positive momentum of global trade was the implementation of a series of trade protectionism measures and countermeasures between countries and economic unions. Following the 25% and 10% tariffs imposed by the US on steel and aluminium imports respectively, a series of countries (EU, China, Canada, Mexico, and Russia) responded with tariffs on certain goods imported from the US. During the first round when these measures were being adopted in Q2 of 2018, the total value of trade under these newly-imposed tariffs was limited, worth only a few billion euro. In the second round, mostly between the US and China, the total value of trade under new tariffs amounted to €300 billion, amidst mutual threats of extending further the tariffs. However, the free trade deal between the US, Mexico and Canada in November 2018 and the 90-day "ceasefire" on tariffs between the US and China in the following month, as well as the announcement by China that it would ease tariffs on imports of the US auto industry, are indicative of an effort to ease global trade tension. The latest IMF World Economic Outlook expressed serious concerns regarding the impact of escalating trade protectionism, resulting in a negative revision in the growth rate of global trade by volume, in relation to the October 2018 forecast, to 4.0% in 2018 (from 4.2% in the October 2018 IMF report), from 5.3% in 2017.[2] However, for the time being, there does not seem to be a change for the current or next year, expected to remain at 4.0%.

The recent deterioration of the growth projections holds for most of the countries and regions of the world, which, however, will still continue to grow. Indicatively, economies and economic zones where projections were revised significantly downwards were emerging Europe, the Euro Area and more specifically, Germany and Italy, and a series of emerging economies such as Russia, Mexico and Middle-East countries.

The global economic environment continues to present significant challenges. In the developed economies, apart from the tendency of strengthening trade protectionism, the long-term growth prospects have deteriorated, the population is aging fast, there are risks to the financial system, and the wealth distribution is unequal. In the developing economies, further challenges arise from capital outflows (due the appreciation of the US dollar following the interest rate rise), inflationary pressures, growth momentum of private debt and high fiscal deficits. Turkey and Argentina are prominent examples of countries with pronounced capital flight and national currency devaluation. The deceleration of the Chinese economy observed last year and expected for 2019 and 2020 as well, has contributed and will continue to contribute to the weakening of the global economy, as the Chinese economy amounts for 18.2% of the global GDP.

Regarding the recent trends in the economies of the major countries and economic groups, in the developed economies, the GDP growth rate is estimated to have stood at 2.3% on average in 2018 (against a previous forecast for 2.4% growth), compared with 2.4% in 2017. The GDP of the OECD members and the 20 major world economies (G20) increased by 2.2% and 3.6% respectively in the third quarter of 2018, against 2.5% and 3.8% in the preceding quarter.

Among the developed countries, the growth rate in the US strengthened in the third quarter of 2018, for the ninth consecutive quarter, to 3.0%, from 2.9% in the previous quarter and 2.2% on

[2] World Economic Outlook, IMF, October 2018

average in 2017. The acceleration largely came from the impact on income and wealth of the recent fiscal package of tax cuts, which boosted domestic demand. Based on the latest forecasts of IMF, the US growth rate is estimated at 2.9% in 2018, with projections for growth of 2.5% in 2019 and 1.8% in 2020, a year when the negative impact of the import tariffs on economic activity will become more acute. Meanwhile, the Fed continues its policy of gradual interest rate increases, with the ninth consecutive increase since the end of 2015 taking place in December 2018. The key challenges that the US economy is facing are associated on the one hand with the escalation of trade protectionism, which increases uncertainty and hampers the growth prospects and on the other with the pro-cyclical fiscal policy, which is foreseen to push output above its potential level and to increase the fiscal deficit, limiting the possibility of a fiscal stimulus in a future economic recession.

Regarding the trends in the Euro area, which are presented in detail in the next subsection, the growth rate significantly slowed down in the third quarter of 2018, for the fourth consecutive quarter, to 1.6% from 2.2% in the previous quarter and 2.4% in 2017. A large portion of this decrease is due to the slowdown of the German, French and Italian economies which recorded the lowest growth rates in the Eurozone. Given these trends, the Eurozone economy is projected to grow by 1.8% in 2018, with a further drop to 1.6% anticipated in 2019.

In the United Kingdom, the GDP grew by 1.5% in the third quarter of 2018, against 1.2% in the preceding quarter and 1.7% on average in 2017. The fact that the deal with the EU for the post-Brexit period was recently rejected by the British Parliament fed into the uncertainty and makes the possibility of a no-deal exit more likely, as the final deadline to find a mutual compromise is drawing near (29th of March 2019). On the other hand, the fiscal initiatives to boost the economy included in the Budget for 2019 are projected to balance part of the pressure, resulting in the British economy growing by 1.5% in 2019 from a 1.4% estimate of its growth in 2018.

In Canada, the growth rate recovered to 2.1% in the third quarter of 2018, from 1.9% in the previous quarter. Nevertheless, overall in 2018 the economy is projected to have slowed down significantly, to 2.1% from and 3.0% in 2017. The projections of international organisations converge to an annual growth close to 1.9% in both 2019 and 2020.

In Japan, the growth rate weakened notably in the third quarter, to 0.1% from 1.3% in the second quarter and 1.7% overall in 2017, mainly because of the natural disasters that occurred in the country last July (hurricane) and September (earthquake). According to the latest IMF projections,[3] the Japanese economy is expected to strengthen by 0.9% in 2018 and 1.1% in 2019, constituting the sole economy with positive revision of the growth projection in relation to October 2018, by 0.2 p.p. The price change slowed down in the fourth quarter of 2018, to about 0.8%, from 1.1% in the preceding quarter, while the monetary policy is expected to continue to be accommodative until prices approach the inflation target of 2%. Having said that, the main challenges to the Japanese economy are the persistently low inflation and the demographic issue.

The emerging and developing economies are estimated to have expanded at an average rate of 4.6% in 2018, slightly weaker than the IMF forecast from October 2018 for 4.8% growth. In addition, the IMF revised down its projections on the growth rate of the developing economies for 2019, to 4.5% from 4.9%. The negative revision is due to the significant (-1.3 p.p.) downgrade of the emerging and developing economies of Europe, which are expected to grow by 0.7% in 2019, from a previous 3.8% estimate in 2018 and a 6% growth rate in 2017. This negative revision mostly stems

[3] World Economic Outlook, IMF, January 2019

from the Turkish economy, where growth slowed down by 2.4 percentage points quarter-on-quarter in the third quarter of last year, to 3.1%, from 7.4% overall in 2017. The economic situation in Turkey deteriorated significantly in mid-2018, due to growing inflationary pressures, capital outflows and rising yields of the Turkish bonds. The inflation rate peaked at 25.2% in October, its highest rate since 2003, slightly slowing down since then. That said, the devaluation of the Turkish lira last year, by approximately 40%, has boosted the competitiveness of the goods and services of the country. This development was recorded in international tourism last year, which was 23% higher than in 2017. International organisations and previous reports by IOBE have noted the structurally fragile growth of the Turkish economy in recent years, driven by fiscal stimulus, high private borrowing in foreign currency, burgeoning negative trade and fiscal balances, developments that have created the country's large «output gap». The latest forecasts of international institutions on the economy of Turkey project growth of 3.3% in 2018 and a GDP contraction by 0.4% in 2019. There is no doubt that the economic developments in Turkey have a direct effect on Greece, as Turkey is inter alia the third largest destination for Greek exports of goods, but also a competitor in certain types of products and services, such as tourism.

The MENA region is another area outside of the EU that has significant trade relations with Greece, besides the emerging countries in Europe. The region is expected to grow by 2.4% in 2018 and 2019, due to lower oil production and geopolitical tension in some of its countries, and by 3.0% in 2020.

The rest of this subsection presents the key trends and economic policy challenges for five major developing economies, which produce in total almost 1/3 of the world GDP.

In detail, the economy of China kept growing in the third and fourth quarter of 2018, albeit at a lower rate than earlier in the year, by 6.5% and 6.4% respectively, against 6.9% overall in 2017. The slowdown for the duration of last year is a result primarily of the implementation of a restrictive regulatory policy, in effort to limit non-systemic banking activity and public investments that exceeded the Budget, and to a lesser extent of the trade war with the US. The growth rate of China is estimated to have stood at 6.6% in 2018, from 6.9% in 2017. Further slowdown is anticipated in 2019 and 2020, to 6.2% each year, because of the escalating trade war, as the size of China's economy has exceeded 18.2% of the world GDP and its exports have exceeded 10.7% of global exports. However, these trend could possibly subside if policies such as the recent trade tariff "ceasefire" between the US and China are extended and a deal is signed on their bilateral trade.

In India, which represents 7.4% of the world GDP, the economy slowed down to 7.2% in the third quarter, from 7.8% in the preceding quarter, and weaker growth by 6.7% in 2017. The growth rate is estimated to have reached 7.3% in 2018, mainly from the strong momentum of investment and exports, while it is expected to strengthen slightly in 2019 and 2020, to 7.5% and 7.7% respectively. The high fiscal deficit and the high rate of non-performing loans are the key structural characteristics of the country's economy.

In Russia, the economy continued to grow mildly in the third quarter of 2018, at a rate of 1.4%, about as much as in 2017 (1.5%). For 2018 overall, the growth rate is estimated at 1.7%, aided by the rebound of international oil prices and the subsequent boost of consumption and investment. It is anticipated to slow down marginally to 1.6% in 2019, returning back to 1.7% in 2020. The strong dependence on the international prices of energy commodities and income inequality remain the main challenges ahead for the Russian economy.

Growth is expected to accelerate in the upcoming two years overall for the Latin American economies. A 2.0% and 2.5% growth rate for 2019 and 2010 is projected, from 1.1% in 2018. In particular, Argentina faced a sharp decline in economic activity since the second quarter of 2018, by 1.9%, compared with growth by 2.9% in 2017. In the third quarter of 2018, there was a further 3.5% shrinkage of the economy. In an effort to reduce fiscal imbalances, monetary policy was tightened, which in turn led to a slowdown in domestic demand. The economy is expected to shrink in 2018 and 2019, mainly due to the decline of this GDP component. In Brazil, the economy remained on a growth path, following the deep recession of 2015 and 2016. The growth rate accelerated in the third quarter of 2018, to 1.3%, from 0.9% in the preceding quarter and 1.1% in 2017. The IMF revised upwards its forecast for the growth of the economy of Brazil, to 1.3% in 2018, and 2.5% in 2019. Nevertheless, the high unemployment rate remains a major challenge for the Brazilian economy.

According to IFO estimates, the economic climate in the world economy weakened for the third consecutive quarter in the fourth quarter of 2018. In particular, the balance of the world economic climate estimates declined to -2.2 points, from 2.9 points in the preceding quarter. Regarding the assessment of the current situation, the positive balance declined further, to 12.2 points, from 17.5 points in the third quarter, remaining higher than the long-term average. In addition, the expectations over the coming six months remained negative, with a significant decline of the index in the fourth quarter, to -15.7 points, from -10.6 points in the third quarter of 2018. It should be noted, that the worsening of the economic climate mostly stems from the emerging and developing countries, with the exception of Latin America. Amongst the developed economies there is a clear divergence between the EU economies, where expectations worsened and the US, where the economic climate improved.

Table 2.2

IFO - Economic climate in the Euro area (balances)

Quarter/Year	IV/16	I/17	II/17	III/17	IV/17	I/18	II/18	III/18	IV/18
Economic climate	-0.7	3.0	13.5	13.2	17.1	26.0	16.5	2.9	-2.2
Assessment of current situation	-14.9	-8.7	5.1	12.5	17.2	28.3	27.4	17.5	12.2
Expectations	14.6	15.5	22.2	14.0	16.9	23.9	6.1	-10.6	-15.7

Source: IFO Institute, Center for Economic Studies

Table 2.3

IFO - Economic climate in the Euro area (balances)

Quarter/Year	IV/16	I/17	II/17	III/17	IV/17	I/18	II/18	III/18	IV/18
Economic climate	8.3	17.3	26.4	35.2	37.0	43.2	31.1	19.6	6.6
Assessment of current situation	2.4	8.0	21.9	33.4	42.9	51.3	49.9	41.4	29.9
Expectations	14.3	27.0	31.0	37.1	31.3	35.4	13.8	-0.1	-14.3

Source: IFO Institute, Center for Economic Studies

The economic climate in the Euro area also deteriorated in the fourth quarter of 2018, albeit remaining positive, with the economic sentiment index falling to 6.6 points, from 19.6 points in the third quarter, its lowest level since mid-2016. As regards the assessment of the current situation, the balance declined significantly, to 29.9 points, from 41.4 points in the preceding quarter. In addition, the expectations balance deteriorated notably, falling to -14.3 in the final quarter of 2018, from a nearly balanced position (-0.1 points) in the preceding quarter.

The inflation rate in the developed economies of the G7 group receded to 2% in November of 2018, from 2.3% in the preceding month and juxtaposed to the 2.3% during the Q3 of 2018, influenced by the falling, since last October, international oil prices. Yet, it remained below the target in some, few by now, cases. This phenomenon remains more acute in Japan, where the rate of price change stood at 0.8% in the fourth quarter of 2018, from 1.1% during the third quarter of 2018, significantly lower than the inflation target of "close to 2%". In the Eurozone, the total inflation rate reached 1.9% in the fourth quarter of 2018 from 2.1% the previous quarter, while in the US the rate stood higher at 2.2%, from 2.6% in the preceding quarter. However, in the US, tariffs imposed on imported goods are expected to boost the inflationary pressures. The inflation rate in some developing economies, such as Argentina or Turkey, remained exceptionally high during the final quarter of the previous year, at 47.3% and 22.4% respectively. This development is to a great extent due to the fact that the gradual increase in US interest rates sparked currency devaluation and inflationary pressures in the emerging markets. Overall in the world economy, inflationary pressures eased after the stabilisation of the international prices of basic commodities, especially fuels, the price of which subsided from the beginning till the end of the third quarter by more than 30%.

As it seems that some economies, including the US, are no longer short of the inflation target, and as growth tends to push the economies above their potential output, the central banks have started shifting toward a tighter monetary policy framework. This gradual shift that began in 2017 has continued in 2018 in countries such as the US, Canada and the UK. Recently, in December 2018, the Fed, as expected, made a slight increase in its interest rates, while it has created expectations for further interest rate rises in the next two years. At the same time, the ECB having concluded its asset purchasing programme at the end of 2018 and maintaining its policy of re-investing the funds from the repayment of bonds that mature announced it would keep its main refinancing rate at the zero level at least until the summer of 2019. As noted in previous reports published by IOBE, the expectations of further interest rate hikes in developed economies cause changes in the capital flows and the exchange rates, such as medium-term strengthening of the dollar and currency devaluation in emerging markets.

B. The economies of the EU and Euro Area

- Growth in the Euro area slowed down to 1.6% in the third quarter of 2018, from 2.2% in the previous quarter and 2.8% a year ago
- Weakening of the economic sentiment indicators, significant deceleration of exports, but also continuing positive impact from investments
- Expectations for continued growth at 2.1% in 2018 and 1.9% in 2019, but with a possibility of a slowdown in the medium term
- Inflation in the Euro area closer to the target of 2%, unemployment at its lowest rate in a decade, at 8.1% during the third quarter of 2018
- Main sources of uncertainty: trade protectionism, political euro-scepticism, obstacles regarding the Brexit deal, high public debt and stock of non-performing loans, delay in the deepening of the Eurozone institutions

In the third quarter of 2018, the economies of the European Union and the Eurozone grew at a slower pace, by 1.8% and 1.6% respectively, from both being at 2.2% in the first quarter of this year and 2.5% in 2017. According to the latest forecasts of the European Central Bank,[4] growth in the Euro area is expected to be 1.9% overall in 2018. Further slowdown is anticipated in 2019 and 2020, to 1.7% for both years.

Investment gave a significant boost to growth in both regions in the third quarter, to a substantially higher degree than in the previous quarter. By contrast, the positive contribution of consumption continued to weaken. The impact of net exports in the third quarter of 2018 in both regions was negative, in contract with their positive contribution in the previous six quarters, since Q1 of 2017. In addition, in the quarter in question, the contribution of net exports in the Eurozone changed more than in the EU-28.

The composition of the GDP expenditure components remained similar in the EU and the Eurozone, with consumption representing 75% and 74%, investments 22%, exports 46% and 48%, and imports 43% and 44% of GDP in the two regions respectively.

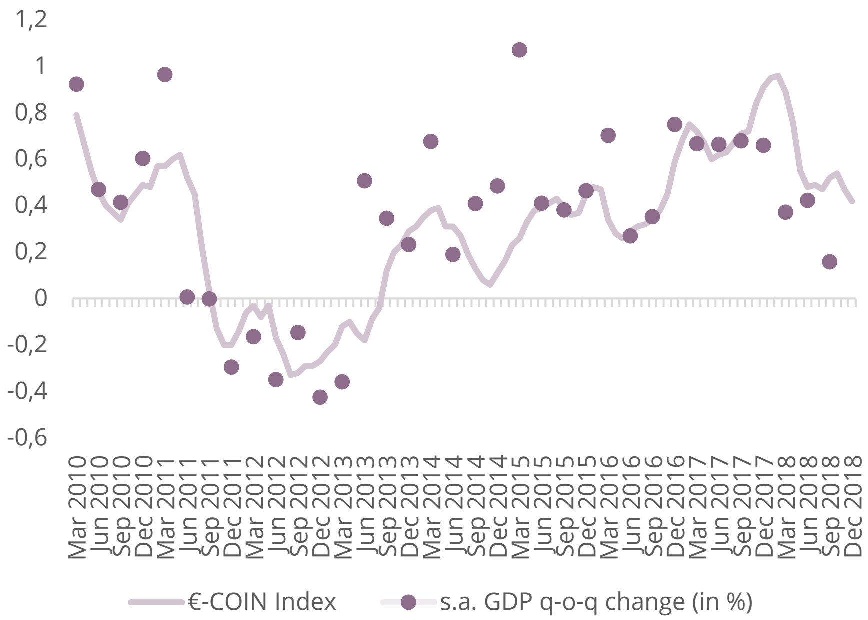
The highest growth rates in the EU in the third quarter of 2018 (in terms of year-on-year changes in seasonally adjusted data) were recorded in Malta (7.9%), Poland (5.7%) and Latvia (5.3%). Greece (2.2%) outperformed the average growth of the Eurozone and EU-28 over this period. The last time this had happened was in the third quarter of 2007, when the Eurozone had a growth rate of 3.3% and EU-28 3.1%, while Greece had a growth rate of 4.0%. The lowest growth rates were recorded in Italy (0.7%), Germany (1.2%), France (1.4%) and the United Kingdom (1.5%). In terms of a 12-month moving average, Greece recorded the 7th lowest rate of growth in the EU-28, at 2.1%, essentially equal to the 2.2% average of both the Eurozone and EU-28, ahead of France and Germany both having a growth rate of 2% in the third quarter of 2018. The countries with the lowest 12-month growth rate were Denmark (0.7%), Italy (1.2%), the United Kingdom (1.4%) and Belgium (1.6%). In contrast, the highest growth in the EU on a 12-month moving average basis was recorded in Ireland (7.3%), Malta (5.9%), Slovenia (5.2%) and Poland (5.1%).

[4] Eurosystem staff macroeconomic projections for the euro area, ECB, December 2018

Regarding the economic climate and the key leading indicators of economic activity in the Euro area and the European Union, the €-COIN index[5] declined slightly in the fourth quarter of 2018, to 0.48 points, its weakest quarterly performance since the fourth quarter of 2016, capturing a reversal in the positive climate of the Eurozone economy. The index dropped probably influenced by the trade protectionist measures and the uncertainty regarding the Brexit negotiations.

Figure 2.1

Monthly €-COIN Index & Euro Area GDP



Decrease in the €-COIN index during Q4 2018, to its lowest level since Q4 2016, indicating quarter on quarter decline of GDP

Source: CEPR και Bank of Italy

The economic sentiment indicator of the European Commission for the EU-28 and the Euro area declined further in the final quarter of 2018, for the fourth consecutive quarter, after recording its best performance since the year 2000 in the final quarter of 2017. Last December, the economic sentiment indicator stood at 107.6 points for the EU-28 and 107.3 points for the Euro area, lower by 2.0 and 2.2 points respectively compared with the previous month and by 7.4 and 7.9 points respectively year on year.

Overall in the fourth quarter of last year, the indicator in the EU stood on average lower by 2.7 points quarter on quarter, and 4.9 points lower than the respective quarter of last year. In the Euro area, the indicator was lower by 2.7 points quarter on quarter and 5.5 points year on year.

Among the EU-28 countries, the climate index deteriorated due to the social unrest in the last quarter of 2018 in France by 3.8 points quarter on quarter and by 7.7 points year on year. In the

[5] The Centre of Economic Policy Research in collaboration with the Bank of Italy estimates every month the leading indicator of economic activity €-COIN for the Eurozone. The indicator provides a quarterly forecast of GDP growth and is constructed from a range of different data, such as the course of industrial production and of prices, as well as labour market and financial data.

United Kingdom, due to continued uncertainty regarding the deal with the EU on Brexit, the economic climate deteriorated by 2.4 points quarter on quarter and 3.3 points year on year. It should be noted, that the economic climate index also subsided in Germany by 1.7 points quarter on quarter and 3.4 points year on year. In Greece, the economic climate index subsided by 2.4 points quarter on quarter, lagging 7.4 points behind the Euro Area average during the final quarter of 2018. Nevertheless, the index was 0.3 points higher in comparison to the last quarter two years ago.

Table 2.4

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

Month	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
EU-28	107.9	108.3	108.5	109.9	109.3	110.6	111.7	111.5	112.6	113.5	113.8	115.0
Euro Area	107.3	107.5	107.4	109.1	109.0	110.5	111.0	111.6	112.8	113.4	114.2	115.2

Month	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
EU-28	114.8	114.4	112.7	112.4	112.8	112.2	112.3	112.2	111.2	110.4	109.6	107.6
Euro Area	114.9	114.3	112.8	112.7	112.5	112.3	112.1	111.6	110.9	109.7	109.5	107.3

Source: European Commission (DG ECFIN), January 2019

More comprehensive information on the GDP components in the Euro area and the EU for the third quarter of 2018, as well as on potential trends in the coming period is provided next in this subsection. Predictions for 2018 and 2019, as reflected in the European Commission forecasts (November 2018) for the EU-28 are also presented.

In greater detail, according to Eurostat data for the third quarter of 2018 (year-on-year changes in seasonally adjusted data), private consumption in the European Union increased by 1.4%, compared to 1.7% growth in the second quarter and 1.9% in 2017. Consumption in the Euro area slowed to 1.0%, against growth by 1.4% in the previous quarter and 1.6% the previous year. The European Commission envisages a slight weakening of the growth in household consumption in the EU in comparison with 2017, to 1.8% in 2018 and 2019. Correspondingly for the Euro area, the ECB projects a stabilisation of private consumption to 1.6% in 2018 and a recovery to 1.8% in 2019 (Table 2.5). Among the EU countries, Germany and France recorded a slight increase in private consumption during the third quarter of 2018, both by 0.8%, with Italy having an even smaller increase of 0.4%, while in the United Kingdom private consumption kept its growth trend at 1.6%. In Greece, private consumption increased by 0.7% in the final quarter of last year.

The growth of public consumption subsided both in the EU (+0.8%) and the Euro area (+0.9%) in the third quarter of 2018, in comparison with the preceding quarter (1.0% and 1.1% respectively). In 2017, public consumption had increased by 1.0% in the EU and by 1.2% the Euro area. For 2018 and 2019, the European Commission anticipates growth by 1.2% and 1.5% respectively in the EU, and by 1.3% and 1.6% in the Euro area. In the third quarter of 2018, the largest decrease in public consumption was observed in Greece (-4.0%) and the United Kingdom (-0.4%).

Investment strengthened substantially in the third quarter of 2018 in the EU and the Euro area, achieving a rate of 5.6% and 5.2% respectively, compared to 3.1% and 2.3% in the previous quarter. In 2017, investment had increased by 3.1% in the EU and 2.6% in the Euro area. The European Commission anticipates acceleration of the investment growth to 3.2% and 2.9% for 2018 and 2019 in the EU-28 and to 3.3% and 3.0% for the Euro area, respectively. The strongest rise in investment in the third quarter of 2018 was recorded in Cyprus (33.0%), Greece (42.2%) and Romania (25.5%).

Table 2.5

Key Macroeconomic Figures, EU-28, Eurozone (annual % change in real terms, unless otherwise noted)

	EU-28			Euro Area		
	2018	2019	2020	2018	2019	2020
GDP	2.1	1.9	1.8	2.1	1.9	1.7
Private Consumption	1.8	1.9	1.7	1.6	1.8	1.6
Public Consumption	1.2	1.5	1.3	1.3	1.6	1.3
Gross Investment	3.2	2.9	2.8	3.3	3.0	3.0
Exports of Goods and Services	3.4	3.6	3.2	3.3	3.5	3.3
Imports of Goods and Services	3.2	3.9	3.6	3.0	3.9	3.6
Employment	1.2	0.8	0.7	1.4	1.0	0.9
Unemployment (% labour force)	6.9	6.6	6.3	8.4	7.9	7.5
Inflation	2.0	2.0	1.8	1.8	1.8	1.6
Balance of General Government (% GDP)	-0.7	-0.8	-0.7	-0.6	-0.8	-0.7
Debt of General Government (% GDP)	81.4	79.5	77.6	86.9	84.9	82.8
Current Account Balance (% GDP)	2.5	2.3	2.3	3.8	3.6	3.6

Source: European Economic Forecast, autumn 2018, European Commission, November 2018

The growth of the exports of goods and services slowed down in the third quarter of 2018, to 2.4% and 2.8% in the EU and the Euro area respectively, compared with 3.5% and 4.0% growth in the previous quarter, but also against a significantly stronger expansion by 5.4% and 5.2% in 2017. For 2018 and 2019, the European Commission anticipates a steady weakening in the growth of exports in the EU-28 by 3.4% and 3.6% respectively. For the Euro area, a similar slowdown of exports is projected, to 3.3% in 2018, with a slight pickup this year to 3.5%. At the country level, export growth slowed down in Germany to 1.2% in the third quarter, from the 3.4% in the previous quarter. In Greece, the rise of exports also weakened in the third quarter, to 7.6% from 9.2% in the previous quarter, posting the second largest increase in the EU-28 after Ireland. By contrast, a decrease in exports was observed for the second consecutive quarter in the United Kingdom, by 1.3% from 0.5% in the second quarter last year.

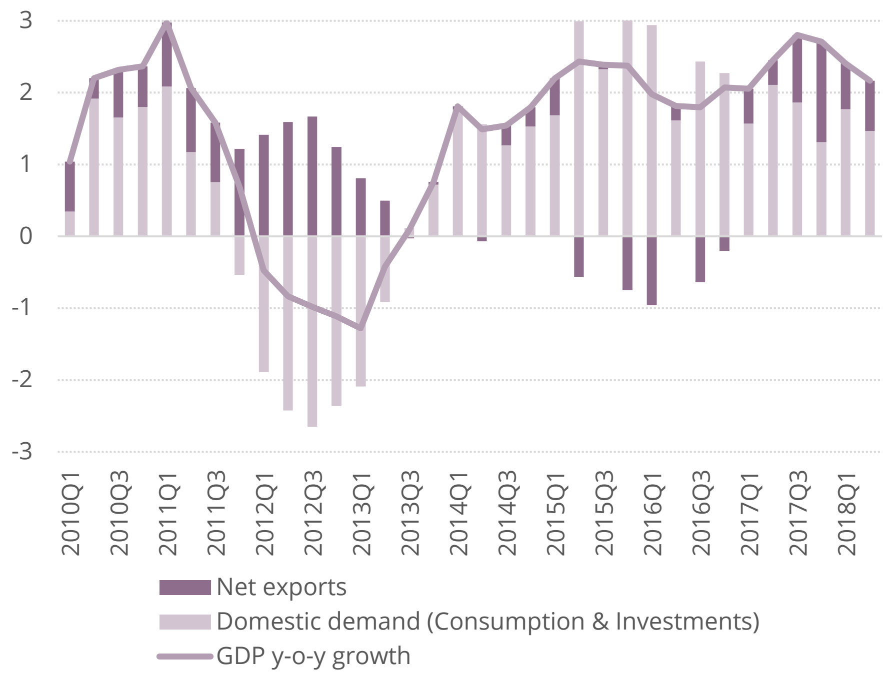
The growth of imports strengthened in the third quarter in the EU to 3.3%, from 2.9% in the preceding quarter, accelerating further in the Euro area to 3.6%, from 2.7% in the preceding quarter. Their growth rate remained significantly lower than in 2017, when they were expanding by 4.2% in the EU and by 3.9% in the Euro area. For 2018 and 2019, the European Commission anticipates growth of imports for the EU-28 by 3.2% and 3.9% respectively while for the Euro area it projects a significant decrease in the growth rate to 3.0%, with a rebound to 3.9% in 2019. The highest rates of import growth in the EU for the third quarter of 2018 were recorded in Ireland (15.7%) and Greece (15.0%), while there was EU countries with a decrease in imports.

As a result, the contribution of net exports to the GDP growth in the Euro area turned negative at -0.2% in the third quarter, after 6 consecutive quarters of positive contribution. The negative contribution of net exports is mostly associated with the slowdown in the expansion of exports and to a smaller extent, the increase in imports. This outcome is possibly linked to the trade protectionism measures taken from by the US against the EU. The contribution of domestic demand remained significant (1.8%), mainly due to the positive contribution of investments (1.1%).

Figure 2.2

Eurozone GDP - Contribution to real GDP growth (in percentage terms)

Net exports had a negative contribution to the growth of GDP in the Eurozone in Q3 of 2018, for the first time after six quarters of positive contribution



Source: Eurostat

The harmonised inflation rate slowed down slightly in the fourth quarter of 2018, standing at 2.0% in the EU-28 and at 1.9% in the Euro area, from 2.2% and 2.1% in the preceding quarter in the two regions respectively. The inflation rate based on the harmonised index excluding energy goods also slowed down in the fourth quarter of 2018, at 1.3% and 1.2% in the EU and the Euro area respectively. Overall in 2018, the harmonised inflation rate stood at 1.9% and 1.7% for the EU-28 and Euro area respectively. For 2019 and 2020, the European Commission projects that the inflation in the Euro area will stand at 1.8% and 1.4%, while for the EU it projects an inflation rate of 2.0% and 1.9% respectively. In December 2018, the highest inflation was observed in France at 1.9%, while in Germany it stood at 1.7%. By contrast, Greece and Portugal recorded the lowest inflation rate, both at 0.6%.

The growth of employment, based on data from the Labour Force Survey of Eurostat, weakened in the third quarter of 2018 to 1.0% in the EU and 1.1% in the Euro area, against a 1.1% and 1.3% rise in the previous quarter. The European Commission projects a weakening of the employment growth in the EU in 2019 as well, to 1.2% and 0.8% respectively, from 1.6% in 2017. For the Eurozone, it also anticipates slower employment growth in the Euro area, at 1.4% in 2018 and 1.0% in 2019, in contrast to 1.3% in the previous year. The strongest employment growth in the third quarter of 2018 occurred in Malta (6.9%), and Cyprus (5.1%), while contraction of employment was observed only in Estonia (-1.2%) and Bulgaria (-0.8%). Greece recorded a steady increase in the third quarter of 2018 (1.7%), but substantially lower than that of the respective quarter of 2017 (2.1%).

Unemployment fell further during the third quarter of 2018 to 6.8% in the EU and 8.1% in the Euro area, compared to 6.9% and 8.3% respectively in the preceding quarter, its lowest level in both regions since 2008. For 2018 and 2019, the European Commission projects further decline of unemployment in the EU-28, to 6.9% and 6.6% respectively (from 7.6% in 2017). Similarly, lower unemployment rates are also anticipated for the Euro area at 8.4% in 2018 and 7.9% this year, compared to 9.1% in 2017. Between July and September 2018, the highest unemployment rate was recorded in Greece (18.9%), followed by Spain (15.0%), while in France it stood at 9.0% and 3.4% in Germany.

Regarding fiscal performance, the European Commission projects a further decline in the general government deficit in the EU in 2018 to 0.7% of GDP (from 1.0% in 2017). Fiscal deficit in the Euro area is expected to fall to 0.6% and 0.8% of GDP respectively in 2018 and 2019, implying that on average the fiscal policy will remain slightly expansionary. Within the Euro area, Spain is the only country that has remained under monitoring under the excessive deficit procedure (EDP) and it must comply with a deficit target of below 3%. Public debt in Europe is anticipated to continue to decline gradually in the EU and the Euro area in 2018 and 2019, as it is projected to reach 81.4% and 79.5% of GDP respectively in the former and 86.9% and 84.9% respectively in the latter. Despite the progress, public debt is anticipated to remain very high across many Member States in 2018, with the largest rate as a percentage of GDP recorded in Greece (179.7%), Italy (133.1%), Portugal (124.9%) and Cyprus (104%).

As to the monetary policy framework, the European Central Bank continues to pursue accommodative monetary policy through maintaining very low interest rates. Yet, the unconventional quantitative easing (QE) programme ended after 4 years in December 2018. The ECB has announced that it will not increase the interest rates until at least mid-2019, with the market consensus forecasts expecting near-zero levels until the beginning of 2020 and very gradual recovery thereafter. Even though the bond purchase programme was concluded in December 2018, the ECB will maintain its policy of reinvesting the principal payments from maturing securities for an extended period of time after the interest rates begin to recover, and in any case for as long as necessary,[6] yet it will no longer partake in net asset purchases. It should be noted, that since the beginning of 2015, when the QE programme began, the ECB has bought bonds of €2.5 trillion total value.

To sum up, the economy in Europe, and particularly in the Euro area, is facing a series of challenges that concern policy-makers:

[6] Press Release, Monetary policy decisions, ECB, September 2018

- Manifestation of impact from the US protectionist trade measures
- Difficulties in the ongoing Brexit negotiations, especially after the rejection of the relevant bill from the UK Parliament
- Euroscepticism, even at the national government level in some countries (e.g. in Italy, where there was an initial intent to reject the Europeans Commission's recommendation regarding the 2019 budget)
- Need of counter-cyclical fiscal policy in countries with a high level of public debt. Despite the recent slowdown, the current growth rate is greater than that of potential output in most European countries, and as a result a slowdown is inevitable in the medium term.
- Delays in the deepening of the monetary union and the strengthening of its institutions
- Securing the robustness of the banking system: very high rate of non-performing loans in some Member States
- Refugee flows and capacity for their integration in economic activity

2.2 The Economic Environment in Greece

A. Economic Climate

- The Economic Sentiment Indicator decreased in Greece in the fourth quarter of 2018, in relation to the third quarter (to 101.5 from 103.9), but increased in relation to Q4 of 2017 (99.5).
- Overall for 2018, the Indicator increased slightly (by 4 points) to 102.7 points
- Business Sentiment deteriorated in the fourth quarter of this year in Industry and Services, improved in Construction, and remained unchanged in Retail Trade
- The Consumer Confidence Index was considerably higher than in the previous quarter, at -36.4 (from -47.5 at Q3), a level last recorded in the fourth quarter of 2009

The IOBE economic sentiment 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 magnitudes and can be used to predict near-term developments and even the course of GDP.[7]

The Greek economy as a whole seems to be, for the time being, on hold, as businesses and households seems to try to adjust to the new conditions and challenges that the conclusion of the last programme has brought about. An additional factor which is steadily influencing the

[7] Note that since March, 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 their values from the 1996-2006 period. The historical series of the indicators are fully revised in order to ensure that the statistics 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.

expectations is the upcoming elections. The economic climate has slightly improved, on average, in 2018 in relation to 2017, yet it has remained relatively low, lower than expected due to the new reality that the exit from the programme has created. The expectations of households have also significantly increased for the second consecutive quarter, possibly due to changes in fiscal policy for 2019, with the lifting of pre-legislated pension cuts, an increase in social spending and some tax-relief measures included in the 2019 budget. Besides, consumer confidence has been proven to be systematically improving in periods leading up to elections. That said, business sentiment deteriorated in the second half of 2018 in many sectors, returning to levels recorded at the beginning of the year in Services or falling even lower (Industry, Construction), reflecting the current persistent concerns in significant segments of the economy. An exception to this is the Retail Trade sector, where expectations correlate with consumer confidence, following a similar trend. In detail:

The Economic Climate Index in Greece decreased quarter on quarter in the final quarter of 2018 to 101.5 points on average (from 103.9 in the previous quarter), at a higher level than the average from the same quarter of 2017 (99.5 points on average). Overall in 2018, the index increased by 4 points, averaging 102.7 points (from 96.8 in 2017).

In Europe, the corresponding indicator declined quarter on quarter in the quarter under examination, both in the EU and in the Euro area. In particular, the Economic Climate Index averaged 109.2 points (from 111.9) in the fourth quarter of 2018 in the EU and 108.8 (from 111.5) points in the Euro area. In 2018, the Economic Climate Index in the EU averaged 111.9 points (from 111.5) and 111.7 points (from 110.7) in the Euro area.

At the sector level, the business expectations in Greece deteriorated quarter on quarter in the fourth quarter of the year in Industry and Services, strengthened in Construction and remained unchanged in Retail Trade. On the demand side, there seems to be a significant increase of the average quarterly Consumer Confidence Index. Compared to the same quarter of the preceding year, the index increased in Construction and Retail Trade and decreased in Services and Industry, while consumer confidence strengthened substantially. In 2018 compared to 2017, expectations seem to be improving in all production sectors and among the consumers. In greater detail:

The Consumer Confidence Index in Greece in the fourth quarter of 2018 was on average significantly higher at -36.4 points (from -47.5 points in the third quarter), a performance substantially better than last year (-52.7 points). Overall in 2018, the index reached -46.7 points (from -63 in 2007). The Greek consumers maintained their top rank on the European pessimism scale. The corresponding average European index weakened considerably in the Euro area (to -4.3, from -1.8), and in the EU (-4.1, from -1.8). These levels are lower in the Euro area and the EU in relation to last year (-0.2 and -1.0 points respectively), while for 2018 the index increased in the EU and Euro area to -1.4 (from -2.5 in 2017) and -1.7 points (from -2.7 in 2017).

The trends in the individual components that make up the overall indicator were positive in the fourth relative to the previous one. Hence, the expectations of the Greek consumers for the financial situation of their households in the following 12 months, the corresponding expectations for the country's economic situation, the unemployment expectations and the very weak intention to save, all strengthened quarter on quarter for another quarter.

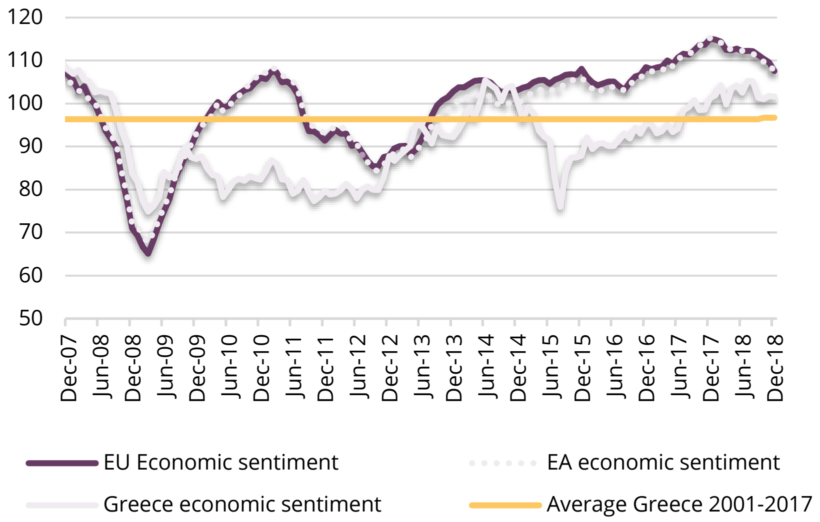
In particular, the percentage of those who were pessimistic about their household's financial situation over the next 12 months dropped to 45% (from 56% in the previous quarter), while the share of respondents holding the opposite view increased to 10% (from 6%). Furthermore, the percentage of Greek consumers with gloomy expectations about the country's economic situation marginally declined to 48% (from 60%), with 18% (from 11%) expecting a slight improvement. Considering the intention to save, the percentage of households that did not consider it possible that they would do any savings in the following 12 months was about 83% (from 88%), while those that considered it possible increased to 14% (from 10%). The percentage of those believing that unemployment would increase declined to 43% (from 49%), while 25% (from 17%) on average expressed the opposite opinion. The percentage of consumers that reported to be «in debt» in the fourth quarter of 2018 was 12% (from 11%), lower in comparison with the same quarter the year before (14%), while the percentage of respondents who said they saved a little stood at 15% (from 12% in the preceding quarter and 10% last year). Finally, the percentage of those who declared that they were "just about managing to make ends meet on their income" reached 60% (from 66%) while the percentage of households reporting that they were "drawing on their savings" remained at 13%, at the same level as in the corresponding quarter of the previous year (from 10% in Q3).

The Business Climate Indicator in Industry stood at 97.7 (from 105.7) points in the fourth quarter of 2018, lower than its corresponding level of 2017 (100.3 points). Overall in 2018, the indicator stood at 102.8 points (from 98.1). Among the key activity indicators, the forecast for short-term output change declined heavily in the examined quarter (+9 from +21 points on average), while the estimates for the level of orders also weakened (to -16 from -7 points). The assessment of the stock of finished products strengthened slightly (to +10 from +7 points), while the trends in the export indicators were negative. The export expectations over the following quarter deteriorated, same as the assessment of foreign orders and demand. The quarterly balance of employment expectations decreased to +1 (from +6) points on average. The production capacity utilisation rate stood at 71% (from 70.2%), while the months of guaranteed production of the enterprises once more averaged 4.8 (from 4.2).

The Business Climate Indicator in Retail Trade remained unchanged at 108.2 points, higher than in the same quarter of the previous year (96.9 points). Overall in 2018, the climate in the sector improved compared to 2017 (104.5 from 94.6 points on average). Among the key components of the indicator, the average current sales assessment decreased to +18 (from +22) points. About 29% (from 22%) of the enterprises in the sector reported that their sales have declined, with 47% (from 45%) declaring the opposite outcome, while the projected sales indicator slightly increased to +30, with the assessment of inventories weakening (to +3 from +7 points). Regarding the remaining activity indicators, the change in the balance of expectations for orders to suppliers is positive (+22 from +15 points on average per quarter), while the short-term employment forecast decreased to +14 (from +17) points.

Figure 2.3

Economic Sentiment Indicators: EU, Euro area and Greece, (1990-2016=100, seasonally adjusted data)



The Economic Sentiment Indicator during Q4 is showing a decrease in relation to Q3, while it increased substantially in relation to the same quarter the year before

Source: European Commission, DG-ECFIN

Finally, the balance of price expectations of 3 points remained unchanged, with 6% (from 2%) of companies expressing expectations of a decline in prices and 89% (from 92%) predicting price stability. At the sub-sector level, the sentiment strengthened in the fourth quarter in Textiles-Clothing-Footwear, Vehicles & Spare Parts and Department Stores, and weakened in all other sectors.

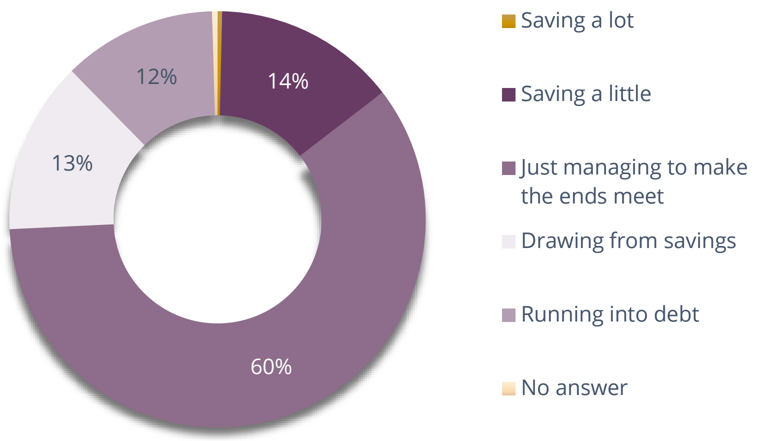
The business expectations in Construction strengthened in the fourth quarter, with the balance standing at 56.6 (from 55) points on average. The indicator stood higher year on year as well (from 52.3 points). Among the key components of the indicator, the employment expectations in the sector remained stable at -40 points, while 6% (from 9%) of the companies were expecting job creation in the sector, with 46% (from 58%) expecting a decrease. The expectations of the businesses about their activity level became less pessimistic (at -62 from -66 points), while the assessment of their current level of activity slightly deteriorated (-32 from -30 points). The months of activity accounted for work in hand in the sector remained at 8.3. The negative balance of price expectations mitigated to -20 (from -34) points, with 26% (from 37%) of the companies expecting a decrease in the short-term and 6% (from 3%) an increase.

Figure 2.4

Consumer survey data on the financial situation of households

(Average: October – December 2018)

The number of respondents declaring that they save increased to 15%, while 60% responded that they were barely making ends meet



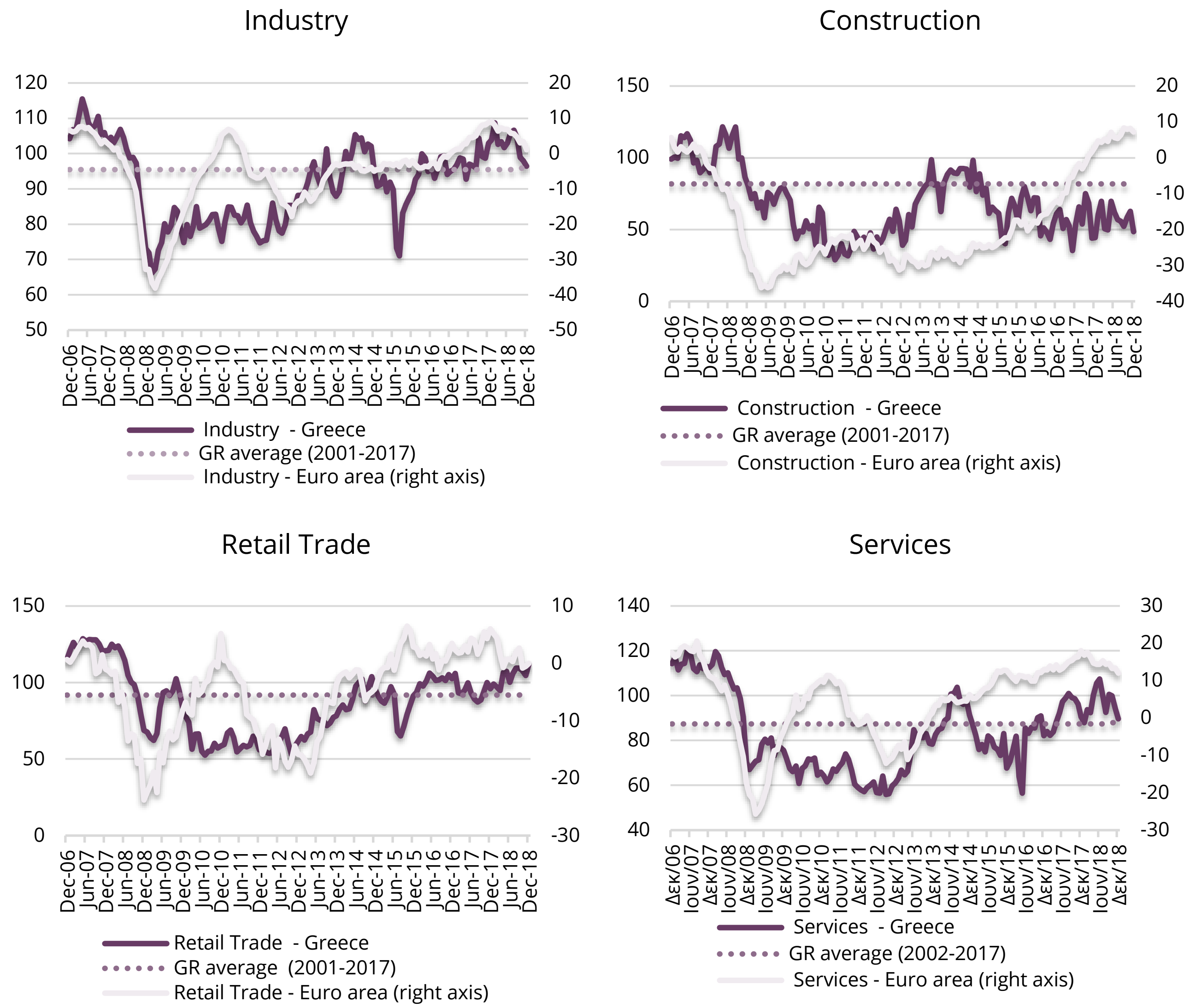
Source: IOBE

Finally, the percentage of companies reporting that they were not facing any obstacles to the proper functioning of their business reached 11% (from 14%), while among the remaining businesses, 22% reported low demand as the main impediment, 48% named insufficient funding and 18% factors such as the country's general economic situation, capital controls, high taxes, lack of projects, and late payment by the state**.** At the subsector level, overall business confidence improved in the examined quarter in Private Construction and Public Works.

In Services, the average Business Climate Indicator decreased quarter on quarter in the third quarter of 2018, to 94.6 (from 97.6) points, reaching a lower level than in the same period of 2017 (95.6 points). In 2018, the expectations in services seemed to be higher than the year before (97 from 92.7 on average). The assessment of the current level of business activity declined (at +10 from +21 points on average), while the short-term demand expectations of the businesses in the sector seemed to improve slightly at +6 points. Regarding the remaining activity indicators, the balance of employment expectations of the respondents increased (to +4 from -2 points on average), while the balance of price expectations stood at -3 (from -5) points. Finally, the percentage of respondents reporting a seamless business operation receded to 26% (from 32%), with 31% declaring lack of demand as a major barrier to their operation, 17% citing working capital shortage and 20% other factors, such as the country's general economic situation, difficulties in obtaining credit, high taxes, and late payments.

Figure 2.5

Business Climate Index



Source: IOBE

Business sentiment deteriorated in Q4 quarter on quarter in Industry and Services, improved in Construction and Consumer Confidence and remained unchanged in Retail Trade. Year on year, the index increased on average in Construction and Retail Trade and decreased in Services and Industry, while a significant increase was observed in Consumer Confidence.

Among the examined subsectors of Services, the indicators deteriorated quarter on quarter in the fourth quarter in Hotels-Restaurants-Travel Agencies, Land Transport and Financial Intermediaries and improved in IT Services and Various business activities.

Table 2.6

Economic Sentiment Indicators

Time Period	Economic Sentiment Indicator			Business Climate Index (Greece)				Consumer Confidence Index (Greece)
	EU-28	Eurozone	Greece	Industry	Construction	Retail Trade	Services	
2008	93.1	93.5	100.2	96.9	104.8	105.9	104.6	-46.0
2009	77.8	78.9	82.5	76.0	72.0	83.3	75.0	-45.7
2010	100.9	100.8	82.7	79.9	52.2	61.3	68.1	-63.4
2011	100.4	101.6	81.5	81.1	37.7	60.9	66.1	-74.1
2012	89.6	89.6	80.7	81.4	47.5	59.1	58.8	-74.8
2013	94.6	92.8	91.6	92.6	71.5	72.6	75.3	-69.4
2014	104.0	100.9	100.7	99.7	88.4	92.3	93.3	-54.0
2015	105.7	103.6	89.6	86.3	62.0	83.9	78.2	-50.7
2016	105.3	104.3	91.9	96.1	61.3	101.4	79.3	-68.0
2017	111.1	110.7	96.8	98.1	55.4	94.6	92.7	-63.0
Q1 2017	108.3	107.5	94.0	97.0	57.2	97.3	83.4	-71.8
Q2 2017	110.0	109.5	94.3	96.1	47.2	96.0	92.6	-70.2
Q3 2017	111.8	111.5	99.5	99.0	64.9	88.3	99.7	-57.4
Q4 2017	114.1	114.3	99.5	100.3	52.3	96.9	95.1	-52.7
Q1 2018	113.9	113.9	102.0	105.1	60.3	97.1	91.4	-52.3
Q2 2018	112.5	112.5	103.4	102.7	60.5	104.7	104.4	-50.7
Q3 2018	111.9	111.5	103.9	105.7	55.0	108.3	97.6	-47.5
Q4 2018	109.2	108.8	101.5	97.7	56.6	108.2	94.6	-36.4

Sources: European Commission, DG ECFIN, IOBE

B. Fiscal Developments and Outlook

The Fiscal Developments January-November 2018 and the Budget for 2019

According to the latest fiscal data,[8] compiled with the National Accounts methodology (ESA 2010), in 2017 the General Government (GG) had a surplus of €1,340 million or 0.7% of GDP.[9] In addition, the primary surplus of the GG for 2017 amounted to €9,959 million or 3.7% of the GDP, clearly outperforming the target outlined in the third Programme for Economic Adjustment, namely 1.75% of GDP (Table 2.7).

It should be noted that the GG balance for 2017 was repeatedly revised. Initially (Budget 2017), a deficit of 0.8% of GDP was expected. By the end of 2017, a deficit of 0.6% of GDP was projected and in April 2018 a 0.8% of GDP surplus was recorded. Respectively, the primary surplus after a series of revisions from 2.5% of GDP (Budget 2017) finally reached 3.9% of GDP. The improvement came mostly from better performance of the Social Security Funds (SSFs), which turned an initial €0.3 billion deficit into a €2.8 billion surplus.[10] Other State Institutions also improved, yet the balance of the Ordinary Budget (OR) worsened.

[8] Hellenic Static Authority report at Eurostat, October 2018 & Hellenic Statistic Authority Press Release, 22nd October 2018.

[9] Without counting the impact of bank supporting measures, amounting to EUR 51 million in 2017

[10] The evolution of the SSF balance for 2017 is as follows:

Budget 2017	May 2017	November. 2017	November. 2018
-€252 million	-€941 million	€1.085 million	€2.805 million

Table 2.7

General Government Outcome on National Accounting Basis (ESA 2010, % on GDP)

	2014	2015	2016	2017	2018*		2019**
					Initial	Est.	
General Government Outcome (without gross funding towards financial institutions)	-3.5	-2.9	0.3	0.7	0.6	0.6	0.6
Primary General Government Outcome (without gross funding towards financial institutions)	0.4	0.7	3.5	3.9	4.2	4.1	3.9
Primary General Government Outcome (Master Financial Assistance Facility Agreement - MFAFA)	0.3	0.25	3.6	4.1	3.8	4.0	3.6
MFAFA Target	-	-0.25	0.50	1.75	3.5	3.5	-
Enhanced Surveillance Target	-	-	-	-	3.5	3.5	3.5
GDP	178.656	177.258	176.488	180.218	184.691	185.658	192.749

Sources: (a) Data Release as part of the Excessive Deficit Procedure, Hellenic Statistic Authority (b) Hellenic Statistic Authority press release, October 2018 (c) Explanatory Budget Report 2018 and 2019, Ministry of Finance, November 2017 και 2018, *Temporary Data and Estimates, ** Budget 2019

Estimates of the 2018 results

Contrary to 2017, recent estimates in the 2019 Budget regarding the surplus and primary surplus for 2018 do not seem to demonstrate substantial differences from the initial estimates a year ago, published in the 2018 Budget.

Public Debt

The amount of debt of the GG and its changes on a yearly basis incorporate and reflect more comprehensively than any other indicator the fiscal developments and performance. There are, for example, cases where some expenditure is financed through new bonds and does not appear in the GG balance, yet it increases the stock of debt. In addition, the assumption of debt, e.g. by the State, from institutions outside the GG, increases debt, leaving the yearly deficit[11] unchanged etc. For these reasons, observing the development of GG debt is necessary in order to have a more comprehensive view of the fiscal developments.

In detail, the total amount of debt of the General Government has increased steadily since 2015, even though the GG had a surplus between 2016 and 2018 (table 2.8). When expressed in relation to GDP, the debt for 2018 is 4.5 percentage points higher than in 2015, even though nominal GDP (the denominator) increased by 2.1% in 2017 and 3.0% in 2018.

There are many reasons behind the positive debt trajectory. For example, in 2016, the Greek State borrowed around €3.5 billion after the conclusion of the second assessment to repay its arrears to suppliers. These payments do not show in the expenses of the GG. For the same reason, in 2017,

[11] These instances are known as stock - flow adjustments.

€1.6 billion was obtained from the European Stability Mechanism. At the same time, since 2017 there has been an attempt at creating a funding reserve, carrying over to 2018, when, upon the conclusion of the fourth assessment of the last programme, the Greek state obtained €11.4 billion for this purpose in 2018.

Table 2.8

General Government Total Debt (in million €)

	2014	2015	2016	2017	2018
Debt	319,629	311,725	315,011	317,414	335,000
% GDP	178.9	175.9	178.5	176.1	180.4

Source: (a) Data Release as part of the Excessive Deficit Procedure, Hellenic Statistic Authority, October 2018 (b) Explanatory Budget Report 2019, Ministry of Finance, November 2018

The argument that the current high yields of the Greek bonds are not of great importance because the created reserve, amounting to €22.4 billion, allows for a delay of market entry for up to 22 months after the expiration of the programme, ignores the fact that Greek businesses borrow with similar or even higher interest rates, rendering them largely uncompetitive.[12] In any case, the lack of progress in the easing of the debt, either as a total amount or as percentage of GDP, indicates that fiscal adjustment remains unfinished and reversible; therefore there is no room for any form of complacency due to the good fiscal results of the previous years. With that into account, any possible fiscal easing should be primarily directed towards measures that will accelerate economic growth, such as reducing tax rates or promoting structural changes. Besides, the markets take very seriously into consideration an economy's growth rate and prospects before investing in it. Nevertheless, a recent analysis[13] showed that in cases where the debt to GDP ratio exceeds 100%, its reduction can be achieved more efficiently through increasing the growth rate or reducing interest rates, than through achieving high primary surplus levels.

After 8 years of fiscal consolidation efforts, the main goal of economic policy should now be to attract investments, increase production, lower unemployment and return the economy to high growth rates. In this regard, economic policy should be welcoming towards investment and economic recovery. Besides, no fiscal position can be sustained, nor could public debt be sustainable, when there is no strong and steady growth.

[12] Generally, no business or bank in a country is able to repeatedly borrow from the international markets with interest rates lower than those of the government bonds of that country.
[13] Special Issue V.4, Monetary Policy 2016-2017, p. 131, June 2017, Bank of Greece.

Execution of the State Budget, January - November 2018

The main element of the execution of the State Budget (SB) in the first eleven months of 2018 is the large primary surplus (4.1% of the GDP) in relation to the previous year, without substantial changes in the levels of income and expenditure of the Ordinary Budget (OB). However, investment expenditure is lower than the year before, when it had already reached its lowest level since 2000. Even though experience from recent years shows that disproportionately large amount of investment is conducted in December each year, it is certain that public investment will decline for yet another time, as was the case in 2015, 2016 and 2017, at a time when the country needs growing investment over a prolonged period of time (table 2.9).

The OB revenue, before tax returns, might have exceeded the goal for the eleven-month period,[14] yet it increased only slightly year on year. Meanwhile, the OB primary expenditure is marginally lower (0.2%) than in 2017.

Concerning the Public Investment Programme (PIP), until last November only 37% of the envisaged yearly grants were disbursed, compared to 58% in 2015, 51% in 2016 and 45% in 2017. It is the lowest percentage in decades. In order to achieve the yearly target, €4.255 million need to be disbursed in December alone, which is an impossible task. It should be noted that PIP payments up until November were lower than the target for the year-to-date period by €1.55 billion. Yet, the PIP revenue also seems to be lower than the respective target, by €1.432 million.

Nevertheless, the OB primary surplus was greater than both the target by €4,893 million and in relation to the surplus of 2017 by approximately €3.0 billion. In short, the year-on-year increase of the primary surplus by €3.0 billion, or 64.1%, is mostly due to:

- Lower tax rebates by €1.7 billion
- Better result from the implementation of the PIP, mostly due to lower expenditure by €1.0 billion
- Reduced interest payment by €0.3 billion

Hence, even though the fiscal developments in the year-to-date period up until November last year seem prima facie very satisfactory, some aspects of the way in which they were achieved raise concerns. Most of the improvement of the primary surplus in relation to 2017 (55.6%) is due to a substantial reduction in tax refunds. Note that the level of tax refunds is set administratively and is subject to fluctuations. Essentially, it constitutes a form of informal borrowing from taxpayers by the State. By the end of November, €734 million worth of tax refunds were pending. In addition, the reduction of the deficit of the PIP by €1.032 million year on year, contributing to a 34.6% increase in the surplus is based on reduced expenditure on investment by €1.550 million in relation to the target and €563 million in relation to 2017. It constitutes a development which impacts negatively the growth prospects of the country. Lastly, the interest reduction is not permanent, as

[14] Monthly cumulative targets for 2018 in the Explanatory Budget Report 2018, p. 91, Table 3.5.

according to the Explanatory Budget Report in 2019 these expenses will increase anew by €1.1 billion.

Recall that in the same period (January-November) of 2016, the primary surplus was very high at 4.0% of GDP, yet in the following month it receded to 2.3% of the GDP. Hence, December is a crucial month for the fiscal results of last year.

State Budget Balance and Primary Balance

In the year-to-date period up until November last year, the State Budget had a surplus of €2,563 million or 1.4% of GDP, compared to a €774 million deficit over the same period in 2017. Respectively, the primary surplus reached €7,626 million or 4.1% of GDP, in relation to €4,647 in 2017 (Table 2.9).

The great year-on-year improvement of the SB results can be attributed mostly to the three aforementioned reasons. In contrast, in relation to the same period of 2016, the primary surplus is only 9.1% higher, a development which largely reflects the cumulative increase of the Nominal GDP by 5.2% and the tax measures taken in 2017 and 2018.

Note that if investment expenditure in 2018 reaches €6,750 million, as projected in the Explanatory Budget Report for 2019, then €4,255 million or 2.3% of grants will have been disbursed in December. Moreover, according to the same projections, the OB expenditure in December would amount to €7,911 million. Therefore, for the duration of December €12.2 billion out of the OB would be cashed out, significantly reducing the primary surplus as was the case in 2016.

OB Revenue

The OB revenue, before tax refunds, increased by 0.4% year on year, amounting to €48.8 billion year to date in November. The revenue from taxes increased year on year by 2.3%, while non-tax revenues declined by €757 million. Recall that the proceeds from the concession of the regional airports boosted revenues in 2017, with no comparable revenue source in 2018 (table 2.10).

In greater detail, the revenue from direct taxation increased by 0.4%. The earnings from the income tax of households increased by 2.3%, due to the lifting of the 1.5% discount applicable to taxes withheld at the source (essentially for pensioners and salaried personnel). In addition, the proceeds from the income tax of legal entities increased by 4.6% year on year.

By contrast, the revenue from wealth taxes (mainly the unified property ownership tax ENFIA) decreased by 0.8%. The proceeds also declined from direct taxation of previous years, by 6.0%, and from other direct taxes, by 6.5% (table 2.10).

The positive trend of tax revenue over the first eleven months is essentially due to proceeds from indirect taxation,[15] which increased by 3.8% in relation to the year before, reaching €24.8 billion (from €23.9 billion in 2017).

[15] Almost 93.0% of the increase in the year-to-date tax revenues by the end of November came from indirect taxation.

Table 2.9 State Budget Execution 2018 (million. €)

Table 2.1	January - November			% Change		2015	2016	2017	2018 Budget	2018* Est.	2019* Budget	% change			
	2016	2017	2018	2017/16	2018/17							16/15	17/16	18/17	19Π /18
I. SB Income (1+2)	**48,051**	**45,130**	**47,471**	-6.1	5.2	51,421	54,152	51,422	54,244	53,824	53,022	5.3	-5.0	…	-1.5
1. Gross SB Income	44,761	43,748	45,620	-2.3	4.3	46,589	49,980	48,973	50,509	49,969	49,282	7.3	-2.0	…	-1.4
Income before Tax Returns[1]	47,442	48,590	48,801	2.4	0.4	49,510	53,243	54,333	54,157	55,957	54,100	7.5	2.0	…	-3.3
Exc. Tax Returns	*2,681*	*4,842*	*3,181*	*80.6*	*-34.3*	*2,922*	*3,263*	*5,360*	*3,648*	*5,988*	*4,818*	*11.7*	*64.3*	…	*-19.5*
2.PIP Income	3,290	1,382	1,851	-58.0	33.9	4,832	4,172	2,449	3,735	3,855	3,740	-13.7	-41.3	…	-3.0
From which: EU Income	*3,074*	*1,146*	*1,496*	*-62.7*	*30.5*	*3,900*	*3,861*	*1,964*	*3,555*	*3,555*	*3,560*	*-1.0*	*-49.1*	…	*0.1*
II. SB Expenditure (3+4)	**46,471**	**45,905**	**44,908**	-1.2	-2.2	54,952	55,702	55,690	55,188	57,032	57,796	1.4	0.0	…	1.3
3.OB Expenditure	42,995	42,847	42,414	-0.3	-1.0	48,575	49,418	49,740	48,438	50,281	51,045	1.7	0.7	…	1.5
Primary Expenditure[2,3]	37,591	37,426	37,350	-0.4	-0.2	42,775	43,841	43,532	43,238	44,761	44,445	2.5	-0.7	…	-0.7
Interest	5,404	5,421	5,063	0.3	-6.6	5,800	5,577	6,208	5,200	5,520	6,600	-3.8	11.3	…	19.6
4. PIP Expenditure	3,476	3,058	2,495	-12.0	-18.4	6,377	6,284	5,950	6,750	6,750	6,750	-1.5	-5.3	…	0.0
III. SB Deficit/ Surplus (I-II)	**1,580**	**-774**	**2,563**			-3,530	-1,551	-4,268	-943	-3,209	-4,774				
% of GDP	*0,9*	*-0,4*	*1,4*			*-2*	*-0,9*	*-2,4*	*-0,5*	*-1,7*	*-2,5*				
OB Deficit / Surplus	1,766	901	3,206			-1,956	562	-767	2,071	-312	-1,763				
PIP Deficit / Surplus	-186	-1,676	-644			-1,574	-2,112	-3,501	-3,015	-2,895	-3,010				
IV. SB Primary Surplus	**6,984**	**4,647**	**7,626**			2,270	4,026	1,940	4,257	2,311	1,826				
% of GDP	*4.0*	*2.6*	*4.1*			*1.3*	*2.3*	*1.1*	*2.3*	*1.2*	*0.9*				
GDP (at current prices)	176,488	180,218	185,658	2.1	3.0	177,258	176,488	180,218	184,691	185,658	192,749	-0.4	2.1	3.0	3.8

*According to the new distribution of income and expenditure in use since 01/01/2019, applied in the Explanatory Budget Report for 2019. For this reason, the absolute values in last two columns are not fully comparable with the previous ones, but are comparable between themselves

Sources: (a) Monthly SB Execution Bulletin January-November 2018, December 2018 and (b) Explanatory Budget Report 2019, November, both taken from the Ministry of Finance

VAT revenue increased by 2.4% to €15 billion. This increase lags behind the estimated increase of nominal GDP by 3.0% for 2018, and should not therefore be considered satisfactory. That said, the revenues from excise duties increased by 3.1%. The increase came from the taxation of tobacco and spirits, while the revenues from fuel taxes declined by 3.0%.

The revenues from indirect taxes from previous years continued to grow significantly, by 19.0%, amounting to €1.098 million. An equally significant 24.1% increase was recorded in the revenue from other indirect taxes.

Table 2.10

State Budget Revenue (million. €)

Revenue Sources	January-November			% change	
	2016	2017	2018	2017/16	2018/17
1.Gross SB Revenue (2+4)	48,051	45,130	47,471	-6.1	5.2
2. Gross OB Revenue	44,761	43,748	45,620	-2.3	4.3
Tax Returns	2,681	4,842	3,181	80.6	-34.3
3. OB Revenue	47,442	48,590	48,801	2.4	0.4
Direct Taxes	19,605	18,444	18,514	-5.9	0.4
--Income Taxes	12,119	11,685	12,022	-3.6	2.9
--Property Tax	3,145	2,809	2,790	-10.7	-0.8
--Direct Taxes of Previous Years	1,581	1,786	1,679	13.0	-6.0
--Other Direct Taxes	2,760	2,164	2,023	-21.6	-6.5
Indirect Taxes	22,550	23,926	24,824	6.1	3.8
--Transaction Taxes	14,291	15,193	15,599	6.3	2.7
Of which: VAT	*13,825*	*14,656*	*15,011*	*6.0*	*2.4*
--Consumption Tax	7,215	7,470	7,705	3.5	3.1
--Indirect Taxes of Previous Years	720	923	1,098	28.2	19.0
--Other Indirect Taxes	325	340	422	4.6	24.1
Non-tax revenues	5,287	6,220	5,463	17.6	-12.2
--Receipts from the EU	387	271	308	-30.0	13.7
--Non-Ordinary Revenue	768	694	679	-9.6	-2.2
Of which ANFA and SMP	*375*	*345*	*314*	*-8.0*	*-9.0*
--Permits and Rights	82	1,272	233	1.451.2	-81.7
--Other	4,051	3,982	4,243	-1.7	6.6
4. PIP Revenue	3,290	1,382	1,851	-58.0	33.9

Source: SB Execution Bulletin January-November 2018, Ministry of Finance, December 2018

Finally, as mentioned earlier, the non-tax revenues declined by 12.2%, due to the strong revenue in 2017 stemming from the regional airports concession (Permits and Rights category). Such a revenue effect did not occur in 2018, leading to a high base for comparison with this year.

Note that after the developments up until 2018, the significance of indirect tax revenue as part of the total amount of tax revenue within the OB seems to strengthen. In particular, the share of this revenue category amounted to 53.5% in 2016, 56.5% in 2017 and 57.3% in 2018 of the total tax revenue of the OB[16] (Table 2.10). By contrast, the revenue from direct taxation eased gradually from 46.5% of GDP in 2016 to 42.7% in the previous year.

Tax Refunds

The tax refunds dropped by 34.3% in relation to 2017, amounting to €3,181 million, against €4,842 the year before. Their reduction by €1,661 year on year contributed substantially (by 55.6%) to the creation of the large primary surplus up until November 2018. These refunds fall short of the revised target for the period[17] by €475 million.

Note that the level of tax refunds is set administratively and is subject to fluctuations from a year to year and its reduction does not signify expenditure cuts, lower tax evasion or higher revenue.

OB Expenditure

OB expenditure was 1% lower year on year. This reduction is essentially due to interest payment (82.7% of the reduction), while primary expenditure did not change considerably from last year (Table 2.11).

In greater detail, primary expenditure decreased by 0.2% to €37,350 million, from €37,426 million in the same period a year before. The expenditure on salaries increased by 3.3% year on year. Expenditure increased steadily for the second consecutive year, at a higher rate (January-November 2017: 2.4%, January-November 2018: 3.3%). The growth in expenditure on salaries tends to become permanent, which is a serious cause of concern, especially in light of the new wave of recruitments announced for 2019. In the meantime, payments for “other benefits” for employees’ increased by 27.4% in relation to 2017 (Table 2.11).

Social expenditure decreased slightly, by 0.8% in relation to 2017, to reach €16,252 million. This development is due to the cuts in grants to social security funds (-0.6 in relation to 2017), as well as a decrease in expenditure for “social protection” (-11.9%). By contrast, the grants to the Manpower Employment Organisation (OAED) increased by 33.3%.

Operating expenditure declined by 7.4% to €6.643 million, mostly due to the significant decrease in the subcategory “other expenditure” by 17.8% (or by €490 million). This subcategory encompasses a series of important expenses, which are presented in more detail in Table 2.12.

As evident from the relevant data, the largest year-to-date decrease by the end of November was observed in hospital subsidies, by -38.7% or €500 million. Also, even though the General Government assumed €192 million debt from various institutions in 2017, this year there was no such expense. That said, called guarantees within the GG are significantly higher year on year (€242 million). In total, the savings from the other expenses category amount to €490 million and are mostly based on lower grants for hospitals.

[16] In 2015 this revenue amount to 53.8% of total tax revenue, approximately as in 2016.
[17] Monthly Budget Implementation Bulletin, November 2018.

It is considered certain that in December large upward pressure will be exerted on primary expenditure, unless it is moved into January 2019. Besides, the last three years, a large part of the OB primary expenditure was spent in December.

Table 2.11

State Budget Expenditure (million €)

Expenditure Category	January-November			% change	
	2016	2017	2018	2017/16	2018/17
1.State Budget Expenditure	46,471	45,905	44,908	-1.2	-2.2
2. Ordinary Budget Expenditure	42,995	42,847	42,414	-0.3	-1.0
Interest	5,404	5,421	5,063	0.3	-6.6
Primary Expenditure	37,591	37,426	37,350	-0.4	-0.2
--Salaries & Pensions	16,536	11,095	11,510	-32.9	3.7
Wages	10,495	10,744	11,102	2.4	3.3
Other Allowance	251	241	307	-4.0	27.4
Pensions	5,790	110	101	-98.1	-8.2
--Social expenditure	11,142	16,375	16,252	47.0	-0.8
Grants to Social Security Funds	9,755	14,856	14,766	52.3	-0.6
Social protection	920	1,152	1,015	25.2	-11.9
Grants to OAED	420	315	420	-25.0	33.3
Other	47	51	51	8.5	0.0
--Operational and other	6,878	7,172	6,643	4.3	-7.4
Subsidies	1,171	1,205	1,265	2.9	5.0
Consumer	1,071	1,085	1,276	1.3	17.6
Conditional	2,053	2,124	1,834	3.5	-13.7
Other*	2,583	2,758	2,268	6.8	-17.8
--Earmarked expenditure	3,036	2,785	2,945	-8.3	5.7
3. PIP Expenditure	3,476	3,058	2,495	-12.0	-18.4

Source: State Budget Execution Bulletins, January - November 2018, Ministry of Finance, December 2018. For the 2016 and 2017 column the Bulletins for the same month period have been used respectively. Since 2016, the calculation of expenditure for the duty calls of doctors in the NHS has changed same with other allowances towards hospital staff, which now fall under "hospital subsidies" and "institution subsidies", themselves under other expenditure in this table.

* Includes transfers to cover deficits and arrears of hospitals and doctor duty calls, military procurement, EFSF disbursement fee, called guarantees, the assumption of debt of General Government bodies and NHS duty calls.

Public Investment Programme

As mentioned earlier, the PIP contributed significantly, by about 1/3, to the year-on-year increase in the year-to-date primary surplus by the end of November. This is both due to lower spending and higher revenue in relation to the year before. As a result, the year-to-date PIP deficit fell to €644 million, from €1.676 million in the same period of 2017 (Table 2.9).

The PIP Expenditure over this period declined by 18.4%, reaching its lowest year-to-date level for November in decades. Bases on past experience from the period 2015-2017: (a) it is likely that a very large part of the PIP expenditure was spent in December and (b) a further cut in the PIP expenditure for 2018 should be considered certain, much like in the previous three years (Tables 2.9 and 2.12).

The repeated cuts in public investment, without a significant liquidity or other reason, while the need for public and private investment remains high, has a significant toll on the growth prospects of the country.

PIP revenues increased by 33.9% against 2017 and reached €1,851 million. Receipts from EU funds increased by 30.5% against 2017 and reached €1,496 million, yet they remained below half the year-to-date November receipts of 2016 (see table 2.9). Note that the total year-to-date PIP revenues for November include revenues from domestic sources of €355 million, when the yearly projection of the Budget for 2018 for these revenues stood at only €180 million.

Table 2.12

Other Expenses (million €)

	January-November		% change
	2017	2018	2018/2017
Hospital Subsidies	1,293	793	-38.7
Doctors' Duty Calls	331	257	-22.4
Military Procurement	191	145	-24.1
Called Guarantees outside the GG	25	24	-4.0
Called Guarantees within the GG	671	913	36.1
Debt Assumption	192	0	-100.0
EFSF Disbursement	55	136	147.3
Total	2,758	2.268	-17.8

Source: State Budget Execution Bulletins, January - November 2018, Ministry of Finance, December 2018

The Budget for 2019

Much like the previous years, fiscal policy remains contractionary in the current year. The balance of the General Government, on a National Accounting basis, is expected to remain unchanged from 2018 (0.6% surplus), while the primary surplus is projected to be marginally smaller in 2019 (3.9% of GDP from 4.1% in 2018, Table 2.8). For yet another year, exceeding the fiscal targets has been set as a priority to the detriment of investment and hence growth.

More specifically, maintaining a high fiscal performance in 2019 is based on: (a) unchanged tax revenue, which in both modified cash accounting and national accounting terms show no substantial difference[18] from 2018, (b) lower public investment by €550 million, in relation to the projection of the Mid-term Fiscal Strategy Framework 2019-2022, adopted in May 2018 and (c) an optimistic macroeconomic scenario for 2019.

This scenario projects an acceleration in the growth rate to 2.5%, despite the contractionary fiscal policy, which is relying on an increase in private –mostly- investment by 11.9%. Recall that a growth rate of 2.5% and an increase in investment by 11.4% were expected for 2018 as well, yet neither of

[18] The tax revenue on modified cash accounting basis is estimated at €51.259 million for 2018 and €51.127 million for 2019. On National Accounting basis, it is projected to reach €51.289 in 2018 and €51.263 in 2019.

those two projections came into fruition. On the contrary, growth last year was estimated at 2.1% according to this year's budget and investment increased by only 0.8%.

In order to achieve the ambitious macroeconomic and fiscal targets for 2019, the economic environment should improve, which could be achieved by: (a) an imminent and significant reduction in the tax burden, (b) a solution of the problem with the non-performing loans, (c) acceleration of privatisation, (d) completion of all reforms that had to be implemented until the conclusion of the third programme in August 2018, but remain unfinished.

Notably, the repayment of arrears of the state (including tax refunds) is pending, which by the end of November totalled €2,582 million, even though they should have been settled by the end of the programme with earmarked disbursements from the ESM loan. In addition, 16 structural reforms due by 20 August 2018 are still pending. In case none of the aforementioned reforms is completed before February 2019 (second Enhanced Surveillance review); the country may lose approximately €600 million from ANFAs and SMPs. Recall that Greece has already permanently lost the refund from ANFAs and SMPs from 2015 and 2016[19], amounting to €3.0 billion.

On the 31st of December 2018, the Quantitative Easing (QE) programme of the European Central Bank that started in March 2015 came to an end. Greece was the only country in the Euro area that did not partake in this programme. The exclusion from the programme for almost four years deprived Greek banks, businesses and the State of lower cost funding and prevented a recovery of the liquidity in the Greek economy at a time when it was severely limited. Greek businesses faced large financing adversities and an increased cost of borrowing, resulting in a significant loss of competitiveness in relation to other businesses in the Euro area. The cost of capital was one of the main reasons why many businesses opted to move their base of operation outside Greece in recent years.

State Budget 2019[20]

On an SB level (modified cash-based accounting), the fiscal indicators are expected to deteriorate in relation to 2018. In particular, the deficit is expected to increase by 0.8% of GDP or by €1,565 million. Respectively, the primary surplus is projected to decrease by €485 million, or 0.3% of GDP (Table 2.9).

This deterioration is partly due to the increase in SB spending by 1.3%, or €764 million and partly due to a reduction in revenue by 1.5% or €802 million compared to 2018. The increase in spending comes exclusively from the OB and specifically from interest payments (increase by 19.6% or €1,080 million), while primary expenses of the Ordinary Budget are expected to decrease by 0.7% or €316 million in relation to last year. On the revenue side, the reduction in relation to 2018 mostly comes from non-tax revenue[21] of the OB, amounting to €2,011 million, while a small decrease is

[19] Exc. those coming from the Bank of Greece.

[20] Note that from 2019 a new classification of revenue and expenses of the SB is being used, hampering the comparability with previous years.

[21] The reduction takes place in the new categories of revenue "Transfers", "Sale of Goods and Services" and "Other Recurrent Revenue" (Table 2.13).

also present in the PIP revenue. Part of the revenue loss is offset by a reduction in tax refunds[22] by €1,170 million in relation to 2018 (see Tables 2.9 and 2.13).

Note that on a national accounting basis, the expenses are completely different, while revenues remain essentially the same. In particular, the SB expenses fall by €1,317 million in relation to 2018, while on cash basis they increase. As a result, the SB deficit on National Accounting basis declines to €3,150 million from €4,646 million in 2018, while it increases on a modified cash accounting basis (Table 2.9).

Ordinary Budget Revenue

According to the new classification,[23] OB revenue, before tax refunds, is expected to decrease by 3.3% in 2019 in relation to 2018, standing at €54.100 million. As previously mentioned, this reduction comes from non-tax revenue[24] (Table 2.13).

Revenue from personal income tax is expected to increase by 0.7% in relation to the previous year, while nominal GDP is expected to increase by 3.8%. A sharper increase of 3.2% is expected in revenue from corporate income tax. However, proceeds from the taxation of real estate property (ENFIA) are projected to decrease by 8.6%, due to a small decrease in the coefficient for low-value real estate, despite an increase in fair value.

Regarding indirect taxes, the revenue from VAT is expected to increase by 0.8% to €17.210 million. This increase does not align well with that of the Nominal GDP by 3.8% in 2019. In addition, revenue from excise duties (tobacco, fuel and spirits) is expected to be 1.2% higher, standing at €7.381 million. By contrast, proceedings from "other taxes on production" are projected to be 21.9% lower than last year, standing at €944 million.

Finally, transfers, sales of goods and services and "other current revenue" also fall significantly in relation to 2018, reaching €2,011 million. Yet, revenue from the sales of fixed assets will increase rapidly by 830.6%, as in 2019 a €335 million revenue is expected from the Hellinikon property development agreement.

Overall, the estimates of OB revenue, before tax refunds, for 2019 do not reflect either the series of tax measures adopted since 2015 or the increase in Nominal GDP, which amounts to 9.2% for 2017-2019 cumulatively.

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[22] Based on the new classification in the Explanatory Report for 2019 (Table 3.2), yearly tax refunds for 2018 (and 2017) are completely different than what was presented in the Monthly Budget Execution Bulletin 2018 of last November.

[23] Explanatory Budget Report 2019, Table 3.1 and p. 52-54. In modified cash-based accounting, according to the new classification, in effect since the 1st of January 2019.

[24] See footnote 16.

Ordinary Budget Expenditure[25]

OB expenditure for 2019 is expected to increase by 1.5% year on year, reaching €51.045 million. The increase comes solely from interest payments (+19.6%), while primary expenditure is expected to decrease by 0.7% (Table 2.14). Note than all categories of primary expenditure, save one, are expected to decline. Overall, expenditure seems suppressed and it does not correspond to the announced measures.

Table 2.13

State Budget Revenue* (million €)

	2017*	2018* Estimates	2019* Budget	% Change 2018/17	% Change 2019/18
Gross SB revenue	50,696	53,824	53,022	6.2	-1.5
Gross OB revenue	48,251	49,969	49,282	3.5	-1.4
Tax refunds	*6,052*	*5,988*	*4,818*	*-1.1*	*-19.5*
OB revenue	54,303	55,957	54,100	3.0	-3.3
Income Tax From Which:	16,210	16,644	16,796	2.7	0.9
--Personal income tax	*10,623*	*10,988*	*11,070*	3.4	0.7
--Corporate income tax	*4,225*	*4,284*	*4,420*	1.4	3.2
Property taxes	3,100	3,063	2,801	-1.2	-8.6
Capital taxes	194	163	159	-16.0	-2.5
Taxes and tariffs on imports	201	225	237	11.9	5.3
Taxes on goods and services From which:	26,344	27,357	27,559	3.8	0.7
--VAT	*16,603*	*17,069*	*17,210*	*2.8*	*0.8*
--Excise Taxes	*7,102*	*7,294*	*7,381*	*2.7*	*1.2*
Other taxes on production	1,368	1,209	944	-11.6	-21.9
Other current taxes	2,440	2,598	2,631	6.5	1.3
Social contributions	66	71	58	7.6	-18.3
Transfers	762	881	488	15.6	-44.6
Sales of goods and services	1,939	1,793	773	-7.5	-56.9
Other current revenue	1,654	1,917	1,319	15.9	-31.2
Sale of fixed assets	25	36	335	44.0	830.6
PIP Revenue	2,445	3,855	3,740	57.7	-3.0

Sources: Table 3.2, Explanatory Budget Report, Ministry of Finance, December 2018 *on adjusted cash basis, according to the new distribution in effect since the 1st of January 2019.

In greater detail, expenditure for compensation of employees, which includes gross wages and the social contributions for public servants, is expected to fall year on year by 3.7% to €13.016 million in 2019. It is unclear whether this estimate includes the recently-announced recruitment (beyond the hire of teachers for people with special needs) for 2019. It is also noteworthy that retrospective payments for all special wage grids that were not disbursed in December 2018 will be paid this year; the corresponding expense (amounting to €982 million) is not included here, but in the non-allocated expenditure.

[25] Explanatory Budget Report 2019, Table 3.2 and p. 54-56. On modified cash-based accounting, according to the new classification, in effect since 1 January 2019.

Payment for social benefits is expected to decrease by 79.3% from 2018 to €246 million, as the expense for the solidarity allowance (KEA) amounting to €1.0 billion was moved to the transfers category.

Expenses for transfers that now constitute the largest category of expenses in the OB, include multiple types of expenses. The main subcategory is the transfer to social security funds, which since 2019 includes the new housing allowance benefit (at around €400 million), the support of social security contribution for young employees, as well as the solidarity allowance (KEA) amounting to approximately €1 billion. Nevertheless, these types of payments are expected to decrease by 1.4% in relation to 2018.

Expenses for purchases of goods and services are projected to fall by 14.0% year on year, despite multiple upcoming elections this year that constitute a substantial additional expense not present in 2018. The expense for "subsidies", for serving low-demand transport routes (PSOs) and for TRAINOSE (the national railway) is expected to remain unchanged.

The "other current expenditure" category for 2019 includes only a €51 million refund to the European Commission (EC) from uncompleted projects. Note than in 2018, €50 million were returned to the EC, implying that over a two-year period, €101 million had to be refunded because Greece was unable to execute the corresponding projects.

In Table 2.14, the non-allocated expenditure category does not include the expenses of the PIP, as shown in the Explanatory Report, but are depicted in a separate category. Their significant increase by 132.6% year on year is due to a €982 million provision for the retrospective payment of special wage grids to be disbursed in January 2019, as well as an expense for the recruitment of 4,500 teachers for individuals with special needs. Purchases of fixed assets, which essentially includes procurement expenses for military equipment, are anticipated to increase by 13.4% in 2019.

Table 2.14

State Budget Expenditure* (million €)

	2017*	2018* Estimates	2019* Budget	% change	
				2018/17	2019/18
SB expenditure (1+2+3)	57,422	57,032	57,796	-0.7	1.3
OB expenditure (1+ 2)	51,472	50,281	51,045	-2.3	1.5
1.Primary OB expenditure	45,261	44,761	44,445	-1.1	-0.7
Compensation of employees	12,018	13,527	13,016	12.6	-3.8
Social benefits	2,305	1,190	246	-48.4	-79.3
Transfers	28,713	26,470	26,104	-7.8	-1.4
Purchases of goods and services	1,267	1,539	1,324	21.5	-14.0
Subsidies	134	151	150	12.7	-0.7
Other current expenditure	137	78	51	-43.1	-34.6
Non-allocated expenditure	183	1,263	2,938	590.2	132.6
Purchases of fixed assets	504	544	617	7.9	13.4
2. Interest payments	6,211	5,520	6,600	-11.1	19.6
3. PIP expenditure	5,950	6,750	6,750	13.4	0.0

Sources: Table 3.2, Explanatory Budget Report, Ministry of Finance, December 2018 *on adjusted cash basis, according to the new distribution in effect since the 1st of January 2019.

Lastly, interest payments are projected to increase substantially, by 19.6%, in 2019, amounting to €6,600 million.

From the above, it is evident that the OB primary expenditure for 2019 is rather compressed and it is likely that provisions have not been made for some of the announcements made after the drafting of the Budget. Only when there is more data for all of 2018 and more details on the new categories of expenses, will it be possible to assess the Budget for 2019 with more accuracy.

Public Investment Programme

In 2019, the PIP is expected to have a €3,010 million deficit, slightly higher than in 2018. The slight increase in the deficit (by €115 million) is attributed entirely to an equal decrease in revenue, while the projected expenditure for 2019 are equal to those of 2018, 2017 and 2016, at €6,750 million. Meanwhile, expenditure was lower than projected in all three previous years. Taking this into account, it is highly likely that expenditure will be short of the €6.750 million estimate in 2019 as well. Besides, the PIP expenditure was projected initially (in May 2018) to reach €7,300 million[26], but fourth month later they were cut in the Draft Budget by €550 million, to €6,750 for yet another year.

The PIP revenue will decline by €115 million in 2019 year on year. Note, however, that due to the new way of presenting the budget, revenue amounting to €150 million has been moved to the PIP, which up until 2018 would have been part of the OB. Therefore, the PIP revenues for 2019 are essentially projected to be lower by €265 million in relation to 2018.

C. Financial Developments

- Concerns of investors about the banking sector
- Stagnation in the deposit flow by households and businesses
- Steady contraction of credit to the private sector, except for an expansion in tourism and the primary sector.
- Banks awaiting decisions regarding the new strategic plan for the reduction of non-performing exposures
- High cost of lending to businesses compared to the rest of the Euro area periphery

The detrimental investment climate in the financial sector carried over into the fourth quarter of 2018, as the market value of the banks declined by 25%, continuing the trend of losses of up to 40% in the preceding quarter. The factors that shaped the negative investment climate include qualitatively weak assets and equity of the banks, the continuing debate regarding the need to revaluate the strategic plan for the reduction of Non-Performing Exposures (NPEs) in the medium-term, stagnation in the return of deposit flows and an overarching volatility of the financial market. Regarding the impact of the banks on the real economy, the contraction of credit from the banks to the private sector continued, indicative of the pressure to settle large volumes of non-performing loans, while the cost of bank lending has remained high compared with the others Euro zone countries. These trends rendered the need to intensify the plans to achieve the quantitative

[26] Midterm Framework for Fiscal Adjustment 2019-2022, Ministry of Finance, May 2018.

targets of the banks regarding the reduction of the NPEs and to approve the quality of their fundamentals.

Having said that, following the positive outcome of the stress test in mid-2018, there were positive developments in the banks’ fundamentals, such as the subtle but steady reduction of NPEs, the continued reduction of their dependence on the Emergency Liquidity Assistance (ELA) mechanism, the further easing of capital controls, and the upgrade of the credit rating of the banks by the international agencies. Moreover, the conclusion of the third support programme, the continuing increase in employment and more generally the gradual recovery of the Greek economy, undoubtedly shape a healthier framework of prospects for the banking system in the medium term, yet sizeable challenges remain.

On the liabilities side of the banks' balance sheet, the return of deposits of households and businesses relapsed between September and November 2018, after 7 continuous months of a subtle yet steady recovery. The return of deposits from households and businesses reached cumulatively €3,537 million and €1,224 million respectively. The marginal reduction observed in October-November 2018 is indicative of a wait-and-see stance and a temporary relapse of the recovery of their trust in the banking system (Figure 2.6). The unfavourable investment environment in the capital markets and the stock exchange, for the reasons mentioned above, as well as an increasing uncertainly regarding the short-term prospects of the sector, contributed to this development as well.

From August 2015 until November 2018, the private sector deposits increased by €17.3 billion, out of which €9.0 billion came from households and €8.3 billion from non-financial corporations. Nevertheless, the total amount of deposits remained significantly lower than in November 2014, by €27.1 billion, of which €24.9 billion comes from households and only €2.2 billion from businesses. Yet, deposits from non-financial corporations showed a marginal increase since the end of 2015 by €0.2 billion. The average monthly deposit inflow reached €122 million for households and -€230 million for non-financial corporations in the period between September and November 2018. The flow of deposits during that period deteriorated year on year by €93 million and €57 million respectively, but also compared with the average monthly deposit inflow between August 2015 and November 2018 for both households and non-financial corporations, by €226 million and €204 million respectively.

Up until the third quarter of 2018, the level of private sector deposits was positively influenced by an inflow of banknotes in the system, which came from a less "under the mattress" hoarding. This observation is verified by the fact that the banknotes in circulation decreased from their peak of €50.5 billion in June 2015 to €31.8 billion in September 2018, and remained close to that level since. Therefore, the hoarding of cash has gradually subsided, as banknotes in circulation beyond the ECB allocation reached zero in September 2018, from €22.8 billion in 2015. The climate of confidence recovery in the banking system might have been encouraged by the gradual relaxation of capital controls up until September 2018, when cash withdrawal limits within the country were lifted, yet withdrawal limits regarding the transactions of legal entities abroad are still in effect.

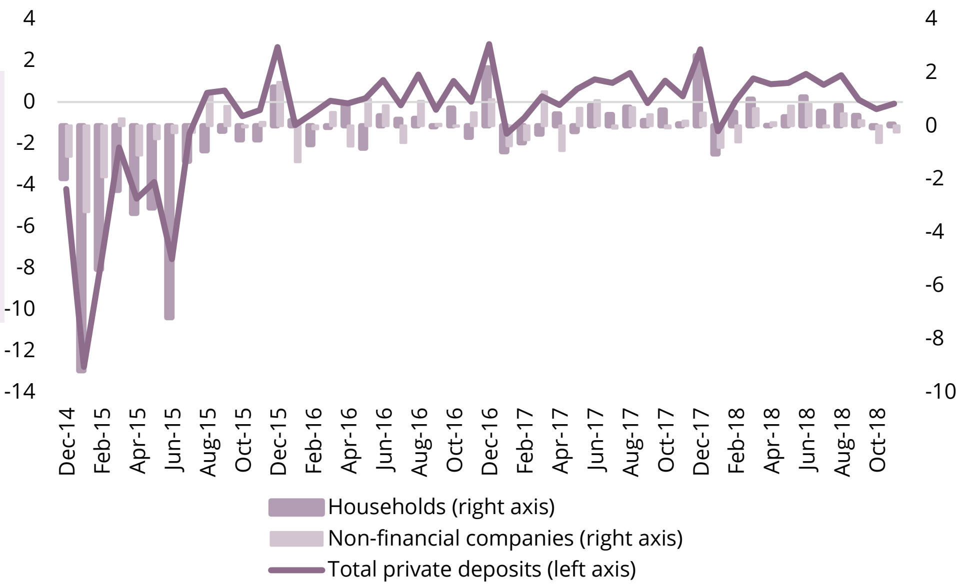
That said, the recent tumult in the Greek financial markets and the pending issues regarding the revision of the strategy for NPE reduction accentuated the uncertainty and inhibited faster trust recovery and deposit return. For 2019 private deposits are expected to strengthen mildly, to the extent that trust is gradually being restored, provided that political and economic uncertainty does not intensify, e.g. with respect to achieving the agreed fiscal targets and reform implementation, especially keeping in mind that 2019 is an election year.

The second pillar of the liabilities of the banks concerns the financing from the Euro system. The dependence of the banks on the Emergency Liquidity Assistance (ELA) of the ECB continued to decline gradually, as the ELA funding fell to €2.7 billion in November 2018, from €19.9 billion a year earlier and €86.8 billion in June 2015 (**Error! Reference source not found.**7). Correspondingly, the total funding from the Euro system kept falling, with the outstanding balance standing in November 2018 at its lowest level in a decade, at €12.2 billion, from €32.9 billion in the same month of 2017 and €126.6 billion in June 2015.

Figure 2.6

Monthly net private deposit flow at Greek Banks (billion €)

Stagnation of deposits from households and businesses in the period Sep 18-Nov 18



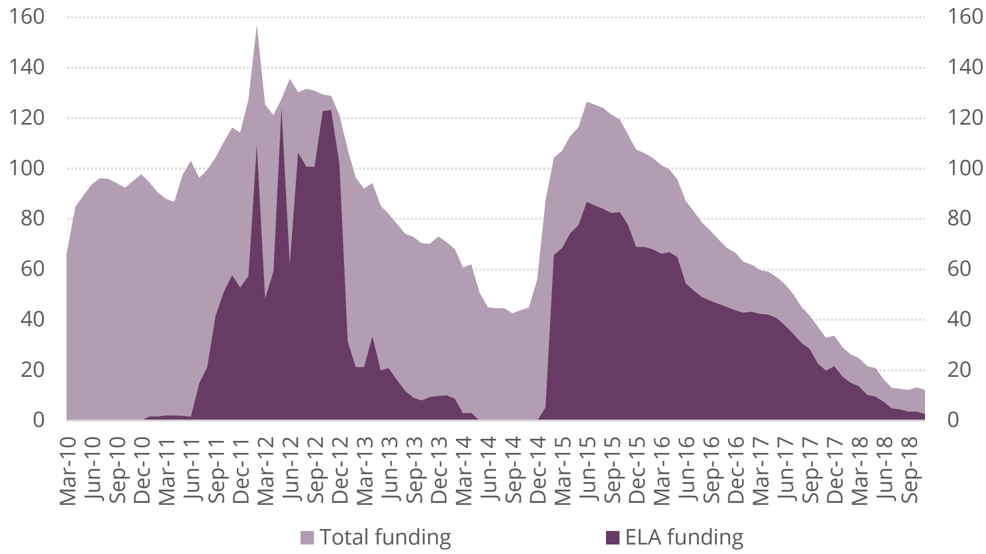
Source: Bank of Greece

The systematic decline of funding from the Eurosystem has led banks to develop alternative liquidity recourses from the inter-banking market, such as repurchase agreements (repos). The cost of these alternative financing instruments depends on the credit assessment of the banks by the international credit rating agencies. In that regards, the upgrade of the credit ratings of the Greek banks in mid-2018 had a positive impact.

On the asset side, credit activity remains particularly subdued. This is likely the result of factors concerning both the supply and the demand for credit. Concerning the supply, the low quality of the banks' equity, with high rate of deferred taxes and negative effects from the reduction of NPLs mainly through write-offs, and their exclusion from the ECB's quantitative easing programme are considered to be among the crucial factors that reduce the credit capacity of the banks.

Figure 2.7

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



The funding from the ELA decreased from €21.6 billion in the beginning of the year to €2.7 billion in November

Source: Bank of Greece

Private sector funding, excluding loan write-offs, shrunk by 1.4% year on year in October and November 2018, stagnating in comparison with the preceding quarter. After a slow, yet steady easing of the credit contraction between 2016 and 2017, in 2018 stagnation was observed and credit contracted for the eighth consecutive year (Table 2.15). In October and September 2018, the year-on-year credit contraction in the private sector came from its reduction by 2.1% to households, by 1.9% to sole proprietors and unincorporated partnerships and by 0.6% to non-financial corporations (Table 2.15). The corresponding year-on-year rates of change for the third quarter of 2018 were -2.0% for households, -1.5% for sole proprietors and -0.8% for non-financial corporations. The trends of bank credit differentiated strongly among the economy's sectors, with credit expansion in Tourism and Agriculture, marginal fluctuations in Industry and Retail Trade, and contraction in Energy, Shipping, Construction and Transport and others.

A research conducted by the Bank of Greece on bank credit showcased that, even though credit criteria remained unchanged, a substantial increase in loan demand for the third and fourth quarter of 2018 was observed. More specifically, loan demand for the entirety of the fourth quarter of 2018 reached its highest level in two and a half years, mostly from SMEs as well as from larger businesses, asking mostly for long-term loans. That said, on the supply side, the criteria seem unchanged for the past five years, with only a slight worsening in mid-2015. In relation to the expectations for 2019, it seems there should not be any significant fluctuations from both the side of supply and that of demand.

The Non-Performing Exposures (NPEs) receded in the third quarter of 2018 by 4.4% or €3.9 billion, slightly faster from the rate recorded in the preceding quarter (-4.1%), yet slower than in the corresponding quarter of last year (4.8%)[27]. The NPEs totalled €84.7 billion or 46.7% of the total exposure in September 2018, about €22.5 billion or 21.0% lower than their peak in March 2016. Note that the target agreed between the banks and the SSM envisages a cumulative decrease by about €43.0 billion or 40% from March 2016 until the end of 2019. In accordance with the intermediate targets of the operational plans, up until September 2018, banks have successfully implemented 53% of the total correction. Nevertheless, the NPE contraction rate should accelerate in order to achieve the targets for the current year, but also the currently discussed ambitious targets for 2020-2021. Note that the target likely to be agreed for 2020-2021 is a cumulative decrease of NPEs by about 17%-22% by the end of the period.

Table 2.15

Bank credit to the domestic sector (annual % change of flows*)

Quarter / Year	4/17	1/18	2/18	3/18	Oct.18	Nov.18
Total private sector	-0.9	-0.9	-1.7	-1.4	-1.4	-1.4
Households & NPIs	-2.3	-2.3	-2.2	-2.0	-2.1	-2.1
Sole proprietors and unincorporated partnerships	-0.1	-0.4	-1.3	-1.5	-1.9	-1.9
Non-financial corporations	0.1	0.1	-1.5	-0.8	-0.6	-0.6
Agriculture	-5.2	-3.3	-2.9	3.8	6.5	6.1
Industry	-3.2	-1.7	-1.6	1.4	-0.3	-0.8
Trade	2.3	1.8	0.2	-0.3	-0.6	-0.3
Tourism	0.4	1.1	1.8	3.4	4.1	4.6
Shipping	-1.2	-3.4	-3.3	-3.9	-3.0	-3.6
Construction	-1.6	-1.5	-1.8	-2.4	-2.4	-2.3
Electricity-gas-water supply	0.1	-1.7	-10.7	-10.1	-3.7	-2.9
Transport and logistics	29.3	20.2	-6.6	-1.3	-0.5	-0.1
Interest rates on new loans (period average. %)						
Consumer credit	8.79	8.42	8.80	9.87	8.78	10.28
Mortgage credit	2.93	2.88	2.93	3.01	2.95	3.33
Loans to non-financial corporations	4.53	4.32	3.83	4.05	4.99	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.

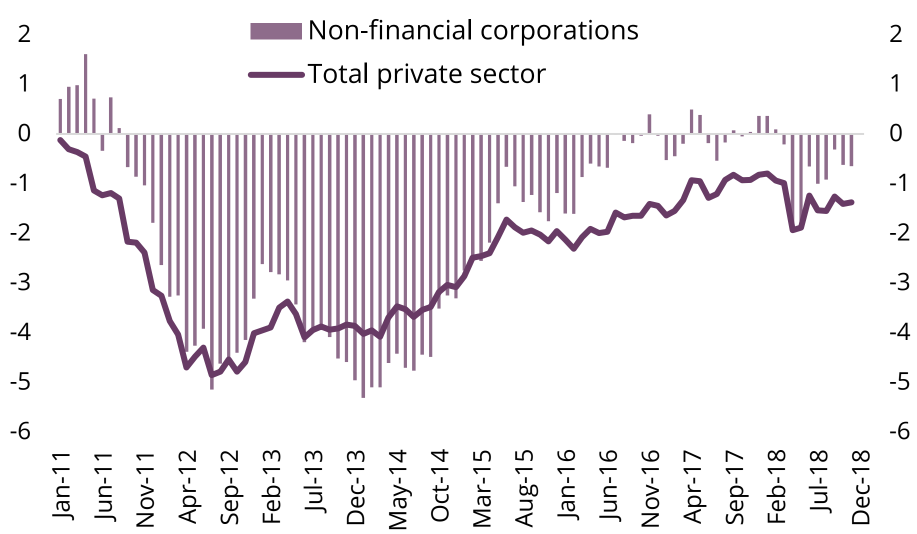
In addition to the quantitative targets, it is necessary to improve the qualitative characteristics of the NPE reduction. Around 65% of the cumulative reduction of the NPLs since the beginning of 2016 was mainly based on loan write-offs (€14.7 billion), with €1.1 billion written-off in the third quarter of 2018 (against €3.3 billion in the first quarter of 2018, and €6.5 billion in 2017). This is an instrument with the strongest negative impact on the profitability and capital adequacy indicators of the banks. In the second and third quarter of 2018, the sale of NPL portfolios increased to €2.0 billion and €2.9 billion respectively, yet their cumulative contribution to NPL reduction remained low (€0.3 billion in the first quarter of 2018 and €3.6 billion in 2017), due to persistently very low transfer prices that cause pressure on the financial results. The negative trends include slower liquidation and receipts (both at €0.6 billion for the second quarter) connected with the gradual

[27]Only data on NPEs within the balance sheet are presented.

implementation of electronic auctions and the out-of-court settlement mechanism or other loan settlement procedures. On the positive side, the default rate declined to 1.9% in the second quarter of 2018 from 2.1% in the previous one, while the cure rate increased to 1.9%.

Figure 2.8

Bank financing of the domestic private sector 2011-2018 (annual % change of flows*)



Net bank financing for the entirety of the private sector remained negative for the eighth consecutive year

Source: Source

* 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 achieve a faster convergence with the revised NPL reduction targets, the receipts from collection and liquidations must increase and the cure rate must be continually above the default rate. The decrease of NPEs in the third quarter of 2018 came mainly from the consumer and business portfolios, in contrast with the housing credit, where the NPEs marginally increased. In business credit, the levels of NPLs in September 2018 remained stagnant among sole proprietors and very small businesses (at 68.6% from 68.8% in the previous quarter) while they improved, albeit remaining quite high, for SMEs (at 60.9% from 62.3%) and larger businesses (at 27.4% from 28.3%).

In order to achieve the NPL reduction target and ease the pressure on the net capital and assets of the banks, two proposals regarding the strategy to be followed by banks to reduce NPEs (one from the FSF and one from the Bank of Greece) were put up for public debate towards the end of 2018. Aiming to quickly improve the asset quality of the banks, both proposals outline different ways through which a part of the NPEs and of the differed tax credits can be securitised and sold to third parties though a special purpose vehicle. Regardless of the solution chosen in coordination with the European Single Supervisory Mechanism (SSM), it is important that decisions are expedited in order to curtail the uncertainty about the short-term prospects and to boost confidence that the targets are attainable.

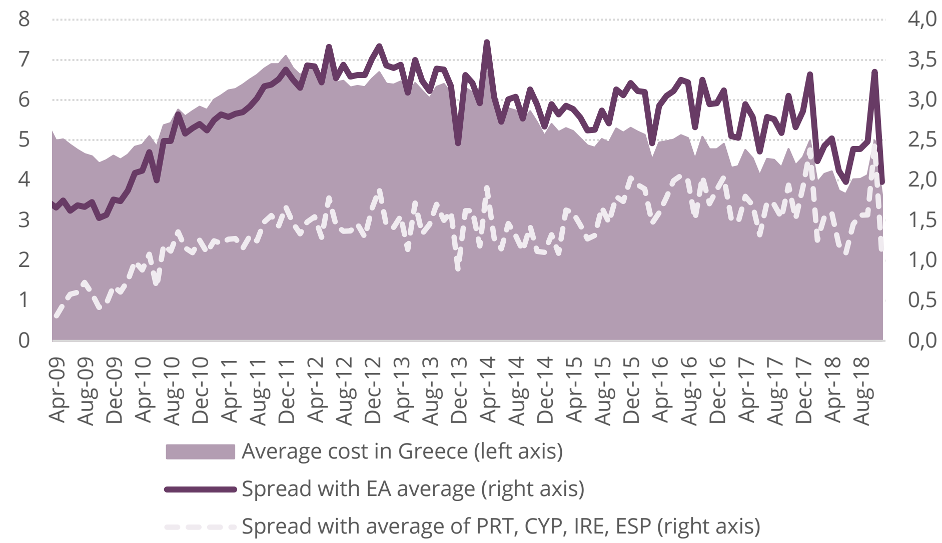
In the medium term, the implementation of a holistic plan to improve the quality of the assets and a faster NPL reduction, together with the envisioned economic recovery, are expected to have a positive impact, boosting further the confidence in the banking system. At the same time, serious challenges will remain in the short-term, which is why a systematic and clear strategy for the banking system is required in order to regain the trust of international institutional investors. The determining factors of the lending policy will be the rate of deposit return, the effective reduction of the NPLs and the access to the cross-border banking market. Boosting the efficiency of tools, such as out-of-court debt settlement, online auctions and the regulatory framework for indebted households, could contribute to the faster convergence with the revised targets of the NPEs in a way that eases the constraints on new bank lending. Larger businesses, especially those listed in the stock market in Greece and abroad, will continue to seek alternative to bank borrowing forms of financing over, such as bond issues and initial public offerings of shares.

Interest rates on new deposits decreased marginally to 0.28% between October and November 2018 (from 0.29% in the third quarter), at a similar level as in the second half of 2017. The interest rates on new loans increased to 4.8% over the same period, from 4.7% in the third quarter and 4.6% in the first half of 2018. The rise came mainly from the interest rates to businesses, as well as households, especially in consumer credit (Table 2.15).

Figure 2.9

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

The cost of new borrowing for businesses in November 2018 remained 105 bps higher than the average of the Eurozone periphery



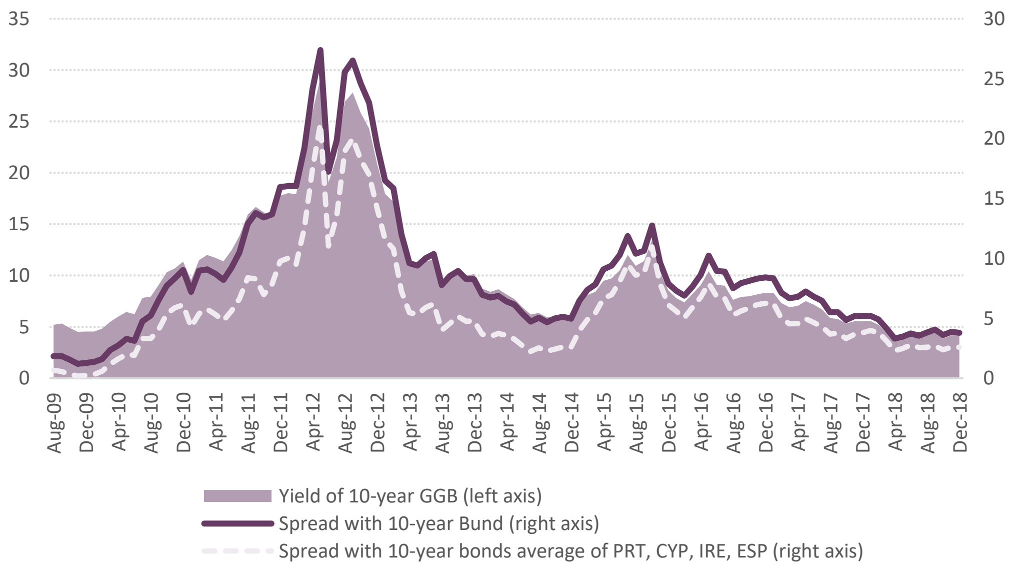
Source: ECB

The average cost of bank financing to the private sector declined to its lowest point since the adoption of the Euro to 3.6% last November, after a rapid increase to 5% in October. It is lower than the 4.1% recorded in the first half of the year and 4.5% in 2017, yet it has remained significantly higher than in other Eurozone countries. Indicatively, according to the ECB composite indicator of borrowing costs (Figure 2.9), the cost for non-financial corporations in November 2018 was at 1.7% in the Euro area, 1.6% in Germany, and 2.6% in the periphery countries of the Euro area that completed a programme (Portugal, Ireland, Cyprus, Spain). The spread of the cost of borrowing for Greek corporations compared to the average for the Eurozone and its periphery fell to its lowest point in the past eight years at 198 and 105 basis points respectively. Compared with their level before the crisis, the spread of the cost of borrowing to Greek corporations against the Euro area in total and its periphery in particular has more than doubled (100 basis points in 2008) and more than tripled respectively (only 37 b.p.). The average cost of borrowing for Greek corporations is considerably higher than the average of the countries in the periphery of the Eurozone that have completed an assistance programme.

With regards to the cost of new borrowing from the markets by the Hellenic Republic, the average yield of a 10-year bond increased to 4.4% in the fourth quarter of 2018, against 4.1% in the third quarter and its lowest level of 3.8% in January 2018. Up to a certain degree, this is due to the fact that, after Greece successfully raised €3.0 billion from the markets by issuing a seven-year bond with a yield at 3.5% in February 2018, the international investment climate deteriorated. In contrast to the situation on the international level, uncertainty in the country partly eased due to the agreement to implement medium-term measures for the Greek public debt, the supply of funds to accumulate a safety cash buffer, and the setup of the relationship between Greece and its European partners and creditors for the period following the end of the support programmes. At the same time, however, uncertainty increased regarding policy measures which raise questions about the orientation of reforms the country will follow after the end of the support programmes, especially since 2019 is a year of elections. For the time being, concerning the rest of the countries in the Eurozone, the cost of borrowing for the Greek state from the markets remained substantially higher by the end of 2018 (Figure 2.10) at 409 basis points against the German 10-year bond (380 bps in the third quarter of 2018) and at 268 basis points against the average of the countries of the periphery implementing similar support programmes (253 bps in the third quarter of last year).

Figure 2.10

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



The spread of the 10-year Greek bond against the German bund reached 409 bps in December, after an eight-year low at 330 bps in early 2018

Source: ECB

The partial easing of the uncertainty in the Greek economy due to the conclusion of the third programme was confirmed by the recent upgrades of the credit ratings of the Hellenic Republic in mid-2018, by agencies such as S&P by one grade and Fitch by two grades. Note, however, that the credit rating of Greece remains between three (Fitch) and six (Moody's) notches away from the "investment grade", i.e. it remains in the speculative grade. The low rating is partly related to the time needed by the markets in order to gain trust in countries after the end of adjustment programmes. Box 2.1 compares the development of the credit rating of all the Eurozone countries that completed support programmes. The recovery of investment trust was time-consuming and gradual in every country, with Portugal and Cyprus being notable examples, needing more than three years after the conclusion of the programme to return to the investment grade. The time it takes to recover can only be sped up by persistence on implementing reform policies that improve the investment climate in the country.

Box 2.1.

Evolution of the credit rating in countries that completed the ESM support programmes

After the breakout of the global financial crisis in 2008, the Eurozone found itself in a decade where five of its Member States needed to resort for credit to an official institution, such as the European Stability Mechanism (ESM). The crises that each of the five Member States faced varied in terms of their causes, characteristics, intensity and duration. Yet, in every case they came with a rapid increase in the risk assessment of the country from the global investment community, rending further borrowing from the markets extremely costly. The risk of a country is reflecting in the yield of its state bonds as well as its ranking from accredited international rating agencies. In particular, the cases in which Eurozone countries resorted to international borrowing in the period 2010-2018, were in chronological order:

- Greece, due to severe fiscal and macroeconomic imbalances and derailment of the public debt, entered the first support programme in May 2010 and concluded the third one in August 2018. Cumulatively, the three Greek programmes had by far the largest extent and duration than the support that the other countries received.
- Ireland, due to weaknesses in its banking system that worsened after the global financial crisis, started its first programme in November 2010 and concluded it in December 2013.
- Portugal, due to macroeconomic imbalance and high public and private debt, entered a programme in May 2011 and concluded it in three years, in May 2014.
- Spain, due to the need to reform the banking system, as a result of the sudden collapse of excessive appraisals in the real estate market, borrowed from the ESM in July 2012 and repaid its obligation earlier than expected (within 18 months) in December 2013.
- Cyprus faced an acute problem with its banking system, which needed a radical reform at the beginning of 2013. The country started the support programme in March 2013 and concluded it within 3 years, in March 2016.

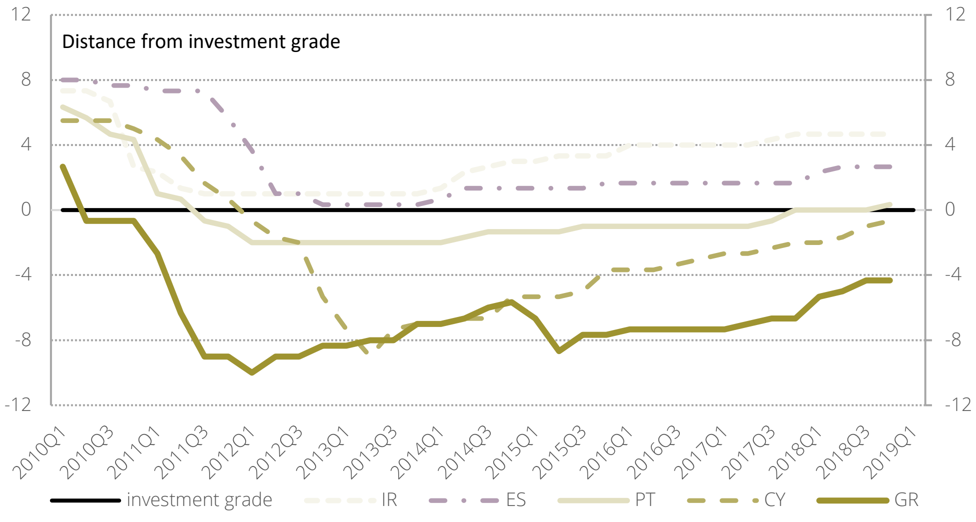
Even though every case had different traits, it is instructive to compare the evolution of risk assessment of the country, both during and after the conclusion of the support programmes. For this purpose, data was collected on the rating of the 10-year sovereign bond of these five countries from the three largest rating agencies (S&P, Moody's and Fitch). Every agency uses a different rating scale that comprises at least 22 different rankings, from the top notch (AAA or Aaa) to that of bankruptcy (C or D).

Figure 2.11

Credit Rating of ESM Supported Countries

A. Evolution of the rating for the duration of the crisis period (2010- 2018)

(Number of rankings over/under the lowest investment grade 1/)



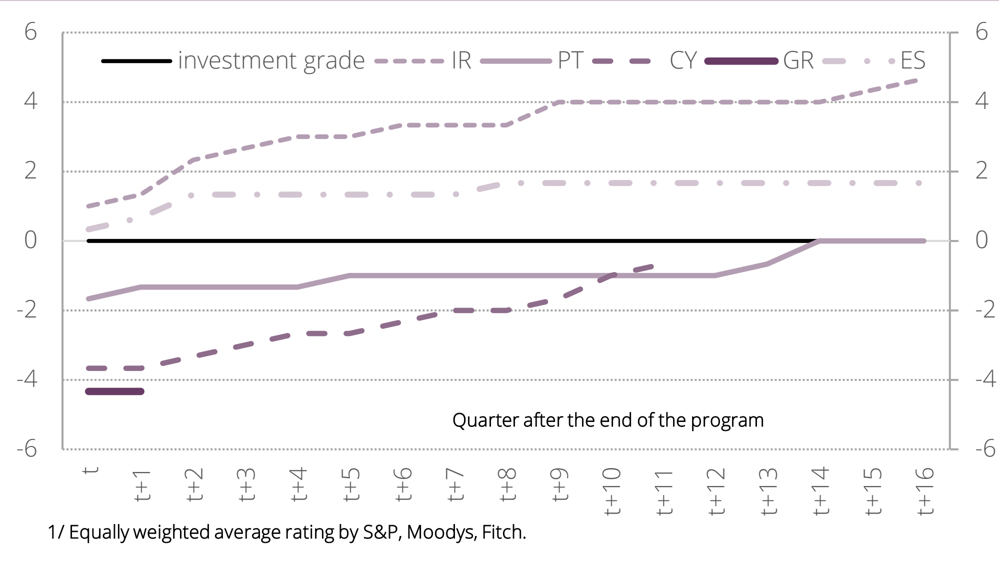
1/ Equally weighted rating by S&P, Moodys, Fitch

The upper ten rankings of each agency belong to the "investment grade" region while the lower rankings constitute the "speculative grade" region, which is linked to higher yields but also higher risk. In order to make the assessment comparable, we set the 10th ranking of each scale as the limit of the investment grade and represented the rest of the grades as the distance between them and the limit. When the distance is positive, this means that the country ranks higher than the lowest rating in the investment grade, whereas if the distance is negative this implies that the country is assessed in the speculative grade. To represent the risk assessment of every country per quarter, we calculated the arithmetic mean of the distance from the investment grade estimated by the three rating agencies based on their most recent report per quarter.

Figure 2.11.A. depicts the evolution of the risk assessment per country for the period 2010-2018. It is noteworthy that for every country the degradation of ranking for the duration of each crisis is clearly speedier than that of their upgrade towards the end and after the conclusion of the programmes. Regarding Greece, it started from the lowest ranking amongst all other

countries at the beginning of 2010, and has remained lower than the investment grade since the second quarter of 2010. By the end of 2018, the average distance from the investment grade was at -4.3 notches, which is due to a -3, -4 and -6 assessment from Fitch, S&P and Moody's respectively.

B. Evolution of the credit rating after the exit from the ESM programme - (Number of rankings over/under the «investing grade» limit 1/)



Source: Trading Economics, Data Analysis IOBE

Figure 2.11.B compares the evolution of risk assessment per country in comparison to timestamp zero, defined as the quarter when the country concluded its respective financing programme from the ESM. Recovery of investment confidence was observed to be time-consuming and gradual for every country, with Portugal being a notable example needing 3.5 years (14 quarters) to return to the investment grade and Cyprus, which remains slightly lower than the investment grade after almost 3 years (11 quarters). To be precise, Cyprus was recently upgraded to the investment grade limit by two out of three agencies (S&P and Fitch). Nevertheless, the average of the distance remains negative due to the ranking by Moody's (-2). Unlike Portugal or Cyprus, Spain and Ireland were never degraded below the investment grade on average at any point during the crisis; therefore their access to the markets after the end of the programmes was easier. In the case of Greece, it need be reminded that by the end of the third programme in September 2018, a cash buffer was accumulated that is estimated to cover the financing needs of the country for up to or a little less than two years. If Greece follows the same risk assessment path as Cyprus and Portugal, it is estimated that the country will have to cover at least a part of its refinancing needs from the markets before the country reaches once more the investment grade.To conclude, the recovery of investment confidence and the full access to the market for countries that faced a crisis and were degraded below the investment grade limit takes significant time. The time it takes to recover can only be sped up through persistence on the implementation of reform policies that improve the investment climate in the country.

3. Performance and Outlook

3.1 Macroeconomic Developments

- An acceleration of the growth rate in Greece in the third quarter of 2018 to 2.2%, from 1.7% the preceding quarter and from 2.0% in the same quarter of the year before
- GDP expansion of 2.1% over January-September, 0.9 points faster than a year earlier
- Continued recovery mostly from stronger external sector, due a significant growth of exports (+8.3% over the first nine months) and a smaller increase in imports (+3.1), which however accelerated rapidly in the third quarter (+15.0%)
- Slight increase in investment (+1.5%) and private consumption (+0.8%), both weaker than in 2017
- Continued public consumption cuts (-3.0% over the first nine months).

Recent macroeconomic developments in Greece

The Greek domestic product was 2.2% higher year on year in the third quarter of 2018, growing by 0.2 percentage points faster than a year earlier. The growth in the third quarter was also 0.5 percentage points higher than in the preceding quarter. As a result, the GDP growth rate for the first three quarters of the previous year averaged 2.1%, against 1.2% over the same period in 2017. The new increase in GDP is attributed, for the first time for a quarter in 2018, mostly to a rapid increase in investment, which is in turn mostly due to stronger stock accumulation, rather than a higher growth in gross fixed capital formation, as explained further below. Household consumption also contributed to growth, albeit to a lesser extent than investment, while public sector expenses continued to diminish. In contract to the preceding quarters of 2018, the external account worsened year on year, due to a higher increase in imports in relation to exports.

In detail as to the trends in individual components of GDP in the first nine months of the year, domestic consumption marginally increased by 0.1%, while a year ago it was increasing by 0.9%. Its increase came from growth in the first quarter (+0.4%), as it declined in the third quarter by 0.3%. Concerning the components of total consumption, the increase was solely driven by private consumption, with a rise by 0.8%, albeit smaller than last year (+1.3%). Public consumption steadily declined since the beginning of 2018, with the contraction rate reaching 4.0% since the second quarter. Overall, in the period under examination, public consumption was 3.0% lower than in 2017, when its decline did not exceed 1.2%.

The year-to-date investment expenditure increased year on year by 1.5% by the end of September, against a stronger growth by 7.4% in the same period of 2017. The increase came exclusively from a rapid expansion in the summer quarter, by 42.2%. This is due, however, to a different trend in stocks over this period in comparison to a year before (positive rather than negative). Gross fixed capital formation fell significantly in the third quarter, by 23.2%. As a result, gross fixed capital formation receded in the first three quarters of 2018 by 6.2%, against an 8.3% expansion in the previous year. Therefore, the slightly larger amount of investment in relation to 2017 is attributed to an expansion in stock accumulation.

Almost all the decline of fixed capital formation came from a fall in Other Buildings and Structures by 15.6%, against a similar increase by 18.4% in the previous year. Transport Equipment - Weapon Systems came next with a 22.3% decline, compared with a positive trend in the first nine months of 2017 (+39.5%). As indicated in previous IOBE reports on the Greek economy, the increase was mainly the result of higher investment in ships in the first half of 2017 (81.8% or €1.06 billion increase of imports).[28] The much lower fixed capital formation in this kind of means of transportation a year later (-73.9% fall in imports) was the key driver of the drop in the category of Transport - Weapon Systems and thus in overall fixed capital investment in the first nine months of 2018. The base effect abruptly changed sign in the third quarter last year (+€540.4 million or +1098%), while the same is expected to occur, with notably lower intensity, in the final quarter as well, limiting the pressure on investment.

Among the other categories of fixed capital, which all strengthened in the first three quarters of last year, the strongest growth in both absolute and relative terms was recorded in Other Machinery - Weapon Systems (+20.4% or +€648 million), against a marginal contraction by 1.6% a year before. Investment in ICT equipment came next (+19.1% or +€195 million), followed by Dwellings (+12.3% or +€108 million), against a drop by 2.8% and 4.6% respectively in 2017. Dwellings expanded over this period of the year after 11 consecutive years of decline. The lowest percentage and absolute growth was recorded in investment in Cultivated Biological Resources, by 4.3% or only €4 million, much smaller than in the same period of the preceding year (+20.9%).

In the external sector of the economy, the export expansion carried over to the third quarter with a similar velocity to the two previous quarters. As a result, the year-to-date exports by the end of September were up by 8.3% year on year, compared to a slightly weaker growth in the same period of 2017 (+7.3%). Both export components continued to grow over the summer at a similar rate. Over the first three quarters of 2018, the exports of goods increased slightly stronger than the

[28] A text box in the IOBE report "The Greek Economy 02/18" outlined the significant correlation of imports in ships, which can serve as a proxy for investment in ships, with the gross fixed capital formation in Transport Equipment – Weapon Systems (Box 3.1).

exports of services, by 8.6% or €2.1 billion, against 8.3% or €1.65 billion. However, a year before, the ranking in terms of contribution to the growth of exports was the opposite, as the international demand for services from Greece had increased by 10.4%, while the exports of goods had expanded by 4.8%.

The continuation of a significant expansion in exports in the third quarter was overshadowed by an even higher expansion in imports. The demand for imports was high for both goods and services. The imports of goods increased in the third quarter of 2018, a development related to the trend change in the imports to positive from negative in the previous quarters. Overall, between January and September 2018, imports were 3.1% higher than in the previous year, a pace which constitutes a significant deceleration in relation to the same period in 2017 (+8.9%). Given the drop in the imports of goods in the first half of the year, the expansion of imports of services in the first three quarters of last year, by 14.6%, was the main reason behind the increase of overall imports, higher than the increase recorded in 2017 (9.4%). Over the same period, the imports of goods were only 0.6% higher, while a year before they were expanding by 8.8%. The much stronger increase in exports in the first three quarters of last year resulted in a significant fall of the trade balance deficit, by 47.2% or €2.2 billion, resulting in its drop to €2.45 billion or 1.7% of GDP.

On the supply side, the domestic gross value added increased in January-September 2018 by 1.8%, recording the same year-on-year growth as in the corresponding period of 2017. Yet, output increased in 8 out of 10 major sectors of the Greek economy, while in 2017 growth was observed only in 5 sectors. The strongest growth took place in Professional – Scientific – Technical Activities by 7.5%, 5.3 percentage points higher than in 2017. Construction and the Primary Sector followed, with a similar increase, 4.8% and 4.7% respectively, offsetting a 7.0% decrease and an 8.2% increase a year before, the strongest negative and positive changes then, respectively. Weaker growth was recorded in Wholesale – Retail Trade - Transport – Storage - Hotels – Restaurants (4.1%) and Arts – Leisure – Entertainment (3.4%) slightly higher than in the previous year in the first case (3.3%) and against a drop by 1.6% in the second. Industry output increased by 1.2%, less than in 2017, when it recorded the second-highest increase (+4.8). The weakest growth was recorded in Public Administration – Defence – Compulsory Social Security (0.8%) and Real Estate Activities (0.2%), against a 0.9% decline and 2.1% growth in the preceding year respectively.

By contrast, activity in Financial - Insurance Activities contracted by 9.7%, continuing and strengthening their decline from last year (-6.0%). The decline in Information - Communication, was marginal, by 0.4%, similar to that recorded a year before.

The continuation for a second quarter over the summer months of the strong increase in employment in Education, which given the time when it occurs is difficult to explain, as well as an expansion in the primary sector, were the main reasons behind a new year-on-year drop in unemployment in July-September last year. In particular, the unemployment rate dropped to 18.3%, the lowest percentage for that period of the year since 2012, 1.9 and 0.7 p.p. lower than a year before and the preceding quarter, respectively. In total during the first three quarters of 2018, unemployment stood at 19.5%, 2 p.p. lower than a year earlier. The decline in unemployment came mainly from a rise in employment by 1.8% or 68,000 people (63.3% of the reduction of unemployment) and secondarily from a decline of the labour force (-39,500 people).

Most jobs were created in certain sectors that had not previously shown strong uptrend in employment. The strongest employment growth (January-September 2018) was recorded in the Primary Sector by 16,800 people (+3.7%). Health Services followed with 15,000 (+6.0%) and Wholesale-Retail Trade with 12,100 (or +1.8). 9,800 more jobs were created in Professional – Scientific – Technical – Administrative Activities and 9,100 in Information – Communication. Sectors with significant contribution to employment in 2017, such as Tourism and Manufacturing, had a much weaker growth last year (+6,200 against +13,800 jobs a year before, and +700 from +9,100 jobs).

Despite slightly weaker growth of household consumption in the third quarter, the rate of price increase accelerated from 0.2% in the first half of the year to 1.0%. The increase in inflation came mainly from a price increase in Communications by 4.0% (against a 1.7% increase in the first half), as well as a trend change in Food – Non-Alcoholic Beverages (+1.3% from -0.4), Housing (+0.3% from -1.2%) and Healthcare (+1.1% from 0%). Apart from the last change which reflects the exogenous to consumer behaviour impact from the increase in oil prices, the rest have no correlation with any exogenous factor, such as an increase in indirect taxation. For this reason, it is assumed that they are linked to a certain extent with a resurgence in consumer demand by households for certain types of goods and services.

To sum up, the trends in the GDP components in the third quarter of 2018 and in the first nine months overall highlight the sluggish domestic demand (sum of the total consumption demand and the net fixed capital formation), which weakened for the first time since 2015, by 0.6%. Given a slight increase of private consumption in the three first quarters, the decline of the domestic demand came from public consumption and investment. The part of the decline that came from investment came from a temporary effect occurring in the first half of 2018, namely the intense drop of investment in means of transportation and ships, in particular. With the exception of Other Buildings and Structures, all the remaining categories of fixed capital increased steadily in the first nine months, a trend that probably carried over to the final quarter. Note that the decrease in Other Buildings and Structures came from a fall solely in the third quarter, and is therefore unlikely to continue. Along with the expected weakening or reversal of the trend in the means of transportation, the trend in total fixed capital formation was possibly marginally negative in the second half last year.

The stronger international demand for goods and services overcompensated for the negative contribution of domestic demand to GDP from the beginning of the year up until September (€3.7 billion against -€921 million). Combined with the mild rise in imports, due to the above-mentioned decline in investment in transportation, the improvement in the trade balance was the main growth driver, contributing 1.57 percentage points of the GDP growth in January-September of 2018.

Significant and positive, yet less than that of the external sector, was the contribution of the third component, the difference in stocks, by approximately 1 p.p. That said, as the strong negative trend in investment in means of transport changed sign in the third quarter and will be significantly weaker overall in the second half, the positive impact of the external sector on GDP will probably weaken. However, an increase in fixed capital will have a positive effect on domestic demand. Together with any continuation of the mild strengthening of consumer spending, it may offset a possible weakening of the stimulus from net exports on GDP.

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	242790	5.6%	208005	3.6%	59922	23.7%	50966	5.1%	77759	13.2%
2007	250505	3.2%	216978	4.3%	64994	8.5%	56373	10.6%	88883	14.3%
2008	249863	-0.3%	221534	2.1%	59019	-9.2%	58487	3.7%	89821	1.1%
2009	239108	-4.3%	219973	-0.7%	43185	-26.8%	47790	-18.3%	71683	-20.2%
2010	226132	-5.4%	207099	-5.9%	38612	-10.6%	49960	4.5%	69216	-3.4%
2011	205336	-9.2%	188124	-9.2%	30200	-21.8%	49998	0.1%	63489	-8.3%
2012	190317	-7.3%	173951	-7.5%	22963	-24.0%	50579	1.2%	57528	-9.4%
2013*	184237	-3.2%	167795	-3.5%	20696	-9.9%	51390	1.6%	55563	-3.4%
Q1 2014	46300	0.6%	42054	1.0%	4925	-16.8%	13288	5.6%	14160	0.1%
Q2 2014	46225	0.4%	42039	0.7%	5442	8.9%	13468	4.5%	15009	8.9%
Q3 2014	46824	1.3%	42163	0.0%	5924	11.1%	14359	9.0%	15173	5.5%
Q4 2014	46295	0.8%	42065	-0.4%	5769	29.7%	14242	11.7%	15505	17.0%
2014*	**185644**	**0.8%**	**168320**	**0.3%**	**22059**	**6.6%**	**55357**	**7.7%**	**59847**	**7.7%**
Q1 2015	46466	0.4%	42362	0.7%	4943	0.4%	14990	12.8%	16393	15.8%
Q2 2015	46505	0.6%	42553	1.2%	4216	-22.5%	15026	11.6%	15696	4.6%
Q3 2015	45613	-2.6%	41455	-1.7%	4604	-22.3%	13192	-8.1%	13021	-14.2%
Q4 2015	46166	-0.3%	42134	0.2%	5612	-2.7%	13719	-3.7%	14978	-3.4%
2015*	**184750**	**-0.5%**	**168504**	**0.1%**	**19375**	**-12.2%**	**56927**	**2.8%**	**60089**	**0.4%**
Q1 2016	46164	-0.7%	41937	-1.0%	5259	6.4%	13587	-9.4%	14842	-9.5%
Q2 2016	45921	-1.3%	41765	-1.9%	5823	38.1%	13495	-10.2%	15396	-1.9%
Q3 2016	46072	1.0%	42216	1.8%	4855	5.5%	14367	8.9%	14844	14.0%
Q4 2016	46109	-0.1%	42251	0.3%	4587	-18.3%	14390	4.9%	15757	5.2%
2016*	**184267**	**-0.3%**	**168168**	**-0.2%**	**20524**	**5.9%**	**55839**	**-1.9%**	**60838**	**1.2%**
Q1 2017	46150	0.0%	42244	0.7%	6824	29.8%	14362	5.7%	17180	15.7%
Q2 2017	46730	1.8%	42219	1.1%	5730	-1.6%	14724	9.1%	16288	5.8%
Q3 2017	46983	2.0%	42525	0.7%	4569	-5.9%	15373	7.0%	15633	5.3%
Q4 2017	47060	2.1%	42216	-0.1%	5344	16.5%	15238	5.9%	16257	3.2%
2017*	**186923**	**1.4%**	**169204**	**0.6%**	**22467**	**9.5%**	**59698**	**6.9%**	**65358**	**7.4%**
Q1 2018	47296	2.5%	42295	0.1%	5265	-22.9%	15530	8.1%	15891	-7.5%
Q2 2018	47507	1.7%	42473	0.6%	5620	-1.9%	16085	9.2%	16728	2.7%
Q3 2018	48005	2.2%	42382	-0.3%	6498	42.2%	16536	7.6%	17982	15.0%

* Provisional Data

Source: Quarterly National Accounts, December 2018, ELSTAT

In any case, the significant positive impact of the external sector on GDP over January-September last year, due to an increase in exports and stable imports, marks the gradual transition to a new growth model for the Greek economy, which relies more on openness and less on domestic demand. This trend is estimated to have continued at least until the end of the year, albeit with less intensity. Apart from the developments in the imports of transportation means, which will boost investment, weaker growth is expected to stem from a lower growth of demand from key export destinations, such as the rest of the EU countries, where growth shows signs of deceleration; it fell to 1.8% in the third quarter of last year, approximately 1 p.p. lower than a year before.

Therefore, as public consumption is continuously decreasing, household consumption is the main factor for maintaining the growth momentum from the first three quarters until the end of 2018. Despite the significant rise of employment over this period, the increase of private consumption has been sluggish. The macroeconomic forecast is presented in greater detail next.

Medium-Term Outlook

- The forecast for growth of the Greek economy in 2018 in the area of 2.0% is kept unchanged. GDP growth this year at a similar or higher rate.
- Stronger growth of consumption spending this year, 1.4% from 0.9% last year, from more social spending and tax deductions, increase of the minimum wage and lifting of the sub-minimum wage
- Growth of public consumption by 2.0%, following a fall of the same extent in 2018, due to retrospective payments from court rulings this year and upcoming elections
- Stronger investment activity (+10-12%), from completed concession – privatisation deals and continued rise in building activity
- Worsening environment, globally and in particular in the European Union, resulting in lower export growth, by 5.3% from 7.7%

The Greek economy entered recently its first year since 2010 without the implementation of an Economic Adjustment Programme. The positive effects of this development are so far evident in the trend of expectations, especially those of households. The Consumer Confidence Index increased steadily in the second half of 2018, reaching its highest level since March 2015 at the end of last year. A steady increase from September till November was also present in the expectations index in Construction. In Retail Trade, the index is marginally higher than last August, when the third programme was concluded. By contrast, it declined steadily in Industry and Services.

Even though Greece did not start a new Economic Adjustment Programme, during the fourth review of the last programme, the Greek government committed in the Medium-Term Fiscal Strategy 2019-2022 to implement certain fiscal measures and achieve set targets in regards to the General Government's primary surplus. At the same time, an extensive plan of reforms for the period following the second half of 2018 was drafted, to be concluded by 2021. According to the memorandum of understanding accompanying the fourth review, these reforms aim at achieving sustainability of public finances (tax revenues, management of public finances, contracts with the public sector, social welfare), financial stability (resolution of NPLs, bank corporate governance), competitiveness boost and higher economic growth (labour market, product markets and business environment, sectors under state regulation, privatisations) and the modernisation of public administration (Justice system, independent/regulatory authorities).

Without a doubt, achieving the fiscal targets and implementing the reform plan are the major economic policy challenges for the post-programme period. They are monitored by the enhanced surveillance mechanism of the European Commission, yet the strong immediate consequences of lacking implementation that loomed during the period of the Economic Adjustment Programmes, such as the withholding of funding within the context of the respective lending agreement, are no longer present. The build-up of a cash buffer of the Greek state, amounting to €24.1 billion is sufficient to refinance public debt up until the end of the first half of 2020. Nevertheless, any slippage from the commitments (especially of a permanent character, such as retraction of key reforms) will hinder the recovery of confidence in economic policy implementation and obstruct the access of the Greek State to the capital markets, under sustainable terms, in order to refinance its debt. Indicatively, as it emerges from the analysis in the text box in chapter 2.2C of the present report, Portugal which also implemented a programme, needed 3.5 years after the programme conclusion to recover an investment grade in its credit rating. Three years after the conclusion of its programme, Cyprus has regained an investment grade from two out of three rating agencies. In addition, the cash buffer of the Greek state does not guarantee access to funds, under sustainable terms, for the private sector. Therefore, political decisions which do not reduce the mistrust towards the Greek economy or boost it are impacting the access to business and household capital, dampening the prospects for the rapid economic growth that the Greek economy needs.

The consecutive elections, with most consequential those for the parliament, constitute another factor affecting the socio-economic environment and the economic policy in the current year. The party manifestos, and in particular the promises pertinent to public finances (such as tax relief, allowances, recruitment etc.) change the expectation of the economic participants. Yet, at the same time, they cause uncertainty regarding the stability of the tax and social security systems and the regulatory framework for entrepreneurship, in investors, international organisations conducting economic analyses and governments. As a result, the elections in 2019 will have a certain degree a negative impact on economic decision-making, pending possible changes in the implemented economic policy by a new government.

The developments and conditions in the banking system, for yet another year, are going to be pivotal for the trajectory of the economy. They are expected to be shaped by the progress made towards reducing the non-performing exposures and their impact on the banks' fundamentals, as well as by the performance of the out-of-court settlement mechanism for business arrears. A role could also be played by a possible reuse of liquidity mechanisms from international organisations, such as the ECB, due to the stagnation of deposits after the conclusion of the third programme, despite the abolition of restrictions on capital flows within the Greek economy. The outcome of these processes in the banking system is also expected to reflect on the trajectory of the Greek stock exchange. The 25% drop recorded in 2018 in the general index of the stock exchange came in part from the Folli Follie scandal, but also from the lower than expected financial results of the banks.

Significant changes are occurring or are expected to occur in the global environment as well, most of which are likely to lead to its deterioration. Amongst the major global politico-economic developments are the repercussions of the US protectionist trade policy and the counter-measures adopted by the EU, China and other countries, and an increase in Euroscepticism, as demonstrated in Italy and the United Kingdom, which is nearing its exit from the European Union (Brexit). The end of the monetary quantitative easing by the ECB at the end of 2018, after approximately four years of expansion, also constitutes a significant challenge for European and global economic policy, as it would lead to a gradual weakening of its benefits, but it would also make less likely possible negative developments, such as an overheating of the EU economy. The recent decision made by OPEC and its partner countries to reduce daily oil production by 1.2 million barrels starting in 2019, has stopped the intense price drop in the preceding quarter (October-December), which exceeded 30%.

The developments just mentioned form the framework of assumptions underlying the macroeconomic projections of IOBE for the Greek economy, as summarised in Box 3.1.

Box 3.1

Assumptions of the central macroeconomic scenario of IOBE

- Continued fiscal consolidation and reform effort, implementing the relevant policy commitments
- Slight impact of the upcoming elections
- Achievement of the targets for asset consolidation of the banking system
- Mild impact on the EU from the conclusion of the QE programme and the intensification of the trade protectionism policies globally
- Retention of the oil price at approximately $60 or slightly higher

In greater detail, as indicated in previous IOBE reports on the Greek economy, a key issue for economic policy this year remains the smooth transition to the post-programme period. Such a transition implies that the medium-term fiscal targets and the planned reforms are systematically pursued, without any slippages and deviations. Any development in the opposite direction will lead to loss or weakening of confidence in the Greek state and the domestic economy. This will reflect initially on the cost of borrowing of the Greek state. Regarding this element of the economic environment, it should be noted that since the completion of the programme last August, the yield of the 10-year sovereign bond was rising steadily up until November, to 4.42% from 3.88%, its lowest level since March 2006. Last December it receded slightly to 4.27%. The increase in the yield is one of the reasons why the Greek States has not yet issued any new bonds since the completion of the third programme. In addition, since the previous quarterly bulletin, the credit rating has remained unchanged, with the latest relevant development being the retention of the BB- rating by Fitch on the 10th of August.

Policy revisions that do not affect the above targets and use any "fiscal space" available are legitimate, for example in the direction of reducing the high direct and indirect taxation, and social security contributions. Such kind of interventions are included in the State budget for 2019 among the new measures to be implemented this year, in place of the interventions and the offsetting measures included in the MTFS 2019-2022. These interventions include a reduction of the social security contributions for the self-employed and farmers to 10% from 15%, with an introduction of a minimum income threshold for supplementary and lump-sum allowances (estimated impact €177 million), 50% subsidy of the contributions for young employees (€51 million), and reduction of the property tax ENFIA by 10% on average (-€260 million).

However, comprehensive reviews must be previously carried out, taking into account all relevant factors, before making changes to budgetary measures that are linked to structural changes and thus have a long-term horizon. The planned in the MTFS 2019-2022 pension cuts starting in 2019, amounting to €2.07 billion, which ultimately never happened, is an indicative example. In the short term, the expected pressures (outlined in the MTFS) on the disposable income and demand of households will not materialise. That said, almost all of the offsetting measures will not be executed either, with the exception of the restructuring of the family allowances, with a total budget of €1.73 billion. The largest such interventions, in terms of estimated expenditure, include rent subsidy (€600 million), active employment policies (€260 million) and subsidy for prescription drugs (€240 million). These measures mainly impact household with low or no income, who will not receive planned increase. From the perspective of social policy, it is uncertain whether this change will have a smaller impact than that of the pension cuts. Overall, the boost on expenses from not implementing the pension review, but also that of the counteracting measures will not be extensive. According to the estimates in the explanatory budget report, the impact will amount to €335 million.

The long-term impact of not implementing these measures on the sustainability of the social security system and social inequality, however, has not been estimated. Such approaches are deemed necessary before amending or cancelling scheduled reforms, mostly in order to avoid imbalances and problems, such as those that occurred in the past in Greece and led to the fiscal derailment in 2007-2009 and the need for strict consolidation. In addition, any unjustified change in economic policy sharpens the uncertainty regarding the continuity of the implemented economic policy and the sustainability of fiscal performance. Particularly for the cancelled pension cuts, concerns have arisen regarding the sustainability of the social security system.

Aside from cancelling the readjustment of pensions and the corresponding compensatory interventions, the new measures in the State Budget for 2019, some of which were presented above, include tax relief amounting to €437 million and €473 million in additional expenses. The tax relief interventions also include gradual reduction in the income tax rate for legal entities by 1% each year for four years (from 29% to 25% in total) and in the tax rate on dividends by 1% for five years (from 15% to 10%). The latter two changes will have a fiscal impact starting 2020, however their pre-legislation outlines how the taxation system will change, which improves business expectations from this year on. In addition, with a ministerial decision at the beginning of 2019, the VAT discount was extended in the five islands of the Aegean with the highest migratory flows. There seems to be no increase or implementation of a new direct or indirect tax so far. On the expenditure side, the major intervention in this year's budget will be the housing allowance for households residing in rented property or with mortgages, amounting to €400 million. The total, negative impact on the fiscal balance of the measures adopted for this year amount to €1.25 billion, limiting the forecast, according to the enhanced surveillance methodology, from 3.96% of GDP in the MTFS 2019-2022 last June, to 3.6%, only €200 million higher than the corresponding target. As a result, a very careful implementation of the Budget is needed, so as to avoid any divergence from the target.

Having said that, the taken measures will boost the household disposable income. The payment of "social dividend" and the retrospective payment of special wage grid categories in the public sector, amounting to €790 million and €800 million respectively, with a total amount that exceeds the "social dividend" for 2017 (€1.3 billion), is expected to have a positive impact on income and consumer spending, at least in early 2019. Other developments projected to impact household income in 2019 are: a) the upwards readjustment of the minimum wage and the abolition of the sub-minimum wage for workers up to 24 years old, b) the decision of the Labour Ministry last

September to expand sector-specific collective agreements in four sectors (banking, shipping agencies and businesses, travel and tourism agencies and agencies that are members of the International Shipping Union), a practice which could possibly expand to other sectors and, to a lesser extent c) the decision of labour dispute arbitration to increase the minimum wage and recognise allowances in food services and tourism. The consequences of the proposals on the minimum and sub-minimum wage have not been estimated at the moment and can only be done so after thorough examination. Such developments, together with the expansion of collective agreements, initially boost the income of those already in work, yet their medium-term consequences on employment and therefore total labour income might be negative if they do not reflect underlying growth of productivity, and thus output, as in such a case they would imply an increase in labour cost which is not compensated by sales.

In order to achieve the primary balance target for this year, despite the negative impact of the new measures, adjustments were made to categories of revenue and expenditure. In particular, the budget for the Public Investment Programme was lowered by €550 million in relation to the MTFS 2019-2022, and as a result, it is standing, for yet another year, at €6.75 billion. The downwards readjustment of the planned public expenditure for investment occurred even though in January-September 2018, fixed capital formation domestically decreased by 6.2%, to €16.4 billion, negatively affecting the growth rate last year, as well as the growth prospects of the Greek economy in the upcoming years. The underspending in the PIP last year overall, and for yet another year, is indicative of a similar development in 2019. Based on the provisional data on the State Budget Execution for 2018, the PIP grants totalled €6.23 billion, against a target of €6.75 billion. They increased by €250 million compared to 2017, yet this increase happened in December, thus leading to a more back-loaded implementation. The reason behind the underspending in the PIP last year is that its revenue was €1.22 billion or 31.5% less than the target. This deficit is primarily due to lower-than-targeted absorption of EU funds by €1.46 billion or 41%.

Aside from the projections on the impact of economic policy in the new year, the measures implemented since its beginning (increase in existing and imposition of new indirect taxes, an increase in the direct taxation of employees and pensioners, an increase in the levies of the self-employed) continued to exert pressure on the real disposable income of households, as well as on the financial results of sole proprietors, in the final quarter of 2018. Besides, the growth in private spending in the third quarter weakened to 0.7% from 1.3%.

Yet another political development that is expected to significantly impact the decisions of economic units this year is the elections, especially those for parliament. Over the years, it has been observed that household expectations improve in the period before parliamentary elections. Businesses tend to adopt an anticipatory stance until the elections, expecting possible changes in economic policy by the government stemming from the election. Also, the outgoing government usually spends more over this period, ups recruitment or makes announcements to that effect. The above effects have begun to appear since the second half of last year, mostly from households, with the Consumer Confidence index increasing steadily, compared to minor changes in the first half of the year, reaching at the end of 2018 its highest level since March 2015. By contrast, for most of the second half of 2018, expectations worsened in Industry and Services, whereas in Construction the mild improvement from July till November was completely arrested in December. These trends might likely be due to the anticipatory stance in light of possible political developments, as it has been known since the end of the third programme that elections will take place at the latest within 13 months.

Not implementing the measures and countermeasures outlined in the MTFS 2019-2022 and the implementation of a different set of measures, which will worsen the fiscal balance by €1.25 billion, can be seen as gradually creating a pre-election climate. In addition, the announcement of a 7,500 strong recruitment in the current year and 18,500 in 2020, which in the second case exceed the number of expected departures (8-8,500 per year) and the "1 departure-1 recruitment" rule in the public sector, are also based on the release of 10,000 jobs from the wage grid, following the separation of the priesthood from the public sector. Regarding the GDP components, the election is likely to boost private and public consumption and will probably affect negatively certain investments.

The change in the fiscal measures to be implemented this year, in the public debate since October, together with the hike in uncertainty recently about the timing of the next parliamentary elections, due to the ratification of the Prespa Agreement by the Greek Parliament, are deemed to be the main domestic factors that drive the uncertainty on the continuity of economic policy, given the public finance commitments in the MTFS 2019-2022 and the planned reforms in the technical memorandum of the last review of the third programme. This development is reflected in the increased yield of the Greek 10-year sovereign bond. Another development which hurt the attractiveness of Greek securities, public and private, and most of all of the Greek stock exchange, is the Folli Follie Group case. External factors with negative consequences for the yields of other Eurozone states, including countries that implemented economic adjustment programmes are: a) the announcement by the ECB last September of the conclusion of the expansion of the quantitative easing programme (Q-E) at the end of 2018 and b) the capital flight to the US after the tax reform at the end of 2017, which resulted in business capital amounting to more than €500 billion returning to the country over the first three quarters of 2018, even though the pace of return was considerably lower in the third quarter.

As noted repeatedly in the IOBE quarterly reports, the smooth financing of the Greek economy, in sustainable terms, is a major prerequisite for the continuation and acceleration of its recovery, by attracting investment and facilitating exports. As long as there is uncertainty on political developments and the implementation of the agreed measures and reforms, the access to international capital markets in favourable terms is deemed difficult, given the external factors which also negatively impact this development. This implies that the public sector will need to use its cash reserves to refinance public debt. Political uncertainty might recede once the elections have led to the formation of a new government.

Given the above, together with the projections for the PIP, the significance of the domestic banking system in order to collect and reallocate the capital needed by households and businesses, is further boosted. The stress tests of last May, which did not raise the need for new capital assistance, followed by the upgrade of the credit rate of the four largest banks by the Standard & Poor's, are believed to have contributed to an easing of the concerns regarding their capital adequacy in the second half of 2018. Another development which could positively impact the deposit flow towards the banking system is the full lift of all limitations on capital flows within Greece and their further easing for international transactions last September. The reduction of the

Non-Performing Exposures (NPEs) had hindered an even larger increase in bank credibility in Greece in the second half of 2018, as it took place in ways that affected their assets, equity and profitability (mostly write-offs and loan sales). Recall that according to a report of the Bank of Greece, the NPE reduction target was exceeded by €1.6 billion in the second quarter of last year, and as a result they stood at €88.6 billion. However, their reduction mostly stemmed from loan sell-offs, amounting to €2 billion and write-offs (€1.6 billion). The revenue from liquidation as a result of online auctions reached €0.6 billion, same as the income of overdue loans.

Despite the aforementioned overall positive developments in the banking system, the return of deposits seems to have ceased since September 2018, right after the completion of the third programme, up until last November. From August till November last year, the private sector deposits (households and non-financial corporations) stood at around €129.3 – 130 billion. A small change is recorded in the two main components, with household deposits ranging between €107.6 – 108.1 billion and those of non-financial corporations between €21.2 – 22 billion. That said, the stagnation came after a 16-month long period of deposit growth, starting in April 2017, over which deposits increased by €11.4 billion or 9.7%, mostly from households by €7.4 billion or 7.4%, even though the rate of return for businesses was higher (+23.3% or €4 billion). However, for the reasons previously above, the deposit growth was expected to continue stronger from last September, which however did not take place.

The latest data on private sector deposits show once more a relatively low growth rate, in contrast to their rapid fall until June 2015. Their stagnation is considered to be one of the main factors that have maintained the credit contraction to businesses and households over the same period with a 0.5% and 2.1% rate respectively, marginally weaker than in the first eight months of the year (-0.8% and -2.2%). However, in the same period of 2017, loans for non-financial corporations were not decreasing, while the credit contraction to households was happening at a similar pace (-2.3%). According to the banks, the negative trend of credit to businesses is due to a low demand for capital. Besides, many already-existing businesses continue to face problems with previous loans, which render them legal entities that have defaulted on their obligations to the banking system, regardless of whether their loans still belong to the loan portfolio of the banks or have been sold.

The recent trend change in deposits constitutes yet another factor with a negative impact on a gradual swift in the credit policy of the banks into a mild credit expansion, at the end of 2018 and at least for the most part of the first half of 2019. A steady and accelerating growth of deposits would have boosted bank credit. Some other developments are needed to shift into a credit expansion, such as further and more rapid decrease of non-performing loans and easier access of the banks to the global capital markets. As indicated in previous IOBE reports, the NPLs should be managed in a way that does not hurt the fundamentals of the banks. In order to achieve this, the quality aspect of the NPL reduction should be strengthened by boosting collection and liquidating loan collaterals through the online out-of-court settlement and the online auctions, limiting at the same time loan write-offs and sell-offs at low prices. The latest and upcoming actions of the banks on that front include the commencement of the securitisation of mortgages amounting to €2 billion by Eurobank in December, with further securitisation of loans with a nominal value of €7 billion. Alpha Bank is preparing to assign the management of mortgages amounting to €3.9 billion to a third party. Regarding Piraeus bank, a €2.5 billion loan sell-off is in progress. The processing of the proposals made by the Financial Stability Fund and the Bank of Greece on this may lead to major developments regarding the NPEs. However, the different strategies followed by the largest banks on this issue constitute an obstacle on the implementation of a joint plan.

If the measures lead to a radical reduction of the NPLs, with positive consequences on their net equity and financial results, the reticence towards the banks will recede and their attractiveness to investors will strengthen. However, the outcome of all the ongoing and upcoming processes, as well as from other possible developments mentioned above, and thus their contribution to lowering the cost of capital for the Greek banks, are not expected to manifest before the end of the second quarter. In any case, political developments will also impact the investment risk of the country, and as a result the yields of the bank securities.

The continued scarcity of bank credit, together with an overall easing, in relation to before 2018, of the caution on the prospects of the Greek economy, will lead many enterprises, to utilise financing tools available through the capital markets, something which many did do in the past two years. The case of Folli Follie Group shook the trust of investors in the Greek capital market and in Greek enterprises by the end of the third and at the start of the fourth quarter, dampening activity in this particular market, as projected in the previous IOBE bulletin. By the end of last year, the attempts at raising capital through these instruments rekindled. Indicatively, Motodynamiki decided to increase its equity capital by up to €10 million, Unibios by up to €3.75 million, Varvaresos by €1.5 million and Intertech by €1.4 million. The most impressive development on this front is the decision by the small Diversa enterprise to raise up to €15.84 million from the Alternative Market of the Athens Stock Exchange, after its acquisition by a group of investors. More businesses are reported to be getting ready to make similar moves in the upcoming time period. Provided that no event that will shake up confidence in the Greek economy and capital market takes place, the use of the funding options the market has to offer is estimated to continue in 2019.

The evident from the National Accounting data for January-September last year, significant increase in exports of goods and services for the second consecutive year, helped export businesses with their access to liquidity. However, it is now considered possible that the international trade environment, not just for Greek but also for EU and global businesses, will not be as positive in 2019. The main reason behind this development is the implementation of trade protectionism measures by the US and the reactions they have caused, namely the counter-measures taken by the EU, China and Canada. Regardless of the global impact of the US trade protectionism policy, due to the small share in Greek exports of aluminium and steel products that were affected by the restrictions, with their value amounting to €130 million in 2017 (0.4% of exports), the direct effect of the measures will not be significant. However, their indirect effect is expected to be more pronounced, through their impact on the exports of EU and third countries, which in turn will affect the demand for Greek products in these countries.

Within the Eurozone, in particular, the conclusion of the expansion of the quantitative easing (QE) programme of the European Central Bank will also contribute to the slowdown in trade. From now on, the ECB will be conduct purchases which will keep the value of acquired bonds unchanged until the end of the current year. Even though the Greek banks were not part of the QE programme, the Greek economy nonetheless profited indirectly from the programme, from the boost it created in the economies of other Eurozone countries, which are the primary destination of Greek exports.

The difficulties with the Brexit negotiations, and the rejection of the draft agreement by the British Parliament in particular, may also affect foreign trade in Greece.

From the data available on global trade up to October last year, there does not seem to be a change in the yearly growth rate in September and October, in comparison to the first seven months of 2018 - in both periods, it stood at 4.1%[29]. However, the growth of the volume of exports weakened to 4.1% from 4.5%, while that of imports strengthened to 4.1% from 3.6%.

The latest data from ELSTAT and the Bank of Greece on the exports of goods and services up until November and October 2018 respectively, show that the balance of goods deteriorated. By contrast, the balance of services improved significantly, mainly due to higher demand for transport services. In greater detail, the exports of goods, in current prices, continued to grow in September and November, at a similar rate as in the first eight months of the year (16.7% from 17.0%). This increase was considerably faster than in 2017 (9.4%). However, in the last quarter there are some changes in the growth rate of specific types of goods: exports of fuels stronger than in previous quarters of 2018, at 37.1% from 27.7%. By contrast, growth slowed down in exports of goods expect ships and fuels, from 12.0% to 8.2%, while the change in ship exports, which are now only a tiny portion of total exports, shifted from a strong growth (+63%) to a drop by 25.9%. The year-on-year increase in oil prices (+25.0%) explains some of the changes occurring over September-November. Despite the substantial increase of the exports of goods, the similarly strong increase of imports (+16.7%), faster than in the previous eight months (+9.4%), resulted in an expansion of the trade deficit, by 11.8% or about €594.4 million, to reach €5.6 billion. Year to date as of 30 November, the exports of goods were 16.9% higher year on year, while imports expanded less (+10.3%). However, given that exports corresponded to 56.9% of imports, the deficit expanded marginally, by 1.6%.

Regarding the trade flows in services, the balance remained positive in July through October, with the absolute rise in exports exceeding that of imports, despite the fact that in relative terms the latter was stronger than the former. In particular, the growth of exports of services in August-October stood at 10.0% or €1.18 billion, accelerating in relation to the previous seven months (+9.5%). Nevertheless, the growth rate remained lower compared with the corresponding period of 2017 (+14.5%). The increase came primarily from stronger travel receipts, by 24.5% or €911 million, and secondarily from the rise of exports of transport services (+4.0% or €286 million). The remaining receipts, from other services, fell by 1.4% (-€15.5 million). The expansion of the imports of services reached 15.5% (+€630.5 million), surpassing slightly their increase over January-July (+13.4%), yet remaining below the growth rate recorded in 2017 (+18.1%). The strongest rise in absolute terms was recorded in the transport category, by €467.2 million or 19.1%, followed by other services (+15.8% or €162.9 million). A marginal increase was also recorded in travel services (+0.1% or €139.1 million). The stronger growth in exports in comparison to imports of services expanded the relevant surplus by 6.9%, similar to its increase since the beginning of the year (+6.3%). It seems from the above that the rise in exports benefited most the financial liquidity in businesses mainly in the sectors of tourism and transportation.

Moving on to features of the domestic investment environment that are affected by the public sector, privatisation deals and concessions that were completed in previous years are anticipated to provide greater impetus to investment activity this year. According to the Budget for 2019 and

[29] Source: CPB Netherlands

the relevant data from the website of the Hellenic Republic Asset Development Fund, the revenue from the programme last year amounted to €1.13 billion, much lower than the target set in the Budget for 2018 (€2.74 billion). The revenue would have been much higher (€2.15 billion), had the fee for the 20-year expansion of the concession contract of the Athens International Airport (AIA), approved by the DG-COMP of the European Commission in December, been paid at the end of the year. Overall, seven major tenders were concluded, including the sale of 5% of the common shares of OTE S.A. to Deutsche Telekom, 66% of the shares of DESFA to SENFLUGA, 67% of the Port of Thessaloniki to South Europe Gateway Thessaloniki Limited and 100% of ROSCO (EESSTY) to TRAINOSE. In addition, the tender for the concession of 1800 MHz radio frequencies for 2018-2035 was concluded and the first payment was collected. The tender for the 20-year expansion of the AIA concession contract was also concluded. In addition, the land plot in the Afantou region of Rhodes was sold and the first and largest instalment for the deal was collected. The investment stimulus from the tenders concluded last year will mostly manifest in the upcoming years and only in some of them, for example the new concession of the AIA whose first expansion phase started last year, and the radio frequency rights, are expected to contribute to investment from this year on.

In early 2019, ongoing are the sale of 50.1% of shares of Hellenic Petroleum (ELPE), the 35-year concession of Egnatia Odos and the concession of the Chios and Alimos Marinas, while after much delay, the necessary actions to sell 100% of the Hellinikon SA shares are being concluded. The tenders for the sale of shares in DEPA, AIA, EYDAP and EYATH are under preparation, yet the Budget does not provide clear indications on the revenue target set for the two water companies. The estimate for the total revenue this year (excluding the fee for the expansion of the concession of the AIA) is considerably lower than in 2018, at €1.53 billion, while the fact that more than 97% of the revenue has been planned for its last quarter cause uncertainty regarding its achievement.

The financial liquidity of businesses continued to improve slightly in the last quarter of 2018 after the payment of arrears of the Greek state. In the period following the last IOBE Bulletin for which data is available (September-October 2018), even though no additional grants were given to public sector entities for this purpose, the payment of arrears, including tax refunds (just €1.5 million) reached €304.4 million.[30] However, earlier last year, €1.25 billion was allotted between April and August, while €532.9 million were disbursed, leaving a significant part unallocated. Note that with the payment in mid-June of the second sub-tranche of the loan from the ESM, amounting to €1 billion, which was connected with the third review and was provided exclusively for this purpose, together with €500 million from the previous sub-tranche received in late March, together with the commitment to pay national contribution of 50% to the funds made available from the third loan for settling arrears, the available resources for this purpose totalled €2.25 billion. Part of these funds, at around €267 million, was given to cover pending pension applications. Therefore, approximately €730 million from the €2.25 billion remained unallocated at the end of last October, which combined with another €413 million distributed to public sector entities, but not used for payments, created a reserve of disposable capital for the payment of arrears amounting to approximately €1.15 billion. That said, after the above payments in April-October 2018, the stock of arrears to businesses dropped by approximately €805 million, slightly less than the payments,

[30] Transfers / Grants - Payments of General Government Arrears, October 2018, Ministry of Finance, December 2018.

implying that new arrears were created too, while the outstanding balance of the stock of arrears stood at €2.62 billion. Therefore, the funds available, in case they are not used on pending pensions, cover around 43.9% of the balance of overdue obligations. The State Budget for 2019 does not specify when the arrears should be fully repaid, while there are no specific targets set for this year, for example on their decrease to a certain level, nor is there a specific amount allocated for this purpose. With that in mind, it is anticipated that their payment will not accelerate in 2019, and might probably weaken.

As for the trends in key figures of the world economy that affect the prospects of all national economies, after 15 consecutive months of growth, the price of oil has been falling since last October, with a recent exception in January 2019. Over the final quarter of last year, oil prices receded by more than 40%, reaching their lowest level since 2017. Already since mid-November, the oil price is lower a year on year, which did not change by the recent increase either. Most likely, the trend change came from the decision by OPEC countries on the 7th of December to limit daily production from the beginning of the New Year by 800,000 barrels per day, and their partner countries, mainly Russia, by 400,000 barrels.

While developments in production push oil prices up, at least for the time being, they are anticipated to be offset throughout the current year by a projected deceleration in global economic growth. According to the most recent projection of international organisations,[31] a relatively stronger slowdown of the GDP growth rate this year in comparison to 2018 will be observed in the developed economies from 2.4% to 2.0%, while its drop will be marginal for developing ones, from 4.6% to 4.5%. Key reasons behind the slower growth in most developed economies will be the impact of protectionist trade policies, uncertainty over Brexit, and easing of the supportive monetary policy of the ECB, while the boost of the US economy from last year's tax reform seems to have been transient, leading to a slower growth in 2019, at 2.5% from 2.9%. The economic growth slowdown in the developing economies will mostly stem from China, the second largest economy in the world. Under these effects, the oil price for 2019 overall is expected to decline by $9.4 or 14.1% from last year. Regarding 2018, after the drop in the last quarter, the oil price stood approximately 30% higher than in 2017, at $68.6. Therefore, at least for the time being, the expected trend on oil prices for the current year will not be a driver of price increase and competitiveness decline for countries with a relatively high dependency on oil imports, such as Greece.

The lower year on year exchange rate of the euro against the dollar eased the disinflation effect of the lower oil price in the last quarter of 2018 and in early 2019 in the Eurozone countries. Even though between August and October the year-on-year change was stable, between early November and early 2019 it expanded, mostly due to the base effect of rising euro exchange rate against the dollar at the end of 2017 and less due to its small further drop in the final quarter of last year. The exchange rate depreciation is mostly deemed to be due to the return of business capital to the US because of the December 2017 tax reform, which however is weakening as it stood in the third quarter of 2018 at around 1/3 of its level recorded in the first quarter, at around $93 billion. Another factor that attracted capital was the gradual tightening of the loose monetary policy by FED, which pushed the yields of the US treasury bonds considerably higher than the yields of the sovereign bonds of the strongest Eurozone economies. The ECB decision mid-September to

[31] World Economic Outlook Update, January 2019, IMF

keep its base interest rates unchanged up until summer of 2019 also contributed to the low yields in the Euro area, despite the conclusion of the quantitative easing programme by the ECB last December.

Aside from the developments in monetary and fiscal policy, the Euro area has to deal with major upcoming challenges, such as Brexit (especially after the rejection of the deal by the House of Commons), the effects of Euroscepticism (mostly through its policy manifestations in Italy and Hungary), the management of refugee flows, the deleveraging of the banking system in certain countries etc. The counter-measures to the US protectionist trade policy, not just by the EU, but also from other major economies (e.g. China, Canada), affect the prospects of the US economy and prevent further capital outflows. The bilateral EU-Japan agreement for trade liberalisation (abolition of almost all tariffs), signed in July 2018, with the two countries together representing 22% of global trade, can counteract the US restrictions on European exports. Taking this into account, it is quite probable that the euro-dollar exchange rate will fluctuate this quarter slightly higher than its current level, without reaching its level from a year ago. Therefore, it will cushion somewhat the positive effects on energy cost coming from the fall in oil prices, yet it will boost the competitiveness of the Eurozone goods in the US for which there are no restrictions, and for services.

As to the latest developments in the domestic economic activity and in short-term economic indicators, up until the beginning of the fourth quarter of 2018, on the supply side, on the production side the positive trends seem to strengthen somewhat, with the exception of tourism, where the increase in activity was weaker than earlier in the year. Consumption demand growth seems to weaken as well. In greater detail, according to the latest data, industrial production growth marginally strengthened in September-November, in relation to the previous eight months, to 1.4% from 0.8%. However, this increase is weaker compared with the same period of last year (2.6%). The increase of industrial activity mainly stemmed from the trend change in Manufacturing from negative (-2.2%) to positive (1.8%). The opposite trend change was recorded in Water Supply, where growth up until August was superseded by decline (-2.0% from +2.5%). In Electricity, production growth slightly decreased to 3.0% from 4.0%. Output growth in Mining strengthened over the same period, from 2.2% in the first eight months to 8.2%. The latest available data on construction activity between August and October shows continued growth since the beginning of the year, as building permits increased in terms of number (18.4% from 8.1% in May-July) and surface area (25.0% against 19.5%), with a slightly weaker increase in terms of volume (+17.8% from -24.7%). In Tourism, the growth of receipts year on year stood at 4.4%, considerably lower than in relation to the first half of last year (+17.2), a trend which shows an extension of the tourist season.

Regarding the indicators that reflect the sentiment on the demand side of the economy, the seasonally adjusted index of volume in retail trade increased by just 0.9% year on year in the August-November period, while up until July it was growing by 1.5%. The lower growth of the Consumer Price Index, from 1.8% in October to 0.6% in December, can also be seen as an indication of a weakening in demand. The significant rise in October stems from Transport and Housing, due to a sharp increase in oil prices in the preceding period, a trend which changed sign abruptly in the following months, causing the above disinflation. Overall, for this period inflation stood at 1.1%, same as in the third quarter (1.0%), but higher than in the preceding nine months of 2018 (0.5%).

Amongst the categories of goods and services that make up the CPI, the sharpest increase was recorded in Communication (4.6%), Transport (2.5%) and Housing (2.4%). The increase in the last two categories is due to the continuous growth in oil prices up until September last year, while in the case of Communication, it came from an increase in the price of phone services, according to ELSTAT. In four more categories prices increased year on year, without their growth exceeding +1.1%, while prices dropped in five categories, by about -0.5% to -1.6%. These trends and their causes indicate that domestic demand has remained sluggish.

Considering the above trends in economic indicators and anticipated developments (mainly with respect to the changes in fiscal policy for 2019 in the State budget, the upcoming elections, the changes in wages and benefits, and the deteriorating global environment) for the forecast of the GDP components and other macroeconomic indicators, the recovery of household consumption is estimated to have strengthened in the final quarter of last year. Apart from the continuous since the beginning of 2018 decline of unemployment, the main positive impact over this period is expected to come from stronger household expectations, coming inter alia from the suspension of pension cuts, the payment of extraordinary allowances ("social dividend") and retroactive payments, amounting to more than €1.5 billion. However, the fiscal measures adopted at the beginning of the previous year will continue to have a negative impact up until the end of 2018. The drop in prices in the final quarter of last year boosted the purchasing power of wages and transfers. As a result of the above effects, private consumption is estimated to have strengthened in October-December, growing year on year overall in 2018 by about 0.9%.

The changes in the 2019 Budget and the fiscal measures for this year that resulted in higher social expenditure and tax relief amounting to €1.25 billion compared to the MTFS 2019-2022, as well as the effects of the upcoming increase in the minimum wage, following a proposal from a group of experts, are expected to be the key factors behind a stronger momentum of household consumption in 2019. Consumption expenditure will also be boosted by further employment growth, which, however, will be considerably weaker than in previous years, also due to the developments in the regulatory framework of the labour market (increase in the minimum wage, abolition of the sub-minimum wage, expansion of collective agreements in certain sectors), and the expected slowdown of the global trade growth. New jobs are expected to be created mostly in Retail Trade and in Construction, yet less than last year, while by contrast, job creation will strengthen in the public sector. The negative impact of inflation will be similar, if not milder, than last year. With this into account, private consumption in 2019 is expected to grow faster than in 2018, by 1.4%.

Regarding public consumption, its drop in the first three quarters of 2018 might give way to growth in the final quarter. From the data on budget execution at the General Government level, no difference can be seen in this period in comparison to the previous quarterly bulletin (October-November) in components that take up significant part of the consumption expenditure of the state, such as wages or procurement of goods and services.[32] However, retroactive payments of up to €800 million in some categories of public expenditure in December are believed to have led to an increase in public consumption that month and for the entirety of the fast quarter of last year. Following this development, consumption expenditure of the public sector is estimated to have declined last year by about 2.0% in comparison to 2017.

[32] Source: Monthly General Government Data Bulletin for November 2018, Ministry of Finance

The changes in the fiscal sphere for 2019 include the recruitment of 4.500 teachers for the disabled. Together with the change in the working status of 3.000 people employed in home care from temporary to permanent contrasts, as envisaged in the MTFS 2019-2022, these recruitments will take place according to the "1 departure – 1 recruitment" rule which should be implemented as per the agreement made with the European partners. Therefore, they are not expected to increase employment in the public sector, while the fact that new hires usually have lower salaries than the ones departing will restrain public spending. That said, despite the fact that retroactive payments for the special wage grid were made at the end of 2018, such payment has also been planned for this year, with a larger budget allocated compared to last year (€982 million from €800 million), which will increase public consumption, but only by a relatively small degree. The three elections this year constitute perhaps the most significant boosting factor for public consumption. As a result of the above, public consumption for 2019 is expected to increase by 2.0%.

Even though the caution about the Greek economy eased in the final quarter of 2018 due to the conclusion of the third programme, the medium-term public debt measures and the creation of a cash buffer, the improvement of the investment climate was moderated by the tumult in the stock market, created by the Folli Follie case, and the worse than anticipated financial results of the banks. The confusion this caused for investors had an impact that extended beyond the financial market, for example by affecting the attractiveness of issues of corporate bonds of Greek enterprises, and the credit supply to businesses, as the credit contraction to businesses continued with a similar intensity. Near the end of last year, there was some activity in the domestic capital market, following a number of initial public offerings of shares. The effects of this on investment will gradually manifest in the current year.

The arrestment of private sector deposit growth in the last third of 2018, but mostly the developments regarding the management of NPLs in the current half of the year, with the implementation of the planned actions by the banks and the review of the possibility to implement the proposals of the FSF and the Bank of Greece, are estimated to constitute the key drivers of credit flows to the non-financial sector of the economy at least for the first half of 2019, if not for most of its duration. On the side of businesses, the election periods over the years have created expectations of change in the policies that affect them, with a negative impact on investment and the demand for investment capital. The uncertainty as to when the elections will take place will prolong this stance. Under the influence of factors on both the supply and demand of credit, the credit contraction to businesses will continue at least for the first half of the current year. Therefore, during this period, both the trend in deposits should change to high inflow into the banking system and the plans to limit NPLs without affecting the assets and the net capital of the banks are needed, in order to gradually change the credit policy into a mild credit expansion in the second half of the current year.

As the search of funding solutions through the capital market rekindled recently, this is believed to continue this year, at a similar pace to last year, if not higher. Possibly, this effort will likely include the utilisation of more means of funding, beyond simple IPOs of common shares. Besides, the increase of the sovereign bond yields in the second half of last year, in conjunction with the uncertainly linked to the elections, raise the cost of other options, such as the issuing of bonds.

In contract to the negative impact of the developments in the banking system and the capital markets on investment funding, as repeatedly mentioned in previous quarterly reports of IOBE, the further boost of export demand in 2018 strengthened investment activity in export-oriented branches of Manufacturing and Transport. This effect is reflected in the case of Manufacturing in the steady strong growth in the fixed capital formation category of equipment and weapons in the third quarter of last year. This might have weakened at the end of last year, as the Eurozone economy, the main destination of Greek exports, slowed down significantly. Nevertheless, in the third quarter, the positive trend continued in four out of the five remaining categories, with Other Construction being the only exception, due to an extensive revision of the data in the third quarter of 2017, which created a negative base effect. The expected slowdown of global trade due to trade protectionism measures, and additionally between the Eurozone countries due to the conclusion of the quantitative easing programme by the ECB will limit the support of investment through exports in 2019.

Investment in Construction recovered as well last year, after many years of decline. It came exclusively from building activity, for residential and business use by the private sector, as output in civil engineering, which includes all categories of public works, declined strongly in the first half of 2018 and increased only slightly in its third quarter (+4.0%). This increase is deemed to be linked significantly with the renovation of already-existing residences, in order for them to be rented through Airbnb. The latest data on building activity show that growth continued until the beginning of fourth quarter. This trend implies that the changes in assessed property values in June had no impact on construction activity and instead might have eased the uncertainty pending their announcement. The decrease in the property tax ENFIA for 2019 by 10%, included in the new fiscal measures, will provide additional stimulus to building works in 2019. However, the Airbnb-driven boost will not strengthen this year and might indeed weaken compared to last year.

Although the PIP expenditure last year turned out to be higher than in 2017, due to acceleration in December, its contribution to investment in 2018 is considered to be lower. That said, the low level of grants and the significant delays in their execution have formed a low basis of comparison for 2019. Following the revision of its budget down by €550 million in the current year, to the level of previous years, grants are not expected to increase in comparisons to previous years. However, given the possibility of a more accelerated implementation, the PIP might have stronger contribution to investment. The indirect contribution of the public sector to investment is also expected to be greater though investment in concluded privatisations-concessions, mostly because this year the investment in Hellinikon is finally expected to come into fruition.

Based on the expected trends and prospects in its drivers, investment is estimated to have increased by approximately 4.9% in 2018, an increase that is mostly attributed to the accumulation of inventories, and to a lesser extent to stronger fixed capital formation. Investment activity will likely strengthen in 2019, with a double-digit growth rate, at around 10%-12%.

In the external sector of the Greek economy, the continuous strong growth in the EU and the US in 2018, according to the latest reports of international organisations,[33] yet slightly weaker in both economies, and its acceleration in developing and emerging economies with a growing share in the Greek exports of goods (e.g. North Africa, BRICS), are estimated to have continued contributing to their strong increase in the second half of 2018. This increase, however, likely weakened in the

[33] World Economic Outlook, Update, IMF, January 2019

final quarter of last year, as the growth in the EU has shown signs of "fatigue" already from the third quarter, slowing to 1.6% from 2.2% in the previous quarter and 2.8% a year earlier. The first effects of the US protectionist trade policy measures and their countermeasures probably also contributed to the slowdown of Greek export growth, as the global export growth slowed in August-October last year. It is now considered possible that the pressures on global trade from the protectionist policies will become more pronounced in 2019. Greek export growth will also be negatively affected by the slower growth in the Eurozone, which according to the latest estimates, will not exceed 1.6%.

Regarding the exports of services, the continued growth of international tourist flows, as reflected in the available data for the summer quarter, and of the corresponding receipts, despite both being lower than in the preceding year, imply an even greater contribution of the tourism sector to domestic economic activity in 2018. It is premature at this stage to make predictions for the flow of international tourists this year. However, as international tourist flows and revenues have grown steadily for a number of years, while competing tourist destinations have begun to recover (e.g. Turkey with 23% growth in international arrivals over January-August), it is possible that the rapid expansion might not continue this year. This will contribute to the consolidation of the market and the corresponding needs and requirements. More broadly, the current slightly lower euro-dollar exchange rate, compared to last year, which is not expected to change significantly over the first half of 2019, support moderately the competitiveness of the Eurozone exports. In addition, in spite of a recovery of oil prices since the beginning of January, with global and European growth weakening, on average it is expected to remain unchanged compared to last year, while the demand for petroleum products will drop, after many consecutive years of growth.

Taking into account the trends in international trade and relevant developments, in Greece and globally, it is estimated that export growth slowed down during the final quarter of last year, to total approximately 7.7% for 2018 overall. In the current year, exports will continue to grow, at a lower rate of around 5-5.5%.

As predicted in the previous report by IOBE on the Greek economy, the growth of imports strengthened in the third quarter of last year, mostly on the side of goods and in absolute terms. Given the slower growth of private consumption, the growth of imports was linked to a significant increase in certain types of fixed capital, mostly in transport equipment, followed by machinery. As indicated in the second quarterly IOBE report for 2018, investment in transport equipment show a high rate of correlation with investment and imports of ships. As ship imports were high in the final quarter of 2017, setting a high comparison base for the following year, a trend change in this part of imports is expected for 2018. Countering this drop, consumption demand is expected to strengthen, a large portion of which is directed to imported goods. The drop in the euro-dollar exchange rates had a positive effect, mostly for petroleum imports, the price of which dropped significantly at the time. The domestic demand for travel services is also expected to have climbed in the festive period around Christmas. These particular trends are projected to have resulted in a significant increase of imports in the fourth quarter of last year. Thus, the drop of imports in the first half of 2018 was overcompensated by the increase in the second half and as a result overall in 2018 imports increased by 4.0% compared to 2017.

Table 3.2

Domestic Expenditure and Gross Domestic Product – European Commission estimates

(at constant 2010 market prices)

	2016	2017	2018	2019
Annual Percentage Change				
Gross Domestic Product*	-0.2	1.5	2.0	2.0
Private Consumption	0.0	0.9	0.8	0.4
Public Consumption	-0.7	-0.4	1.2	0.2
Gross Fixed Capital Formation	4.7	9.1	-2.1	14.6
Exports of Goods and Services	-1.8	6.8	8.4	5.7
Imports of Goods and Services	0.3	7.1	3.6	6.1
Employment	0.5	1.5	1.8	1.4
Compensation of Employees per capita	-0.9	0.5	0.9	1.3
Real Unit Labour Cost	0.0	0.0	0.1	-0.2
Harmonised Index of Consumer Prices*	0.0	1.1	0.8	1.2
Contribution to real GDP growth				
Final Domestic Demand	0.4	1.6	0.5	2.1
Net Exports	-0.7	-0.1	1.6	-0.1
Inventories	0.1	0.1	0.0	0.0
As a percentage of GDP				
General Government Balance	0.5	0.8	0.6	0.6
Current Account Balance	-0.6	-1.0	-0.2	-0.2
General Government Gross Debt	178.5	176.1	182.5	174.9
In percentage terms				
Unemployment (% of labour force)	23.6	21.5	20.1	18.4

* Based on the Labour Force Survey methodology

Source: European Economic Forecast, autumn 2018, European Commission, November 2018

The stronger domestic demand over the new year, from growth in both investment and consumption, will affect the demand for imports, which are expected to be about 6 – 6.5% higher this year.

Summing up the forecasts for the trends in the key components of GDP for the final quarter of last year and overall for 2018, the recovery of household consumption most likely strengthened in the final quarter of last year, due to the annulment of the planned pension cuts and the disbursement of allowances ("social dividend") and retroactive payments in special wage grid categories. The drop in prices at the end of last year boosted the purchasing power of wages and benefits. The changes in the 2019 Budget for this year, resulting in higher social expenditure and tax reliefs, and the impact of the upcoming increase of the minimum wage and the abolition of the sub-minimum wage, will be the main drivers of the stronger rise of demand of household consumption this year. The pre-election climate will also boost expectations. Consumer expenditure will also be supported by a further increase in employment, which, however, will be notably weaker than in previous years.

Regarding the trend of public consumption, its drop in the first three quarters of last year has probably given way to growth in the following quarter. The reason behind this change is the retrospective payment for special wage grid categories last December, which is estimated to have led to an increase in public consumption in the final quarter of 2018. The fiscal interventions in

2019 include recruitment in the public sector and changes in the status of individuals already working in this sector, respecting the "1 departure – 1 recruitment" rule, and therefore they are not expected to increase the consumption expenditure of the public sector. However, retrospective payments are also included in the Budget for the current year, slightly higher than in the previous year. The three elections this year will probably be the major driver of public consumption.

Table 3.3

Comparison of forecasts for selected economic indicators for the years 2017 – 2018 (at constant 2010 market prices, annual % changes)

	MinFin		EC		IOBE		IMF		OECD	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
GDP	2.1	2.5	2.0	2.0	2.0	2.0	2.0	2.4	2.1	2.2
Private Consumption	1.0	1.1	0.8	0.4	0.9	1.4	:	:	1.1	1.2
Public Consumption	0.2	0.6	1.2	-0.2	-2.0	2.0	:	:	0.5	1.2
Gross Fixed Capital Formation	0.8	11.9	-2.1	14.6	0.2	10.0	:	:	2.4	8.8
Exports	7.5	5.8	8.4	5.7	7.7	5.3	:	:	7.7	4.7
Imports	3.4	5.2	3.6	6.1	4.0	6.3	:	:	3.5	5.0
Harmonised Index of Consumer Prices (%)	0.8	1.2	0.8	1.2	0.8	0.8	0.7	1.2	0.8	1.3
Unemployment (%)*	19.6	18.2	19.6	18.2	19.3	18.0	19.9	18.1	19.5	18.1
General Government Balance (% GDP)	0.6	0.6	0.6	0.6	:	:	0.5	0.0	0.3	0.1
Current Account Balance (% GDP)	:	:	-0.2	-0.2	:	:	-0.8	-0.4	-0.5	-0.6

* Based on the Labour Force Survey methodology

Sources: Explanatory State Budget Report 2019, Ministry of Finance, November 2018 - European Economic Forecast, autumn 2018, European Commission, November 2018 - The Greek Economy 04/18, IOBE, January 2019 – World Economic Outlook, IMF, October 2018 - Fiscal Monitor, IMF, October 2018 - OECD Economic Outlook No. 104, November 2018

The end of the private sector deposit growth in late 2018 and more importantly the developments regarding the management of NPLs in the current half of the year, with the implementation of the planned actions by the banks and the assessment of the proposals of the FSF and the Bank of Greece, constitute the major drivers of credit flows to the non-financial sector of the economy, at least for the first half of 2019. From the side of the businesses, over the years, the period of elections creates expectations of policy changes, with a negative impact on investment and demand for investment capital. Under the influence of both demand and supply factors, credit to businesses will continue to contract at least for the first half of the current year. The search for financing solutions through the capital markets rekindled recently, in spite of the after-effects of the Folli Follie case and the bad financial results of the banks, and will continue to do so this year, to a similar or greater degree than last year.

The new increase in exports in the first nine months of 2018, which boosted the investment activity in the export-oriented sectors of Manufacturing and Tourism, most likely weakened by the end of the year, due to slower growth in the Euro area, the main destination for Greek exports. The overall slowdown this year, aside from that of the Eurozone, in global trade, as a result of trade protectionism measures, will limit the support of investment through exports. Even though PIP expenditure has higher than in 2017, its implementation was more back-loaded than in the preceding year, and for this reason its contribution to investment in 2018 was weaker. The provision of grants is not expected to strengthen in the current year, yet it is likely that PIP implementation will be faster, slightly boosting investment. The indirect contribution of the public sector to investment is also expected to strengthen through investment in completed privatisations and concessions, mostly due to the start of the Hellinikon project.

In the external sector of the Greek economy, the continued strong growth in the EU and the US in 2018, as well as the stronger growth in developing and emerging economic regions with an increasing share in Greek exports (e.g. North Africa, BRICS) continued to support export growth until the end of 2018. However, it is likely that this growth weakened in the final quarter of last year as growth in the EU showed signs of "fatigue" already from the third quarter. The effects from the US protectionist measures and their countermeasures are another reason for the slow down. It is now considered likely that pressures on the international trade by such policies will become more pronounced in 2019. Export expansion will also be affected by the significantly lower growth in the Euro area. As international tourist flows and revenues have grown for a number of years, while last year competing tourist destinations started to recover, they are quite likely to cease to grow in the current year. Despite the recovery of oil prices since the beginning of January, with global and EU growth weakening, on average this year they are not projected to be higher year on year, while the demand for petroleum products will drop.

The expected peak in consumption demand in the final quarter of 2018 will boost the imports of goods. The lower euro/dollar exchange rate supported their growth and mostly that of petroleum, whose price dropped significantly at the time. Then again, the strong imports of ships in the final quarter of 2017 have set a high base of comparison for the same period in the following year. The domestic demand for travel services is also estimated to have peaked over the festive period around Christmas. The stronger domestic demand in the current year, due to significant increase in both investment and consumption, will boost the demand for imports.

Taking into account the above estimates for the final quarter of last year and the expected developments in the current year that affect the trends in the components of GDP, we estimate that that output has increased by 2.0% in 2018 and is forecasted to continue to grow this year at a similar rate, perhaps slightly higher at 2.1%-2.2%.

Regarding the labour marker, the gradual conclusion of the tourist season in the fourth quarter of last year implies a drop in the boost coming from Tourism, which was weaker in 2018 compared to previous years, so it is possible that jobs in the sector declined at the end of last year. Employment is estimated to have continued to grow significantly in Health and Retail – Wholesale Trade, in the latter as result of a significant boost in consumer confidence. The largest boost in employment for this period is expected to stem from the public sector, through temporary social employment programmes run by OAED, and in particular the programme for 26.800 individuals in municipalities, regional authorities and social welfare centres that began last October. This programme will last throughout the first half of 2019, while during the second quarter another social employment programme is expected to begin in municipalities and environmental agencies, targeting almost 9.000 people. At the sector level, the increase will reflect on employment in administrative and support activities. Following the sector-specific developments, the year-on-year decline in unemployment is estimated to have slowed down slightly by the end of the year, averaging 19.5% overall in 2018.

In 2019, aside from a boost in temporary employment in the public sector through the OAED initiatives, no actual increase is expected from the announced permanent recruitments, as they will be conducted following the "1 departure – 1 recruitment" rule. A significant increase in employment is expected to occur in Retail – Wholesale Trade, due to higher than last year growth in private consumption. Employment is also expected to increase in the Construction sector, mostly due to investment in completed privatisations-concessions, as well as from construction activity in renovation or building of residences. Then again, the notably weaker expansion of exports will slow down employment expansion in export-oriented sectors, such as Manufacturing and Tourism, where, as mentioned earlier, after many years of growth, activity may decline this year, affecting job creation as a result. Finally, employment in the banking sector is projected to continue to decline in the current and the upcoming years, as a result of the extensive restructuring of its assets. Given these and other factors that affect employment in 2019, unemployment is expected to decline less than in previous years, to 18.0%.

Concluding with the consumer price forecasts, given that no new indirect taxes or increases in already existing taxes[34] are included in the fiscal measures for 2019, and with the oil prices projected to decline year on year on average in the current year, inflationary pressures are expected to come only from stronger demand. However, as shown in box 3.3 of chapter 3.5 of this report, every time since 2010 that a high inflation rate was recorded, it was mostly due to an increase in indirect taxation and to a lesser extent from an increase in oil prices. Therefore, the expected increase in household consumption expenditure due to: a) an increase in their income from the payment of allowances ("social dividend"), retroactive payments, fiscal measures for 2019 and higher than initially planned allowances and tax reliefs; b) the developments in regulations on wages (increase of the minimum wage, abolition of the sub-minimum wage); and c) a new, milder increase in employment, is not expected to cause significant inflationary pressures. If unexpected developments in factors that influence prices occur (e.g. an extensive increase in oil prices, following the reduction in daily production since the beginning of the year), the rate at which prices increase will accelerate. However, under the current conditions, the average rate of change of the CPI in the current year is expected to be similar to that of last year, at 0.6%-0.8%.

[34] With a joint ministerial decision on 2 January 2019, the duration of the reduced VAT regime for the five Aegean islands with increased refugee inflows (Leros, Lesvos, Kos, Samos and Chios) was extended until 30 June 2019.

3.2 Developments and Prospects in Key Areas of the Economy

- A slight increase in industrial production over January-November 2018, considerably lower year-on-year (+1.1% from +4.6%)
- A slight decrease in activity in Construction in the first 9 months of 2018 (-0.2%), from a 10.9% drop over the same period of 2017
- Continued growth in Retail Trade over January-October 2018, with a similar rate to the previous year (1.4% from 1.6%)
- Turnover contraction over the first 9 months of 2018 in five out of thirteen sub-sectors of services. Boost in expectations last year, but less than in 2017.

Industry

During the first eleven months of 2018, industrial production increased by 1.1% year on year, from 4.6% growth in the same period of last year. The slowdown of the growth in the overall index came from the fact that in many sectors of Greek industry that recorded an increase in 2017, activity remained stable or slightly dropped in 2018.

According to the latest data, the prices of industrial products increased by 4.7% over the same period of 2018 against stronger rise in the same period of 2017 (+5.6%). As projected in previous IOBE reports, 2018 will be the second consecutive year when the prices of industrial products increase, after four years of decline (2013-2016). The increase comes primarily from exported products (+8.4%, from +9.7% a year earlier) and less from products directed to the domestic market (+3.6% from 4.4%). Given the increase in industrial output and prices, turnover expanded in the first eleven months of 2018 at a slightly weaker rate than in the corresponding period of 2017 (10.8% against 11.8%).

In the Euro area, industrial production strengthened less in the first eleven months of 2018 compared to the same period of 2017 (1.4% from 2.8%).

At the sector level, the increase came solely from Manufacturing, where output increased by 2.1%, from 3.5% a year before. In contrast, contraction was recorded in Mining (by 0.9% from 9.0% in 2017); Electricity Generation also subsided to 2.0% against a 10.3% growth in 2017, while output in Water Supply was 2.3% lower, from a 2.6% drop in 2017.

In greater detail regarding Mining, output increased strongly in Extraction of Crude Petroleum (47.3% from -21.5% in 2017). In all other sectors output decreased. The greatest drop was recorded in Other Mining (-4.5% from 0.8%), followed by Coal-Lignite (-2.4% from +19.9%), the trend of which is influenced by Electricity production, which declined last year. A smaller reduction was recorded in Mining of Metal Ores (-1.1% against 14.8%).

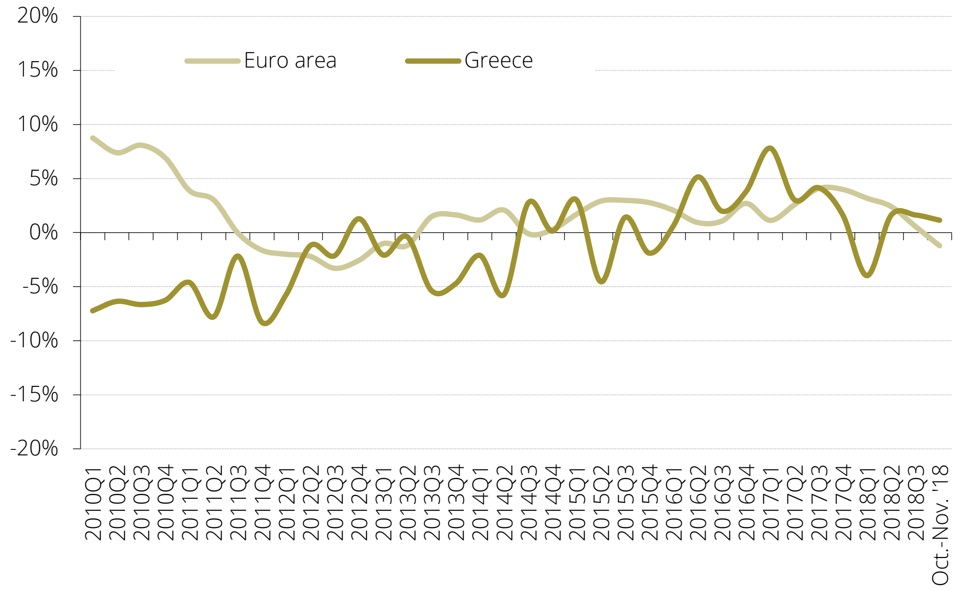
In Manufacturing, output increased in 14 of its 24 branches. Among the branches with particular significance for the Greek economy, production increased in Basic Pharmaceuticals by 16.3%, slightly faster than a year earlier (+15.7%), and Basic Metals, slower than the previous year, at 3.4%

from 26.1%. Food production was about the same (-0.3%), after a 1.4% increase in the first eleven months of 2017.

Figure 3.1

Industrial Production Index in Greece and in the Eurozone-19

(% change compared to the same quarter of the preceding year)



Slower growth in January-November 2018 than in 2017, at 1.1% from 5.6%

Sources: ELSTAT, Eurostat

Among the remaining branches of Manufacturing, the largest contraction in the first eleven months of 2018 was recorded in Tobacco Products, where output declined faster than in the preceding year, by 27.5% and 17.9% respectively. Electrical Equipment came next (-17.0% from +2.9%), followed by Other Transport Equipment (-6.1% from -19.7%) and Motor Vehicles (-5.8% from +31.3%). Branches with growing output include Furniture (+16.6% from -5.0%), Computers-Electronics (+15.7% from +9.5%), Beverages (+6.2% from -6.9%) and Machinery-Equipment (+1.5% from +4.1%)

Output increased in three out of five key groups of industrial products over the same period, yet in some of them growth slowed down significantly year on year. In particular, the production of Capital Goods strengthened by 2.9%, against a 4.7% increase a year earlier. Non-durable Consumer Goods came next with a 2.7%, from 0.1% in 2017 and Intermediate Goods with +0.7% from 6.7%. In contrast, output declined in Durable Consumer Goods (-2.1 from +0.9%) and Energy (-0.2% from +7.1%).

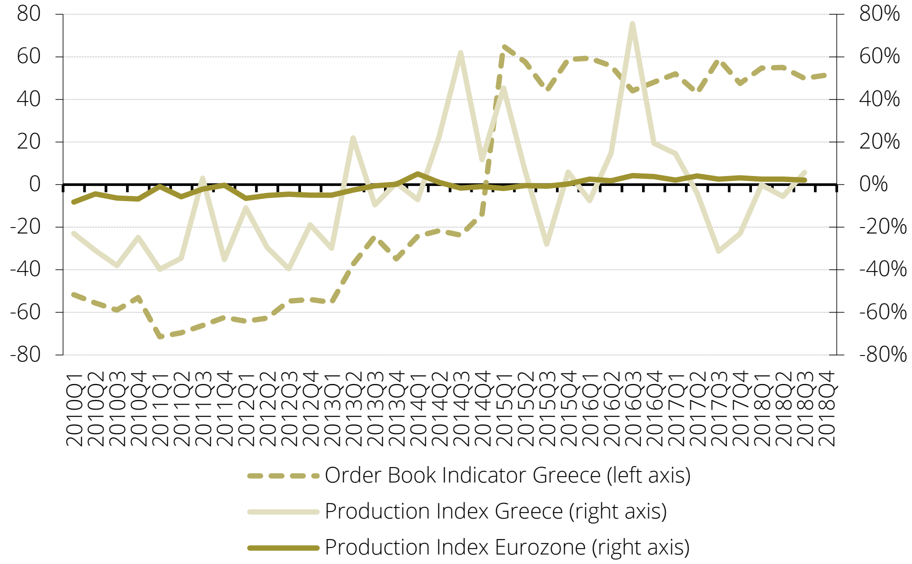
Construction

The production index in Construction decreased marginally by 0.2% in January-September 2018, against a much larger drop of -10.9% in the corresponding period of last year. The index averaged 41 points, lower by 59 points than the base year (2010).

Figure 3.2

Production Index in Construction and Building Activity Index

Marginal drop over the first 9 months (-0.1%), against a strong 10.9% increase a year before



Source: ELSTAT

Strong and diverging trends prevailed among its constituent activities: the production index in Building Construction strengthened by 19.5%, against a contraction by 8.3% in the first nine months of 2017. By contrast, the production index in Civil Engineering declined by 15.1%, continuing a 12.9% drop a year earlier.

The monthly data on building activity over the same period point to a 1.2% drop in terms of number of permits (against 15.1%). Both in terms of volume (9.3% against 22.0%) and surface (9.3% against 23.5%), activity strengthened. Over September-October last year, the most recent period for which there is data, the total number of permits amounted to 2,800, 15.5% higher year-on-year (+10.0%). Over the same period, the volume and surface indicators increased by 34.2% and 38.7% respectively. The further increase is linked to real estate acquisitions by non-residents of Greece and non-Europeans for the purpose of obtaining a residence permit and the right of free movement within the Schengen area. According to data from the Bank of Greek, foreign investment in property increased by 91% in 2017 (latest available data) in relation to 2016, while a similar trend is expected for 2018 as well. Residence renovations from these investors constitute one of the main drivers of the recent growth in permits. In the Euro area, over the first nine months of 2018, production in Construction increased anew, with a similar rate to that of 2017, at 2.5% from 2.9%.

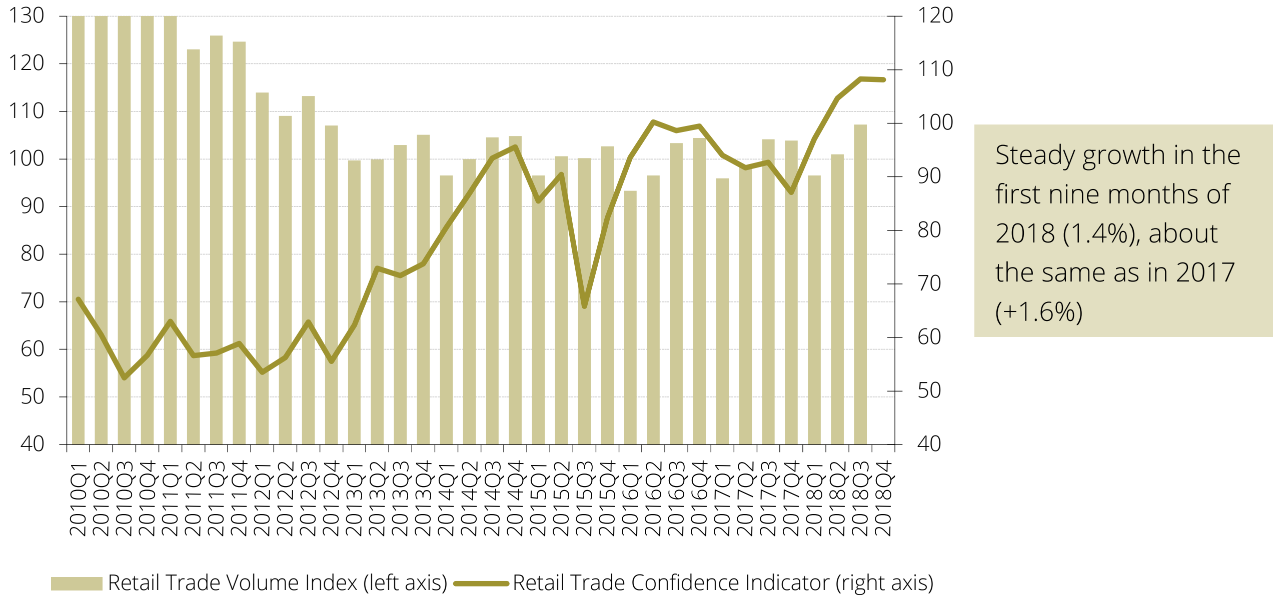
Retail Trade

The revised volume index[35] in retail trade strengthened in January-October 2018 by 1.4%, at a marginally lower rate than in the same period of 2017 (1.6%).

[35] 2015 being the new base year of comparison

Figure 3.3

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



Source: IOBE

The volume of activity increased in six of the eight branches of Retail Trade. The strongest growth was recorded in Furniture – Electrical Equipment – Household Appliances, by 5.1%, against weaker growth by 4.8% in the same period of 2017. Supermarkets came next, more than doubling their growth (3.6% from 1.5%). Sales in Pharmaceuticals-Cosmetics increased by 1.6%, same as in 2017 (1.8%), followed by Books-Stationary (+2.0% against +8.4%). An increase was recorded in Department Stores, at +0.6% against 0.0% and in Clothing-Footwear by 0.5%, continuing the 3.4% trend from a year before. By contrast, the contraction rate in Food – Beverages was similar to 2017 (-3.9% from -3.4%). Small losses were recorded in Fuel – Lubricants by -1.2%, same as in 2017 (-1.7%).

For 2018 overall, the expectations in Retail Trade strengthened significantly year on year. According to the leading indicators of the Business Surveys conducted by IOBE, the index for Retail Trade overall increased by 3.8 points year on year, compared with a decline by 6.6 points in the corresponding period of 2017.

At the branch level, expectations weakened year on year only in Clothing – Footwear, by 5.8 points, while the previous year they had strengthened by 20.4 points. By contrast, expectations significantly improved anew in Vehicles-Spare Parts (15.1 points, against 10.4 points in 2017), Household Appliances (10.3 points against -0.87 points last year), Department Stores (7.1 against -10.2 points) and Food-Beverages-Tobacco (+3.9 points against -35.7 points in 2017).

In Vehicles, in particular, the index seems to match the sales of passenger vehicles which are 17.4% higher in 2018 in comparison with 2017, taking into account that the largest part of these sales are for business purposes, due to an increase in tourism. In the individual components of the business sentiment indicator, a significant improvement in relation to 2017 was recorded in the balance of current and expected upcoming sales, standing a bit lower than their levels before the crisis (in 2007). In the balance of orders, the negative trend turned positive, while an improvement was also recorded in the balance of employment, without, however, improving the positive expectations.

Table 3.4

Volume Index in Retail Trade, annual changes

Category of Retail Trade Stores	Volume Index (2015=100)				
	Jan- Oct 2016	Jan- Oct 2017	Jan- Oct 2018	% Change 2017/2016	% Change 2018/2017
Overall Index	98.0	99.5	101.0	1.6%	1.4%
Overall Index (excluding automotive fuels and lubricants)	98.9	100.5	102.3	1.6%	1.7%
Store Categories					
Supermarkets	99.8	101.3	104.9	1.5%	3.6%
Department Stores	106.7	106.6	107.3	0.0%	0.6%
Automotive Fuels	95.3	93.7	92.6	-1.7%	-1.2%
Food – Drink – Tobacco	98.4	95.0	91.4	-3.4%	-3.9%
Pharmaceuticals – Cosmetics	96.6	98.4	100.0	1.8%	1.6%
Clothing – Footwear	103.8	107.4	107.9	3.4%	0.5%
Furniture – Electric Equipment – H. Appliances	95.5	100.1	105.2	4.8%	5.1%
Books – Stationary	97.6	105.8	108.0	8.4%	2.0%

Source: ELSTAT

Table 3.5

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

Sector	2016	2017	2018	% Change 2017/2016	% Change 2018/2017
Food-Drinks-Tobacco	117.7	82.0	85.9	-30.3%	4.8%
Textiles - Clothing – Footwear	80.6	101.0	95.2	25.3%	-5.7%
Household Appliances	85.7	84.9	95.2	-0.9%	12.1%
Vehicles-Spare Parts	97.8	108.2	123.3	10.6%	14.0%
Department Stores	99.4	89.2	96.3	-10.3%	8.0%
Total Retail Trade	98.0	91.4	95.2	-6.7%	4.2%

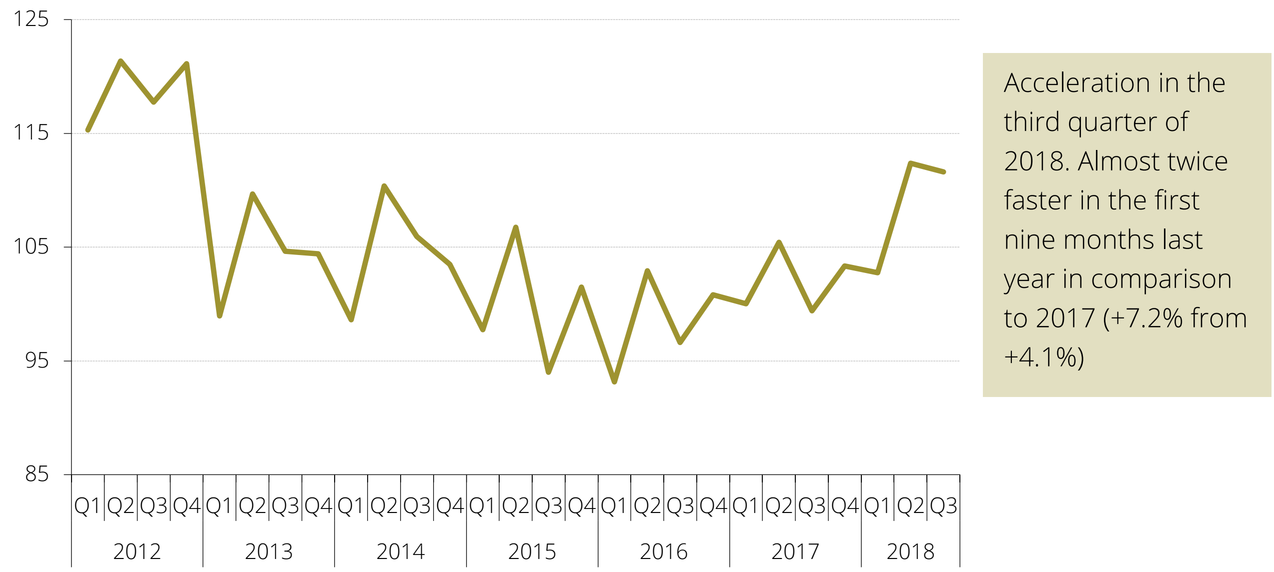
Source: IOBE

Wholesale Trade

The revised index for turnover in wholesale trade increased by 7.2% in January-September 2018, against 4.1% growth over the same period in 2017. However, in the third quarter of 2018, the rise of the index accelerated rapidly, to 12.3%, from 2.9% a year earlier.

Figure 3.4

Turnover Index in Wholesale Trade



Source: ELSTAT

Services

Over January-September 2018, turnover declined year on year in five of the thirteen branches of Services in comparison with the same period of 2017.

The strongest activity contraction was recorded in Cleaning Activities (-8.7% from -2.5%) and Publishing Activities, with turnover contracting by 8.1%, following a more intense contraction in 2017 (-19.3%). Architectural – Engineering Activities came next (-6.0%, against -12.0%). Weaker contraction was recorded in Information Service Activities (-1.1% against -2.2% in 2017), while Security - Investigation Activities contracted by 0.7%, compared with a marginal increase of 0.1% in 2017.

Among the branches where turnover increased year on year, the largest growth was recorded in Employment Activities (+17.7%, against 6.9% last year), Office Administrative, Office Support - Other Business Support Activities (+12.0%, against -2.6%) and Legal – Accounting – Management Consultancy Activities (+9.9%, from 4.2%). Revenues in Computer Programming increased in comparison to 2017 (8.1%, against 6.1%), followed by Advertising - Market research activities (+3.8% against -0.4%) and lastly, Telecommunication Services (+1.2 against 0.0%).

Table 3.6

Turnover Indexes (2010=100)

Sector	% Change Jan – Sep 2017/2016	% Change Jan. -Sep. 2018/2017
Publishing Activities	-8.1%	-19.3%
Architectural and engineering activities; technical testing and analysis	-6.0%	-12.0%
Cleaning Services	-8.7%	-2.5%
Computer programming, consultancy and related activities	-1.1%	-2.2%
Security and investigation activities	-0.7%	0.1%
Telecommunications	1.2%	0.0%
Advertising and market research	3.8%	0.4%
Postal and courier activities	9.0%	0.1%
Information service activities	8.1%	6.1%
Other professional, scientific and technical activities	9.2%	15.5%
Legal and accounting activities	9.9%	4.2%
Office administrative, office support and other business support activities	12.0%	-2.6%
Employment activities	17.7%	6.6%

Source: ELSTAT

Table 3.7

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

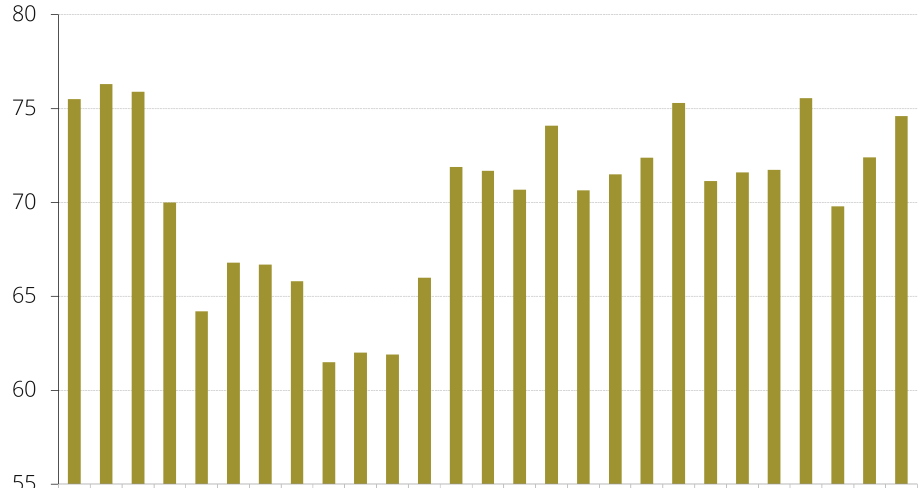
Sector	2016	2017	2018	ΠΜ%	ΠΜ%	Change 2017/2016	Change 2018/2017
Hotels – Restaurants – Travel Agencies	89.5	108.1	107.1	20.8%	-0.9%	18.6	-1.0
Other Business Services	56.4	65.6	68.0	16.3%	3.7%	9.2	2.4
Financial Intermediation	60.9	86.2	87.7	41.5%	1.7%	25.3	1.5
Information Services	76.6	73.5	70.2	-4.0%	-4.5%	-3.1	-3.3
Total Services	76.1	86.6	90.6	13.8%	4.6%	10.5	4.0

Source: IOBE

According to the leading indicators of the Business Surveys conducted by IOBE for 2018 overall, the sentiment improved year on year in most of the branches of Services, albeit less than in the previous year. More specifically, the overall indicator for services increased by 4.0 points, against growth by 10.5 points in 2017. The indicator increased by 2.4 points in Various Business Activities (from +9.2 the preceding year), 1.5 points in Financial Intermediaries (against +25.3 points in 2017) and 1.6 points in Hotels - Restaurants (from 22.5 point increase a year earlier). The indicator fell in the IT sector by 3.3 points, same as in 2017 (-3.1). In Tourism, expectations marginally weakened in comparison to 2017 (-1.0 point), after their steep increase two years ago (+18.6 points).

Figure 3.5

Turnover Index in Telecommunications (branch 61)



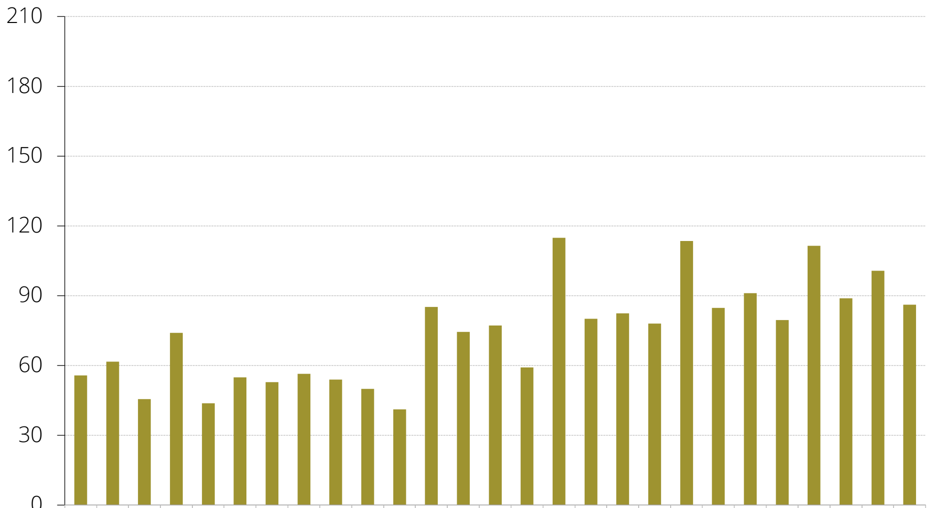
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	2012				2013				2014				2015				2016				2017				2018		
Index	76	76	76	70	64	67	67	66	62	62	62	66	72	72	71	74	71	72	72	75	71	72	72	76	69	72	74

Marginal improvement in the first nine months of 2018, by 1.2%, against no change a year before

Source: ELSTAT

Figure 3.6

Turnover Index in Information Services (branch 62)



	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	2012				2013				2014				2015				2016				2017				2018		
Index	56	62	46	74	44	55	53	56	54	50	41	85	74	77	59	11	80	82	78	11	85	91	80	11	89	10	86

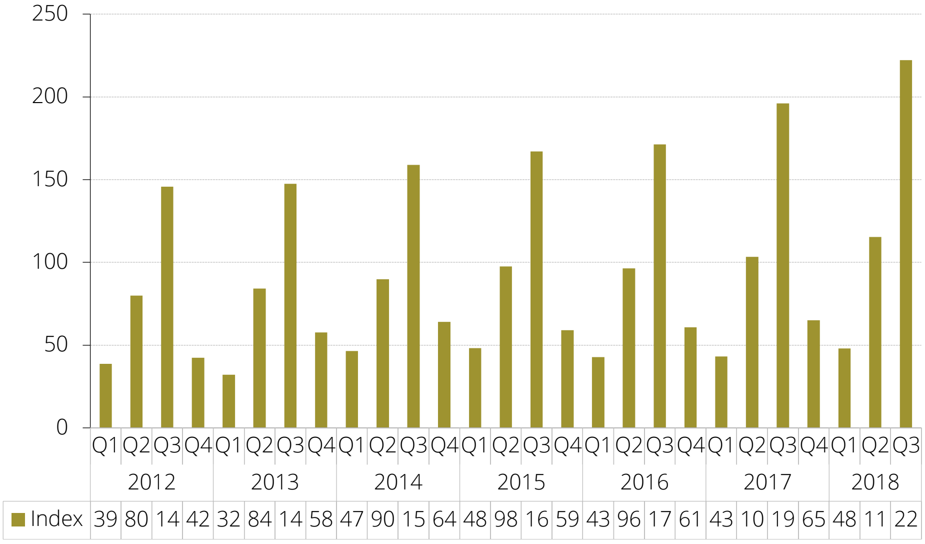
Continued expansion In January-September 2018, 8.1% faster than in 2017 (+6.1%)

Source: ELSTAT

Figure 3.7

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

New record high level of activity in tourism over the summer



Source: ELSTAT

3.3 Export Performance of the Greek Economy

- Exports of goods continued to grow over January-October 2018 with a high rate (17.0%)
- Increased demand mainly by EU countries (+13.3% or +€1.7 billion), due to steady strong growth
- Stability in the trade deficit in comparison to the same ten-month period of 2017.

The exports of goods stood at €27.6 billion in the first ten months of 2018, from €23.6 billion in 2017, recording an increase of 17.0%, according to data from ELSTAT. If petroleum and ship exports are not taken into account, the remaining exports increased by 10.9%, to reach €18.1 billion, from €16.3 billion in the preceding year (Figure 3.8). Imports increased less in the first ten months of 2018, by 10.1%, to reach €45.2 billion, from €41.0 billion a year earlier. As a result of the above trends in the main components of the external balance, the trade deficit stood at €17.72 billion in January-October, from €17.70 billion (+0.1%), €21.5 million more than a year ago. Subsequently, the value of the exports of goods of the Greek economy accounted for 60.8% of its imports, from 56.8% in the first ten months of 2017.

In greater detail, the exports of Agricultural Products increased by 8.9% in the first ten months of this year, to reach €4.9 billion, from €4.5 billion a year earlier, while the exports of Fuels increased by 31.4%, to €9.6 billion from €7.3 billion in the previous year (Table 3.8). The exports of these two product categories accounted for 53.0% of the Greek exports in the current year, from 50.7% a year earlier. The growth in Agricultural Products came mainly from a 41.1% increase in the demand for Oils and Fats of Animal or Plant Origin, the value of which amounted to €584.0 million, from €413.9 million a year earlier and, as a result, their share in total exports strengthened from 1.8% in 2017 to 2.1% in 2018. The exports of Food – Live Animals, which account for approximately 76.3% of the exports of Agricultural Products, increased by 6.8%, from €3.5 billion in 2017 to €3.7 billion last year. The foreign demand for Beverages – Tobacco, which represent 11.9% of the exports of

Agricultural Products, totalled €585.9 million in the first ten months of 2018, lower by 1.5% year on year (from €594.5 million).

Figure 3.8

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

Exports except fuels and ships stood at €18.1 billion over January-October, 17% higher than in 2017

Source: ELSTAT. Processing: IOBE.

The exports of Industrial Products increased by 13.0% in the first ten months of 2018, with their value reaching €11.4 billion, from €7.3 billion a year earlier. This rise is explained mainly by the strengthening of foreign demand for Manufactured Goods Classified Chiefly by Raw Material, by 14.5%, with their value reaching €4.4 billion. The exports of Chemical and Related Products also rose, by 13.0%, to €2.8 billion in 2018, from €2.5 billion a year earlier, while the exports of Miscellaneous Manufactured Articles increased by 8.0%, to €1.8 billion, from €1.7 billion a year earlier. The export performance strengthened in Machinery and Transport Equipment as well, by 14.5%, to €2.4 billion, from €2.0 billion.

Finally, the exports of Raw Materials also increased, reaching €817.7 million from €736.6 million (+8.0%), while the exports of Commodities and Transactions Not Classified by Category expanded by 7.5%, from €348.3 million in the first ten months of 2017, to €374.4 million in the same period of last year.

Regarding the export trends by geographical area, the exports to the Euro area countries expanded by 14.9%, to reach €1.01 billion in 2018, from €8.8 billion in the first ten months of 2017, absorbing as a result almost 36.8% of the Greek exports of goods in 2018. There was a similar increase in the EU-28, by 13.3% or €1.3 billion, with the exports to the region totalling €14.3 billion, from €12.6 billion a year earlier. Among the Eurozone countries with the largest share of Greek exports, growth was stronger in Italy, at 9.0%, from €2.6 billion in 2017 to €2.8 billion a year later, and in Cyprus, by 3.4%, from €1.42 billion in 2017 to €1.47 billion. The exports to Germany also increased significantly, from €1.71 billion in 2017 to €1.76 billion in 2018. The only contraction of exports in the first ten months of 2018 in the Eurozone was recorded in Lithuania, yet it did not exceed 1.5% or €0.6 million, as they reached €42.8 million. In contrast, the highest percentage increase was recorded in Slovenia, by 98.3% or €163.1 million.

Among the remaining countries of the European Union, where total exports grew by 9.5% or €358.3 million, to reach €4.1 billion, Bulgaria continues to be the main export destination, with an increase in outflows by 6.8% or €73.2 million year on year. The exports to two other countries, which also absorb a significant share of Greek exports from this group of countries, UK and Romania, also increased, by 7.7% or €40.6 million to €1.0 billion in the former and by 11.5% or €80.3 million to €779.8 million in the latter. The largest percentage growth, by 26.3%, was recorded in Hungary, where Greek exports increased by €29.7 million, from €112.9 million in 2017 to €142.6 million in 2018.

The Greek exports to the remaining European countries increased by 16.9% in the first ten months of 2018, to €4.4 billion, from €3.8 billion in the same period of 2017. In Turkey, the major destination in this country group, exports expanded significantly, by 25.9%, from €1.4 billion to €1.8 billion.

Exports to the North American countries increased by 14.1%, from €1.2 billion in the first ten months of 2017 to €1.4 billion last year, mainly due to the increase in exports to the US by 18.6%, from €960.8 million in 2017, to €1.1 billion in 2018. By contrast, exports retreated by 3.8% or €5.2 million to Mexico.

The exports to the Middle East and North Africa increased by 28.6%, to €4.5 billion from €3.5 billion, mainly due to an increase in the exports to Egypt (64.1%), where they reached €1.0 billion in the first ten months of the year, from €618.9 million a year earlier. The higher export activity to this specific geographical region was also boosted by an increase to Libya (+63.9%, from €209.6 million to €343.5 million). Exports to Saudi Arabia, another major export destination in the Middle East, increased by 1.2%, to €568.1 million, while to the United Arab Emirates they increased by 26.0% to €264.5 million.

Table 3.8

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

Product	Value		% Change	% Share	
	2018*	2017*	18*/17*	2018*	2017*
AGRICULTURAL PRODUCTS	4,929,9	4,528,5	8.9%	18.0%	19.4%
Food and Live Animals	3,760,0	3,520,0	6.8%	13.7%	15.1%
Drinks and Tobacco	585,9	594,5	-1.5%	2.1%	2.5%
Oils and Fats of animal or plant origin	584,0	413,9	41.1%	2.1%	1.8%
RAW MATERIALS	1,054,6	976,4	8.0%	3.8%	4.2%
Non-edible Raw Materials excluding Fuels	1,054,6	976,4	8.0%	3.8%	4.2%
FUELS	9,599,5	7,305,8	31.4%	35.0%	31.3%
Minerals, Fuels, Lubricants etc.	9,599,5	7,305,8	31.4%	35.0%	31.3%
INDUSTRIAL PRODUCTS	11,394,3	10,079,0	13.0%	41.5%	43.2%
Chemicals and Related Products	2,837,2	2,511,3	13.0%	10.3%	10.8%
Industrial Products Sorted by Raw Material	4,357,1	3,804,6	14.5%	15.9%	16.3%
Transport Equipment	2,386,7	2,084,6	14.5%	8.7%	8.9%
Various Manufactured Goods	1,813,3	1,678,5	8.0%	6.6%	7.2%
OTHER	459,5	434,8	5.7%	1.7%	1.9%
Goods and Transactions not sorted by Category	459,5	434,8	5.7%	1.7%	1.9%
TOTAL EXPORTS	27,437,8	23,324,5	17.6%	100.0%	100.0%

* Provisional Data

Sources: ELSTAT, PSE-KEEM.

The flow of exports of Greek products to Oceania increased by 5.1% over first ten months of the year, with their value reaching €137.9 million, against €144.9 million a year earlier. The exports to Australia expanded by 4.6%, from €124.9 million in 2017, to €130.7 million in 2018. In New Zealand, exports also increased, by 9.9%.

Table 3.9

Exports by destination, January – October* (million €)

ECONOMIC UNION – GEOGRAPHIC REGION	EXPORTS		% CHANGE	% SHARE	
	2018	2017	18/17	2018	2017
World	27,437.8	23,324.5	17.6%	100.0%	100.0%
OECD	14,630.2	12,682.8	15.4%	53.3%	54.4%
EU	14,248.1	12,579.7	13.3%	51.9%	53.9%
Euro Area	10,106.6	8,796.4	14.9%	36.8%	37.7%
G7	7,738.4	7,015.0	10.3%	28.2%	30.1%
North America	1,405.6	1,231.8	14.1%	5.1%	5.3%
BRICS	1,231.5	687.4	79.2%	4.5%	2.9%
Middle East & North Africa	4,502.6	3,502.5	28.6%	16.4%	15.0%
Rest of Africa	1,858.8	1,133.2	64.0%	6.8%	4.9%
Oceania	144.9	137.9	5.1%	0.5%	0.6%
Latin America	303.1	173.9	74.3%	1.1%	0.7%
Rest of Asia	1,814.9	1,394.6	30.1%	6.6%	6.0%
OPEC	1,497.5	1,255.8	19.2%	5.5%	5.4%

* Provisional Data

Source: ELSTAT, Processing KEEM

The exports to the markets of Central and Latin America increased significantly in the first ten months of this year, by 74.3%, with their value amounting to €303.1 million, from €173.9 million a year earlier. The better export performance to these countries came mainly from strong growth in the demand for Greek products from Brazil, by 360.3%, where their value expanded to €103.6 million, from €22.5 million in 2017.

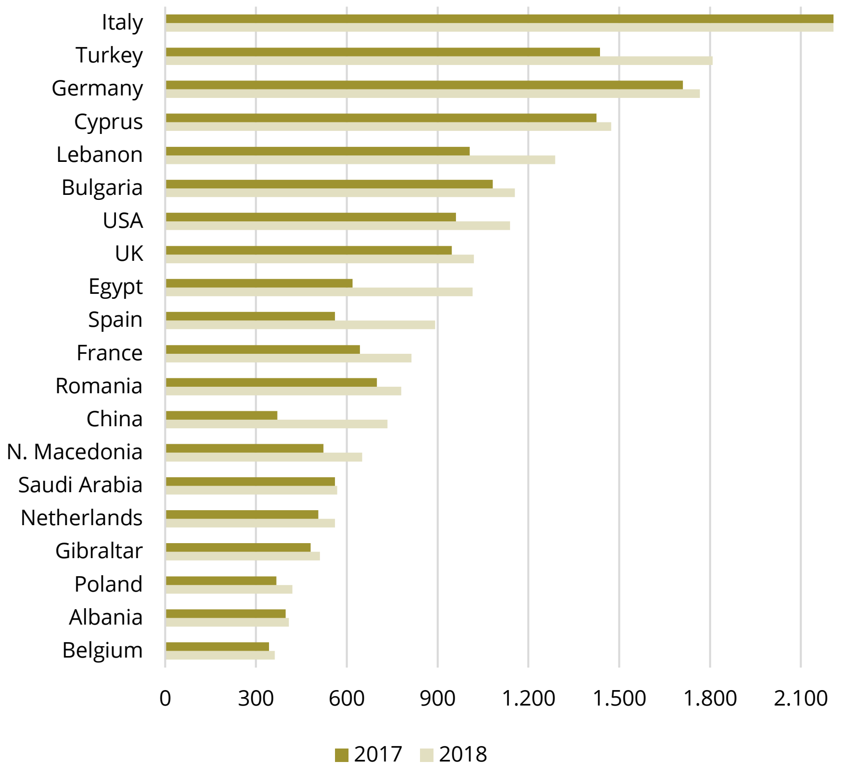
The demand for Greek goods strengthened significantly in the Asian countries, where exports increased by 30.1%, to €1.8 billion, from €1.4 billion in the first ten months of 2017. This development came mainly from the strengthening of exports to the Philippines (+259.9%, to €63.9 million, from €17.7 million in 2017), and China (+98.5%, to €734.7 million from €370.2 million). By contrast, a significant decline of Greek exports was recorded in South Korea, by 48.3%, from €181.0 million in 2017, to €93.6 million a year later, and by 5.6% towards Singapore from €335.8 million to €316.8 million.

In conclusion, exports continued to grow strongly in the first ten months of 2018, at a high rate maintaining their momentum from the first half of the year. Exports excluding fuels and ships increase strongly as well. Its wide range, evident in every sector, save Beverages-Tobacco, is significant for the future growth prospects. The positive trend of Greek exports in the first ten months of last year is estimated to lead to a new openness record overall in 2018. Then again, the significant expansion of imports is problematic, as it prevents a decrease in the trade deficit, despite the rapid increase in exports, a fact which highlights the enduring lack of competitiveness of domestic production.

Figure 3.9

Countries with the largest share in the exports of Greek products, January –October (million €)

Largest increase of exports over Jan-Oct in absolute terms to Egypt (+€397.0 million). The share of Italy remains the largest.



Source: PSE-KEEM. Processing: IOBE

The strong export growth of last year is expected to weaken in 2019, mostly due to slower growth within the Eurozone, from the completion of the QE programme, the trade protectionism measures and the lower oil prices, despite the recent drop in daily production by OPEC and its partner countries. These possible developments must lead to a search for the global comparative advantages of Greek production in recent years, in order to maintain the good performance of the recent years. Such an analysis can be seen in the box below.

Box 3.2

Products with a significant contribution to export growth, Jan-Oct, 2015-2018

In recent years, the boost of openness has constituted a key strategic choice in order to change the growth model of the country and recover from the crisis. In the past three years, the exports of goods except petroleum products have grown steadily. The international demand for Greek products mostly originated from the Euro area, as a result of the quantitative easing programme (QE) of the ECB. The expansion of Greek exports of goods over this period was not uniform for every product. It mostly stemmed from some of them, which seems to have developed certain comparative advantages against competing products from other countries.

Table 3.10

Products with the greatest contribution to export growth

Products	Jan-Oct 2015	Jan-Oct 2016	Jan-Oct 2017	Jan-Oct 2018	Change Jan-Oct 2015-2018 (million €)	Change Jan-Oct 2015-2018 (%)
Pharmaceutical products and preparations	851	880	979	1.193	342	40%
Aluminium	1,178	1,116	1,316	1,472	294	25%
Basic iron, steel, ferro-alloys	232	233	351	462	231	100%
Computers and peripheral equipment	398	478	388	610	212	53%
Ornamental and building stone, limestone, gypsum, chalk and slate	110	129	217	246	135	123%
Copper	401	343	448	520	119	30%
Dairy and cheese products	462	481	514	556	94	20%
Other processed and preserved fruit and vegetables	850	833	869	939	89	10%
Electricity	71	63	88	156	85	121%
Plastics in primary forms	342	335	383	422	80	23%
Other outerwear	127	139	172	204	77	61%
Games and toys	91	106	129	160	68	75%
Measurement, testing and navigation equipment	109	132	139	162	53	49%
Tubes, pipes, hollow profiles and related fittings, of steel	279	103	142	330	51	18%
Footwear	64	95	93	115	50	79%
Total exports excl. ships & fuels	15,054	15,233	16,317	18,102	3,048	20%

Therefore, the effort to boost further the openness of the Greek economy in the upcoming years can be structured around these products, with the implementation of appropriately designed policies and promotion actions by the branch associations. These products are outlined below. Petroleum products are not included in the analysis, as they are a product of processing imported crude oil, while their price fluctuation often does not stem from demand trends, but from decisions on daily oil production.

Based on the latest data, covering January through October, if we exclude petroleum products, which topped the ranking of Greek exports, growing in comparison to previous years, a significant part of exports are taken up by pharmaceuticals (€1.2 billion), which increased by €342 million in 2018, in comparison to 2015.

Aluminium and Basic iron - steel – ferro-alloys came second and third, with exports totalling €1.5 billion and €462 million respectively, recording an increase by €294 million and €291 million in comparison to 2015. A noteworthy increase by €119 million is also recorded in Copper products, and in Tubes, pipes, hollow profiles and other steel articles by €51 million over the same period.

Computers and peripheral equipment (€422 million) and Measurement, testing and navigation equipment (€160 million) recording a €212 million and €85 million increase in comparison to the same period in 2015.

The top ten of products with the greatest contribution to Greek exports also includes food sector goods, as the value of Other processed and preserved fruit and vegetables (€939 million) and Dairy and cheese products (€556 million) rose by €89 million and €94 million, respectively.

The list of the top fifteen products that boosted Greek exports is completed by Electricity, Games-toys, Other outerwear, Footwear and Plastics in primary forms.

3.4 Employment – Unemployment

- A drop in unemployment to 18.3% in Q3 2018 from 20.2% a year earlier, at the same level as in Q3 2011
- About 71.7% of the drop in unemployment can be explained with an increase in employment and 28.4% with a drop in the labour force
- Strongest job creation in the Primary sector (+20,300), Wholesale-Retail Trade (+19,800) and Tourism (+12,400)
- The seasonally-adjusted wage cost index increased by 4.7%, growing for the fourth consecutive quarter

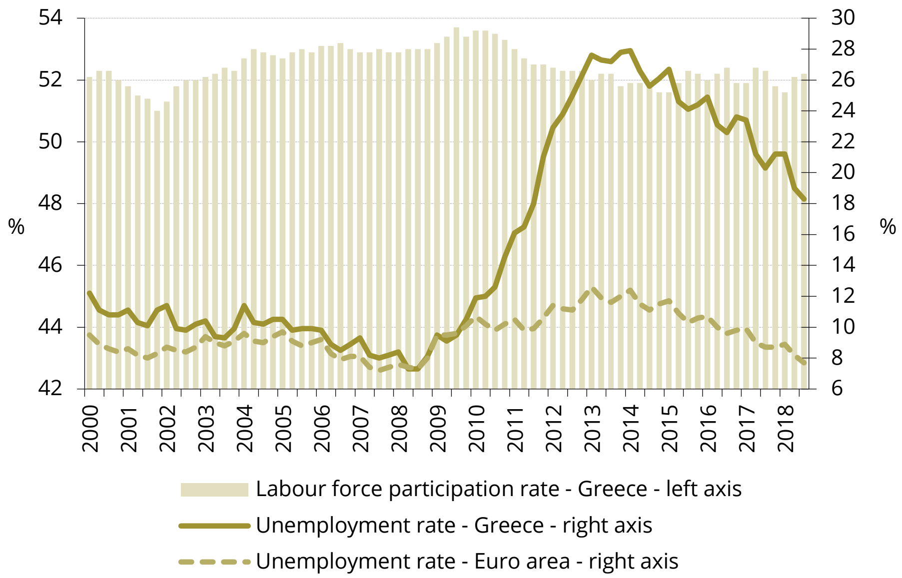
Unemployment, which has been falling since Q2 of 2014, continued to decline in the third quarter of 2018, according to data from the Labour Force Survey of ELSTAT. The (non-seasonally adjusted) unemployment rate declined to 18.3%, 1.9 percentage points lower than in the same period of 2017 (20.2%) and 0.7 p.p. lower compared to the previous quarter of 2018 (19%). The number of unemployed declined from 970,100 in Q3 2017 to 871,800 in Q3 2018 (-98,300), while the number of employed rose from 3,823,700 to 3,894,200 (+70,500), and hence the labour force dropped by 27,900 people. As a result, 71.7% of the drop in unemployment came from increase in employment growth, while the remaining 28.4% is attributed to a drop in the labour force. In October 2018, the non-seasonally adjusted unemployment rate stood at 18.4%, or 2.2 p.p. lower compared to October 2017 (20.4%).

In the Eurozone countries, unemployment has been falling year on year since Q1 of 2014, while in Q3 of 2018, it stood at 7.7%, one percentage point lower than in the same quarter a year before (8.7%). The highest unemployment rate after Greece is recorded in Spain, where it dropped from 16.4% in Q3 of 2017 to 14.6% a year later (-1.8 p.p.), while the largest drop was recorded in Cyprus, by 2.1 p.p., from 10% to 7.9%. The lowest unemployment rate for Q3 of 2018 was recorded once more in Germany (3.3% from 3.6% a year earlier) and in Malta (3.7% from 4% last year). In France unemployment also decreased, by 0.5 p.p., from 9.3% to 8.8%.

The trends in unemployment by sex in Greece have not changed. Unemployment has remained higher among women than men, as the unemployment rate for men in the third quarter of 2018 dropped from 16.5% in Q3 of 2017 to 14.3% in Q3 of 2018 (2.2 p.p. drop) and was 9 p.p. lower than that of women. Among women, it dropped from 25% to 23.3%. In the Euro area, the difference in the unemployment rate among men and women in the third quarter of 2018 did not exceed 0.7 percentage points. Unemployment stood at 7.4% among men (from 8.3% in Q3 2017) and at 8.1% among women (from 9.1% a year earlier).

Figure 3.10

Labour force participation and unemployment rates



A drop in unemployment to 18.3% in Q3 2018 from 20.2% a year earlier, at the same level as in Q3 2011

Sources: ELSTAT – Labour Force Survey, Eurostat

Regarding the age structure, unemployment decreased year on year in all age groups in the second quarter of this year. The largest drop occurred among the age group with the highest unemployment - young people aged 15-19 - where unemployment fell by 7.9 p.p., from 52.2% to 44.3% and for people aged 20-24 by 3.1 p.p. from 38.5% to 35.4%. The lowest reduction was recorded among people aged 65 and over, which already had the lowest rate, to 10.9% from 12.1% (-1.2 p.p). For people aged 30-44 and 44-65 unemployment also dropped over the same period by 1.8 and 1.7 percentage points, from 19.5% to 17.7% and from 16.6% to 14.9%, respectively.

The percentage of long-term unemployed declined for the third consecutive quarter, to 71.8% from 75.7% a year earlier (-3.9 p.p.). The number of long-term unemployed decreased steadily year on year for the 16th consecutive quarter, to reach 625,900 from 734,600 people a year earlier (-108,700 people or -14.8%).

As mentioned in previous IOBE reports on the Greek economy, the unemployment rate is inversely related to the education level - it decreases as the educational attainment increases. The holders of doctorate or master's degrees had the lowest unemployment rate, at 10.2% in Q3 of 2018 from 12.1% in Q3 of 2017, while tertiary education graduates came next with unemployment rate at 14.8%, from 15.6%. By contrast, among people who did not attend school, the unemployment rate increased from 41.9% to 43.8% (+1.9 p.p.). The largest drop can be seen among people with some elementary education, where unemployment fell by 7.6 percentage points, from 40.8% to 33.2%, while the lowest reduction was recorded among people with completed elementary education, by just 0.7 percentage points (from 21.4% to 20.7%).

Unemployment decreased in all regions of the country, except for West Macedonia, North and South Aegean. The highest drop was recorded in Epirus, where it fell from 24.2% to 19.0% (-5.2 p.p.), while the smallest reduction of unemployment was recorded in Central Greece, to 18.4%

from 19.3%. The highest increase in unemployment in Q3 2018 was recorded in the South Aegean, to 10.4% from 8.6%, while the highest rate is observed in West Macedonia where it stood at 27.3%, from 27.6% (0.3 p.p. increase). The lowest rate over this period was recorded in the Ionian Islands (9.4% at Q3 2018, from 12.3% a year earlier) and Crete (9.9%, from 13.2% in Q3 of 2017). In Attica, the unemployment rate fell to 19.5% from 21.4%, posting a 1.9 percentage point reduction.

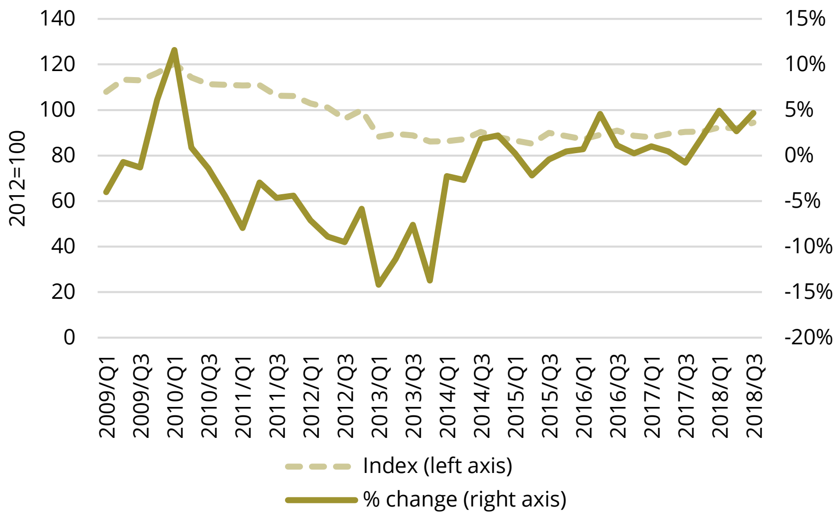
At the level of main economic sectors, employment increased in two out of three. Employment rose between Q3 2017 and Q3 2018 by about 20,300 people (from 452,400 to 472,700 employees) in the Primary sector, and from 2,781,700 to 2,834,000 (+52,300) in the Tertiary sector. In the secondary sector, employment contracted by 2,100 people or from 589,600 to 587,500 employees.

Employment in the constituent branches of economic activity varied, as it dropped in 7 and increased in the remaining 14. The number of employees declined most in Administrative and Support Activities (-6,000 people, from 98,100 to 92,100), and Construction (-5,200, from 155,500 to 150,300), while employment declined marginally in Arts-Entertainment-Recreation (-600, from 54,100 to 53,500). The biggest rise in the number of employees in the third quarter of 2018 was recorded in Agriculture-Forestry-Fishing (+20,300 people, from 452,400 to 472,700), followed by Wholesale-Retail Trade (+19,800 people, from 687,700 to 707,700), while employment increased a bit less in Accommodation – Food Services (+12,400, from 398,700 to 411,100 people). Employment also increased in Information – Communication (+10,800, at 98,000) and Education (+10,700, at 293,600), while in Manufacturing employment essentially remained unchanged (from 362,100 to 362,200).

Figure 3.11

Seasonally adjusted wage cost index (Q1/2007-Q3/2018)

The seasonally-adjusted wage cost index increased by 4.7%, continuing its growth for the fourth consecutive quarter



Source: ELSTAT

To sum up, the increase of employment in the third quarter of 2018 originated mainly from employment growth in:

- Agriculture, Forestry and Fishing (by 20,300 or +4.5%)

- Retail-Wholesale Trade (+19,800 or 2.9%), in conjunction with an increase in the seasonally-adjusted Turnover Index in Wholesale Trade by 11.6% and the seasonally-adjusted volume index in Retail Trade by 2.5%
- Tourism (+12,400 or 3.1%), in conjunction with an increase in the seasonally-adjusted Turnover Index in the sector over the same period by 9.4%.
- Communication-Information (+10,800 or 12.4%)
- Education (+10,700 or +3.8%)

Regarding the trend of the seasonally adjusted wage cost index for the Greek economy overall, in Q3 of 2018 it increased year on year for the fourth consecutive quarter, by 4.7% (from 90.3 to 94.5 points).

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
Q1 2016	9,226.3	52.0	3,606.3	75.1	1,195.1	24.9
Q2 2016	9,217.2	52.2	3,702.6	76.9	1,112.1	23.1
Q3 2016	9,208.3	52.4	3,736.7	77.4	1,092.6	22.6
Q4 2016	9,199.4	51.9	3,648.6	76.4	1,124.0	23.6
2016	9,212.8	52.1	3,673.6	76.5	1,130.9	23.5
Q1 2017	9,190.7	51.9	3,659.3	76.7	1,114.7	23.3
Q2 2017	9,181.4	52.4	3,791.4	78.9	1,016.6	21.1
Q3 2017	9,172.3	52.3	3,823.7	79.8	970.1	20.2
Q4 2017	9,163.3	51.8	3,736.3	78.8	1,006.8	21.2
2017	9,176.9	52.1	3,752.7	78.6	1,027.1	21.5
Q1 2018	9,154.0	51.6	3,723.8	78.8	1,001.2	21.2
Q2 2018	9,144.7	52.1	3,860.4	81.0	906.0	19.0
Q3 2018	9,135.5	52.2	3,894.2	81.7	871,8	18.3

Source: Labour Force Survey, ELSTAT

Medium-Term Outlook

The gradual conclusion of the tourist season in the fourth quarter last year implied a drop in the boost from Tourism, which in 2018 was weaker than in previous years. This, it is possible that a jobs declined year on year in this sector at the end of the previous year. Employment in Health and Wholesale-Retail Trade is anticipated to have continued to grow strongly over the same period, in the latter sector as a result of stronger consumer confidence. The largest boost in employment for this period is expected to have come from the public sector, through temporary social employment programmes run by OAED, and in particular the programme for 26.800 individuals in municipalities, regional authorities and social welfare centres that began last October. This programme will last throughout the first half of 2019, while during the second quarter another social employment programme is expected to begin in municipalities and environmental agencies, targeting almost 9.000 people. At the sector level, the increase will reflect on employment in administrative and support activities. In addition, the programme for the employment of long-term unemployed in the Health sector was extended for the second time in November 2018, benefiting around 4,000 people for twelve months. Following the sector-specific developments, the year-on-year decline in unemployment is estimated to have slowed down slightly by the end of the year, averaging 19.5% overall in 2018.

In 2019, aside from a boost in temporary employment in the public sector through the OAED initiatives, no actual increase is expected from the announced permanent recruitments, as they will be conducted following the "1 departure – 1 recruitment" rule. A significant increase in employment is expected to occur in Retail – Wholesale Trade and Tourism, due to the stronger than last year private consumption growth. This will happen due to: a) changes in the fiscal measures for 2019 (no pension cuts, non-implementation of balancing measures, 10% reduction in the ENFIA property tax, a reduction in the social contributions of freelance professionals etc.) which result in social expenditure and tax relief higher by €1.25 billion than in the MTFS 2019-2022, b) further retroactive payments for special wage grid categories, c) upcoming increase of the minimum wage and abolition of the sub-minimum wage, d) stronger expectations from households due to the upcoming elections.

Then again, the aforementioned changes in labour costs, together with some changes in the second half of 2018 in the framework surrounding the labour market (e.g. extension of collective bargaining agreements in four sectors) may negatively impact employment, if they are not reflecting productivity growth, as in such a case, wages will have gone up, without an offsetting decline in the unit labour cost.

The anticipated weaker expansion of exports this year in comparison to the two previous years will slow down the expansion of employment in export-oriented sectors, such as Manufacturing and Tourism. Global trade will also slow down, as a result of the trade protectionism measures by the US and their countermeasures, in addition to a slower growth in the Euro area, as a result of the conclusion of the quantitative easing programme by the ECB and the problems with the Brexit negotiations. According to the latest IMF estimates, the Euro area is expected to grow at 1.6% this year, from 1.8% last year.[36] As international tourist flows and revenues have grown for a number of years, while last year competing tourist destinations started to recover, they are quite likely to cease to grow in the current year.

Employment is also expected to increase in the Construction sector, mostly due to investment in completed privatisations-concessions, as well as from construction activity in renovation or building of residences. Finally, employment in the banking sector is projected to continue to decline in the current and the upcoming years, as a result of the extensive restructuring of its assets. Taking all these and other factors that affect employment into account, unemployment is expected to decline less than in previous years, to 18.0%.

According to the latest data from the Business and Consumer Surveys of IOBE, strengthening of the expectations on the short-term prospects of employment quarter on quarter in the final

[36] World Economic Outlook Update, IMF, January 2019

quarter of 2018 was recorded only in Services, while the employment expectations deteriorated in Industry, Construction and Retail Trade. Compared to the same period of last year, expectations strengthened in all sectors, with a more pronounced boost in Services and Construction. Overall in 2018, employment expectations strengthened in Industry, Construction and Services and deteriorated in Retail Trade. In more detail:

In Industry, the average balance of 6 points of the previous quarter fell by 5 points in the fourth quarter. Compared to last year, the average quarterly index is higher by about 4 points. For 2018 overall, the percentage of industrial firms that expected a drop in employment in the coming months remained at 8%, while the percentage of those expecting employment growth decreased to 9% (from 13%). The vast majority of businesses in the sector (835 from 79%) were expecting employment to remain unchanged.

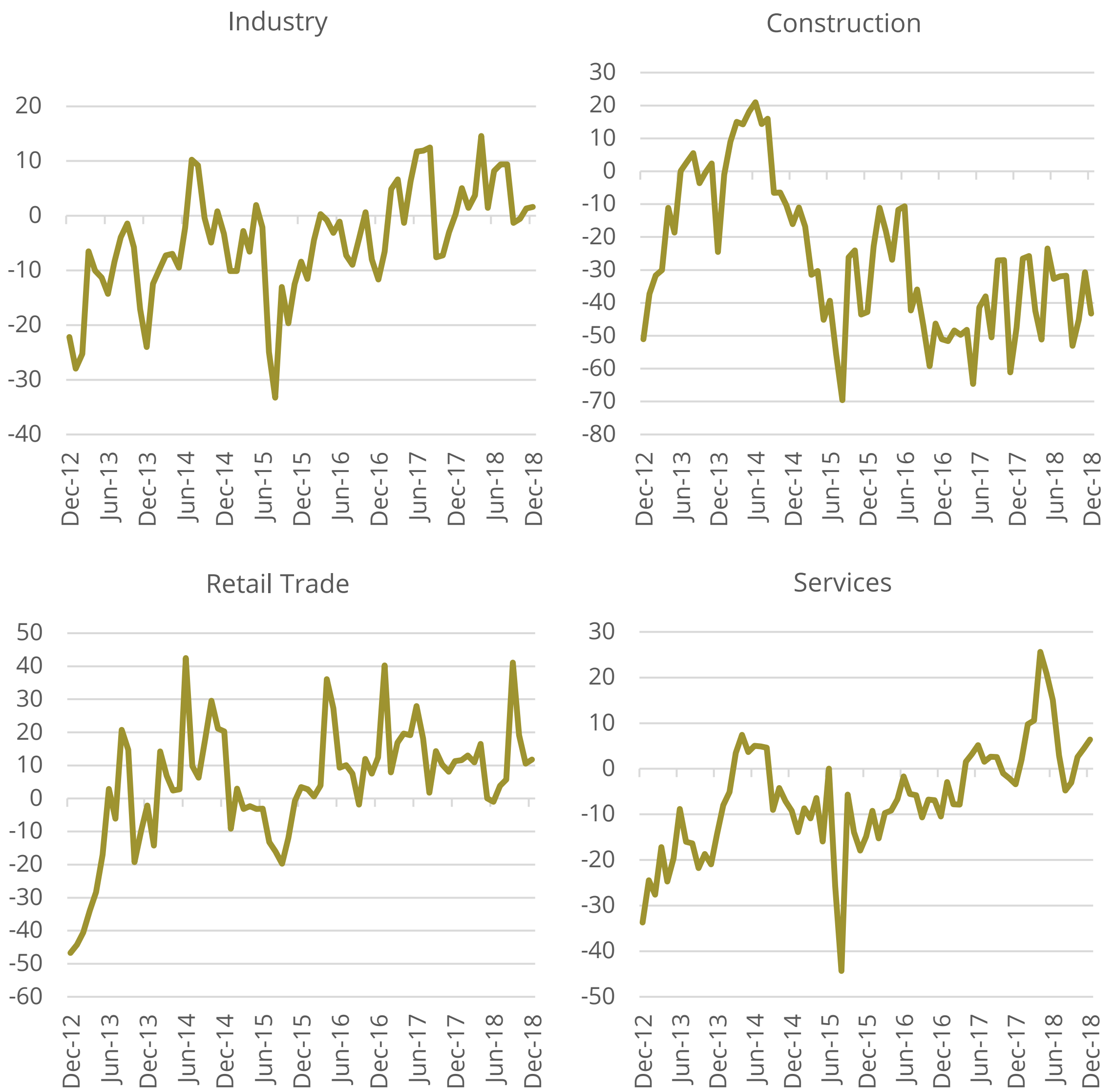
In Construction, the balance of employment expectations marginally deteriorated from an already very low level, to -40 points, yet they remained at a higher level compared to the same period of 2017. For 2018 overall, the index stood at -36 (from -46) points. In the fourth quarter of 2018, 46% (from 48%) of the businesses in the sector were anticipating further job losses, while 6% (from 9%) of the respondents were expecting employment growth. At the sub-sector level, the fall of the index in Private Construction (-12 from -4 points) was accompanied by a small increase, from an already very low level, in Public Works (to -52 from -58).

The employment outlook indicator in Retail Trade decreased quarter on quarter in the fourth quarter of the year, to 14 points (from 17). The index was up by 4 points compared to last year. For 2018 overall, the index stood at +12 (from +16) points. About 4% (from 5%) of the firms in the sector were expecting job cuts, while 18% (from 22%) were anticipating employment growth, with those expecting job stability taking up 79% (from 73%) of the sample. The employment expectations indicator deteriorated in Food-Beverages-Tobacco, Household Appliances, Motor Vehicles – Spare Parts and Department Stores and improved in Textiles – Clothing – Footwear and Department Stores.

Services are the only sector where employment expectations gained ground compared to the previous quarter, while they also recovered in comparison to the same period of last year. The balance of -2 points from the previous quarter increased in the quarter under examination to 4 points (from 2 points on average in the corresponding quarter of 2017). Overall in 2018, the index stood at 8 (from -1) points. About 11% (from 13%) of the companies in the sector were expecting a drop in employment, with the percentage predicting an increase averaging 16% (from 11%). The trend is positive in Other Business Activities, Land Transport and IT branches, and negative in all the other subsectors.

Figure 3.12

Employment expectations (difference between positive and negative responses)



Source: IOBE

Employment expectations strengthened in Services and deteriorated in the other sectors

3.5 Consumer and Producer Prices

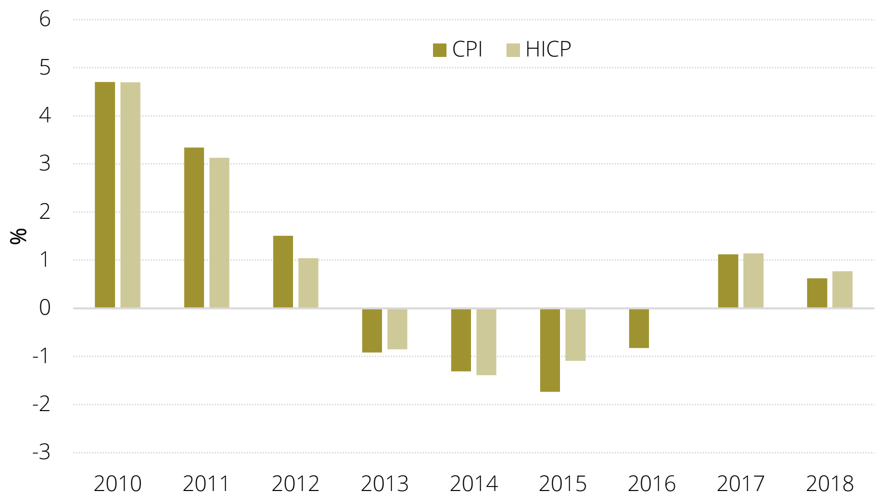
- Weaker inflation in 2018 than in 2017
- Significantly weaker inflationary impact of indirect taxes and energy prices
- Marginally positive CPI rate of change without taxes and energy, after 7 years of deflation
- Expected inflation rate at around 0.9% for 2019

Recent Developments

In 2018, the rate of change of the Consumer Price Index (CPI) remained positive for the second consecutive year, yet it was lower than in 2017. In particular, the domestic CPI increased marginally last year, by 0.6%, year on year, compared with a rise by 1.1% in the same period of 2017. The Harmonised Index of Consumer Prices (HICP) increased by 0.8% over the same period, compared to 1.1% in 2017 (Figure 3.13). In September 2018 the annualised price increase based on the 12-month moving average of the CPI stood at 1.1% (Figure 3.13).

Figure 3.13

Annual change in the domestic CPI and the HICP in Greece (January – December)



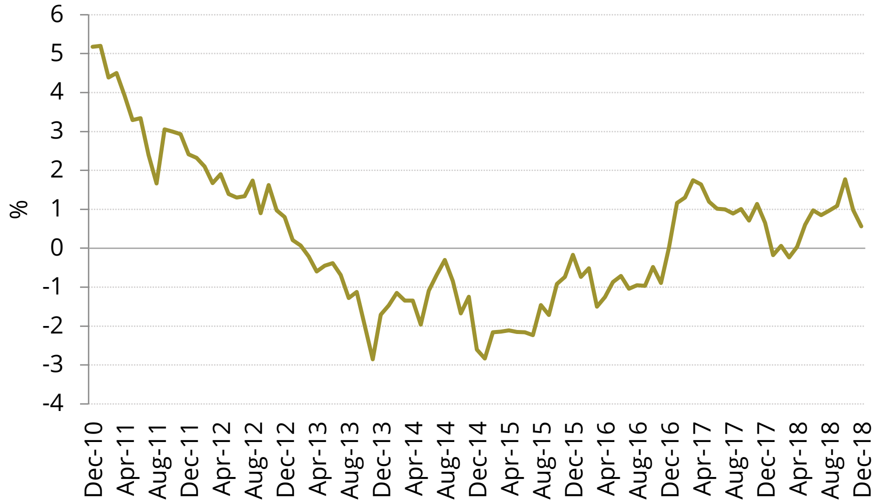
Milder inflationary pressures in 2018 than in 2017, 0.6% against 1.1%

Source: ELSTAT, Processing: IOBE

According to the data for 2018, the price rise was driven mainly by growing energy prices, an effect which will probably not continue in the current year, while indirect taxes had a marginal inflationary effect. To some, but not very large, extent, domestic demand helped prices to rebound, based on the change of the general price index with constant taxes and excluding energy goods **(**Figure 3.14).

Figure 3.14

CPI in Greece (annual percentage change per month)



Inflation remained unchanged quarter on quarter on average in the final quarter (1.1%, from 1.0% in Q3), yet it slowed significantly towards its end

Source: ELSTAT, Processing: IOBE

Regarding the impact of taxation, the new indirect taxes from 01/01/2018 (VAT increase in 27 of the 32 Northeast Aegean-Dodecanese islands[37] and the tax on bookings in hotels, rooms to let and apartments) only caused small increase of prices, mainly in early 2018. The fact that the annual HICP change was only marginal, at 0.1 percentage points in 2018, compared to 0.9 percentage points in 2017, because of new indirect taxes imposed at the beginning of 2017 on petroleum products, tobacco products, coffee, etc. is indicative of the weak impact of indirect taxes in the current year (Figure 3.15).

As to the impact from energy goods, the higher, year on year, international oil price in 2018, along with the gradual weakening of the euro-dollar exchange rate since April, strengthened oil prices in Euros. The average international oil price increased year on year by 31%, standing at $72.2/barrel in 2019 from $54.2/barrel in 2017.[38] The marginally lower rate of the euro against the dollar, by 5%, to 1.18, from 1.13 in 2017, partly offset the increase in oil prices. Consequently, the international oil price in Euros averaged €68.2/barrel in 2018, 15% higher than in 2017. Given these trends, the impact of energy prices on the change of the HICP in 2018 stood on average at around +0.3% from +0.4% in 2017 (Figure 3.15).

The HICP percentage change in Greece was lower than the Eurozone average, at 0.8% against 1.7%, same as in Cyprus, recording the third lowest rate in the Euro area, marginally higher than Ireland and Denmark (both at 0.7%). Without the effect of energy prices and taxes as well, prices rose slower in Greece than in the Euro area, by 0.5% against 1.2% (Figure 3.16). Prices excluding energy and taxes increased for the first time after seven consecutive years of decline (2011-2017), which is considered to be an indication of a small recovery of domestic demand. Nevertheless, Greece

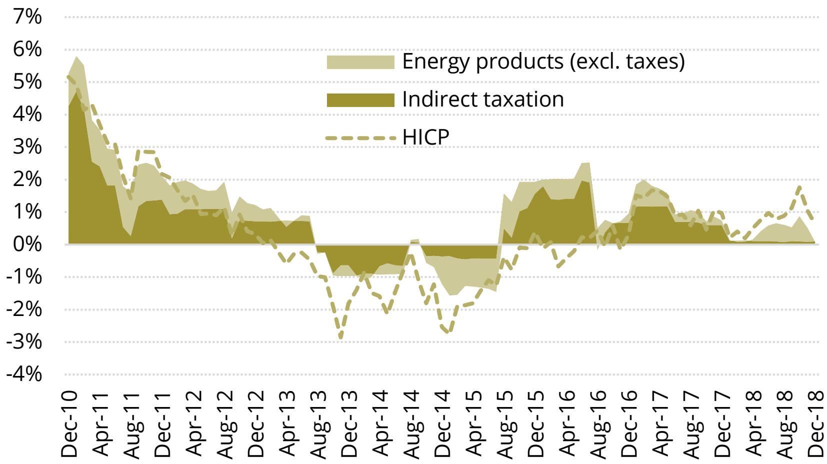
[37] Lesbos, Chios, Samos, Kos and Leros are excluded from the abolition of the VAT discount due to the refugee flows.

[38] Average values based on the Europe Brent Spot Price. Source: EIA, US Energy Information Administration

posted the second lowest rate of change in the Euro area after Cyprus and Ireland (0.2% and 0.0% respectively).

Figure 3.15

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



The impact of taxes and energy goods on inflation was milder in 2018 in comparison to 2017

Source: Eurostat, Processing: IOBE

Regarding price changes in individual categories of goods and services included in the Consumer Price Index, the largest increase in prices was recorded in Telecommunications, by 2.9%, against 1.6% a year before, followed by Transport, a category affected by energy cost variations, by 2.7%, against 6.7% a year earlier, and Alcoholic Beverages-Tobacco, by 2.6% against 6.0% in 2017. Price also went up, albeit a bit less, in Hotels-Cafe-Restaurants by 1.2%, from 1.6% in 2017, despite the new indirect tax on hotels, rented rooms and apartments, the VAT increase in 27 island and, for yet another year, the stronger external demand for tourist services.

Prices in Health, Food – Non-Alcoholic Beverages, and Housing increased marginally, by 0.5%, 0.4% and 0.1% respectively. In the remaining five categories of goods and services of the domestic CPI, prices declined year on year in 2018, with the greatest reduction occurring in Durable Goods - Household Articles - Miscellaneous Goods & Services, by -1.6%, from -2.9% a year before.

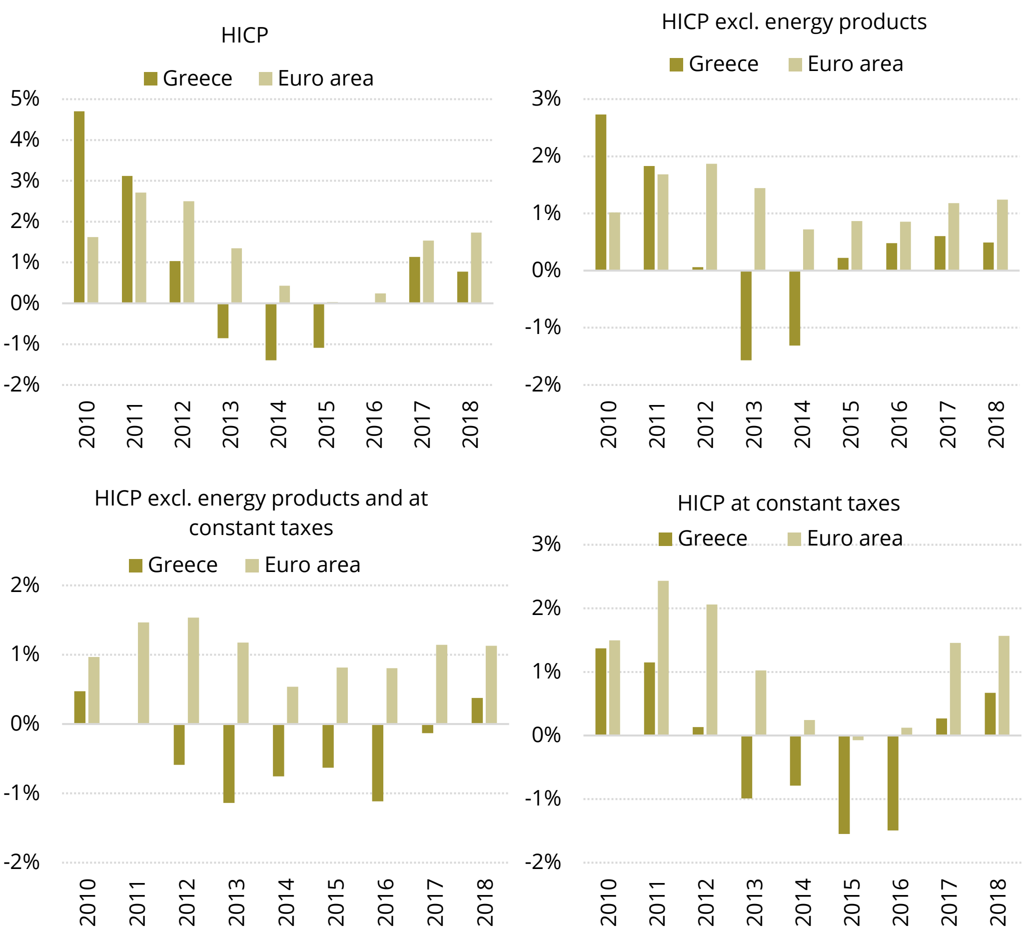
The Producer Price Index (PPI) of domestic and foreign markets in total kept growing year on year in 2018, for the second consecutive year. More specifically, the index increased by 4.8% in the first eleven months of 2018, compared with 5.6% growth in the same period of 2017 (Figure 3.17). The PPI excluding energy increased marginally, by 0.3%, against 1.0% over the same period in 2017, which in conjunction with the change in the total index highlights the strong impact of energy goods on the PPI. In greater detail, the strongest inflation for the second year in a row was recorded in Refined Petroleum Products and Energy Goods excluding Electricity, by 21.4% and 18.7%, respectively, followed by Energy Goods, by 11.0%. Weaker positive changes of the PPI were recorded in Mining-Quarrying-Manufacturing, by 5.7%, while the prices of Basic Metals increased by 3.5%. By contrast, producer prices declined significantly in Basic Pharmaceuticals, carrying through from a similar decline in 2017 (-3.8% from -4.4% in 2017).

The Import Price Index (IPI) also increased faster in January-November 2018 than in the same period of 2017. More specifically, the rate of change of the IPI picked up to 7.4%, from 6.0% a year earlier, with Greece posting the second largest increase among ten Eurozone countries with available data for this period. The index moved up in all these countries, at an average of 3.2%. The stronger import prices in most countries came largely from on average higher year-on-year oil price. The differences in IPI inflation between countries reflect the varying degrees of use of energy products, as well as the size of trade with countries outside the Euro area.

In greater detail, the biggest increase in January–November 2018 was recorded in Refined Petroleum Products by 31.7% from 27.9% a year earlier and in Electricity Supply, by 14.5%, against a mild increase in 2017 (+1.2%). Smaller positive changes were recorded in Mining of Metals, at around 4.3%. By contrast, import prices declined slightly year on year in Basic Pharmaceuticals, by 3%, and in Mining of Coal-Lignite, by 1.4%.

Figure 3.16

Annual HICP change in Greece and the Euro area



Positive rate of change of prices with constant taxes and excluding energy goods, for the first time after seven years of decline

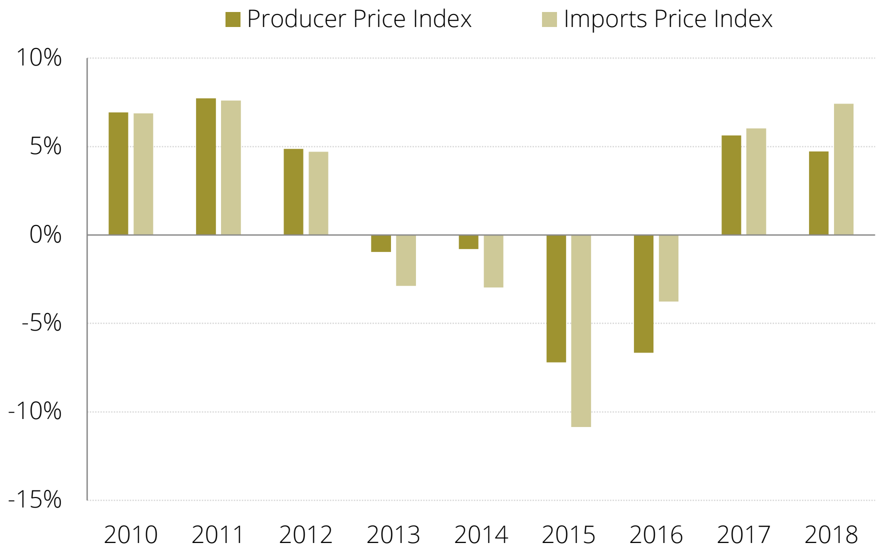
Source: Eurostat, Processing: IOBE

Medium-term outlook

As evident from the analysis of the trends in changes in consumer prices in 2018, despite the support from energy commodities, due to the substantially higher oil prices, CPI grew slower compared to 2017, because of the significant weakening of the effect of indirect taxes. Oil prices (Brent) reached \$71.2/barrel in 2018, 31.4% higher than in 2017. The increase due to the energy commodities was moderated only by the stronger euro/dollar exchange rate. The price increase was also partly the result of a small recovery in domestic demand, as the index excluding energy goods and with constant taxes increased in 2018, for the first time since 2011. The effects of all these factors are expected to carry over to 2019, with the exception of the buffering effect of the euro/dollar exchange rate, which is expected to weaken in comparison with 2017.

Figure 3.17

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



For the second year in a row, producer and import prices increased, due to higher oil prices

Source: ELSTAT, processing: IOBE

Over the current year, no inflationary pressures are expected from indirect taxation. No new indirect taxes or increases in already existing taxes are included in the fiscal measures for 2019. Moreover, the VAT discount for five North-East Aegean islands with high migrant inflows was extended at the beginning of January for another six months. Given the marginal impact of the increase in indirect taxation last year, it is likely that the impact of taxes will be negative this year, which implies that businesses absorbed the effects from the taxes more so than last year, limiting their profit margin.

Regarding the recent developments in energy costs, Brent price fell from \$81/barrel in October, its highest level since October 2014, to \$57/barrel on average in December. The expansion of oil reserves, as a result of high production by the US, Saudi Arabia and Russia, and the uncertainly regarding the continuation of the rapid growth of the global economy and thus oil demand, resulted in a slump in oil prices in the final quarter of 2018. Since January this year, the trend in oil prices has changed to growth. This development can be attributed to the decision by the members of the OPEC on the 7th of December to limit daily production from the beginning of the current year and for six months, by 800,000 barrels daily compared to the levels of last October, and those of their partner countries, mainly Russia, by 400,000 barrels.

Even though the developments in oil production are pushing prices up, at least for the time being, the slowdown of the global economy for the entirety of the current year to offset this. According to the latest projections by international organisations[39], global growth will drop from 3.7% in 2018 to 3.5% this year and possibly lower. Some of the reasons behind the slowdown are the trade protectionism measures implemented by the US last year that have caused similar reactions from the EU, China and Canada, the tightening of the accommodative monetary policy of the ECB, the heightening of uncertainty regarding Brexit negotiations, the implementation of new standards for the fuel emission of vehicles in Germany etc. These factors are expected to restrain the oil price growth and gradually lead to a decline. Moreover, despite its recent increase, the Brent oil price is still lower year on year. As a result, its average price for the first half of 2019 is expected to stand at approximately $61/barrel, or 14% lower on average than in 2018[40]. The recent IMF forecast concurs on the contraction rate of the oil price overall in the current year.[41]

The lower than a year before euro/dollar exchange rate will moderate the deflationary impact of lower oil prices in the Eurozone countries, at least in the first half of the year. The weakening of the exchange rate is considered to be the result of the return of business capital to the US due to the tax reform, with a receding impact over time. Another factor that attracted capital was the gradual tightening of the Fed's monetary policy, which has increased the yields of US bonds well above those of the strongest Eurozone economies. That said, the counter-measures towards the US protectionist trade policy hit the prospects of its economy and prevented further outflow of capital. As a result, the euro/dollar exchange rate for the first quarter of 2019 is expected to stand at around 1.14, a bit lower than in 2018. Consequently, the lower exchange rate balances to an extent the drop in oil prices, without affecting negatively the international trade. In any case, unlike last year, no inflationary pressures are expected to come from the energy cost.

Inflationary pressures in the current year are expected to come only from stronger domestic demand. The expected increase in household consumption spending will stem from: a) a boost in income from the disbursement of allowances ("social dividend"), retroactive payments, and the fiscal measures for 2019 which include higher-than-originally-planned social transfers and tax relief; b) wage developments (increase in the minimum wage, abolition of the sub-minimum wage); and c) further, weaker expansion in employment. However, as evident from the analysis in box 3.3 below, since 2010, whenever inflation was high, it was primarily due to an increase in indirect taxation, and to a lesser extent from a strong increase in oil prices. Therefore, the increase in demand alone is not expected to lead to a notable price increase. Under the current conditions, the CPI rate of change is anticipated to be similar to last year, at around 0.7%-0.9%.

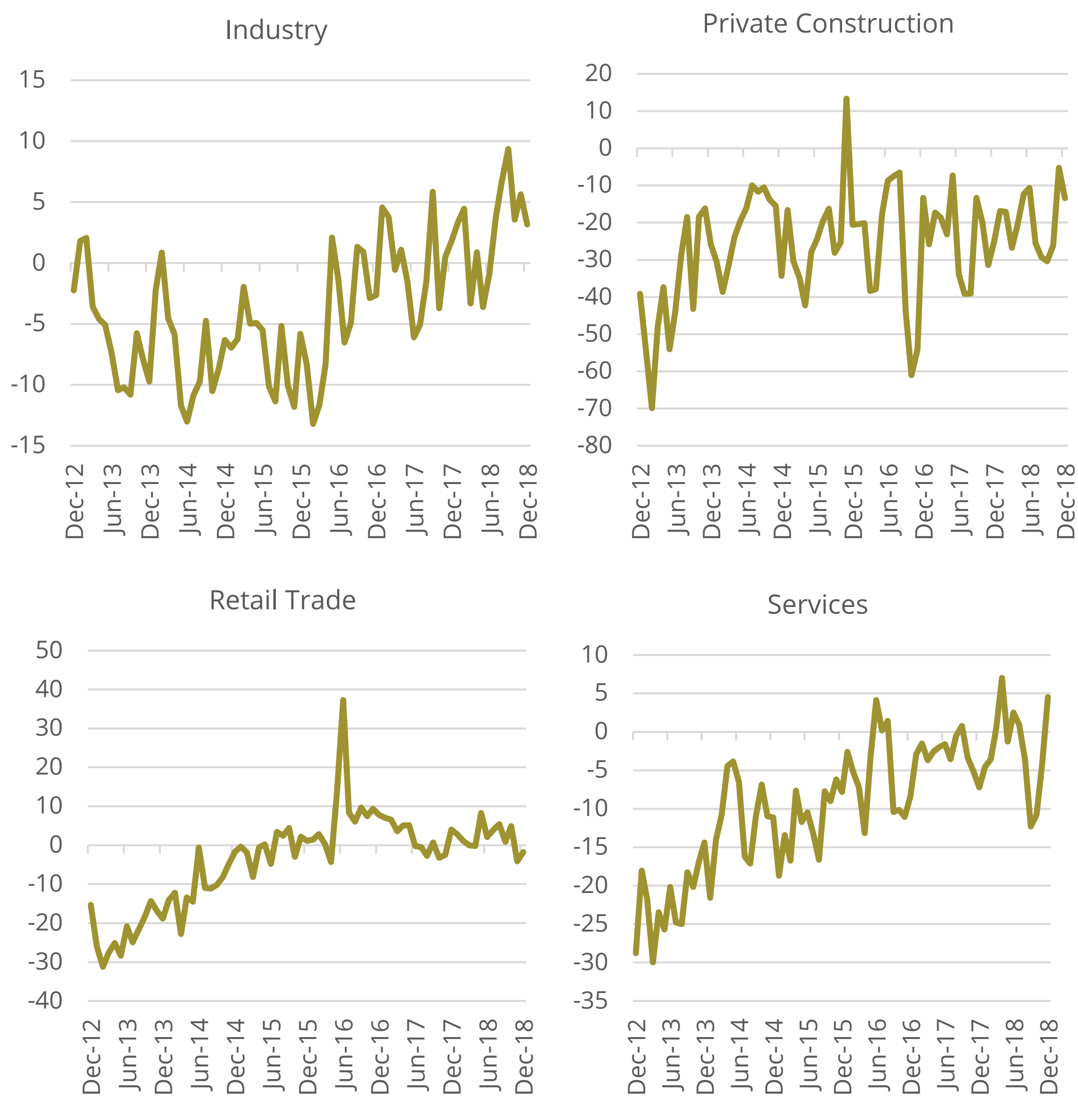
Valuable insight on the price trends in the coming period is also provided by IOBE's monthly business surveys, the results of which serve as leading indicators of price developments on the supply side.

[39] World Economic Outlook Update, January 2019, IMF
[40] US Energy Information Administration
[41] See footnote 38

The price expectations had mixed quarter-on-quarter trends in the fourth quarter of 2018, with the balance of expectations once more in negative territory in Services and Private Construction. In particular, the price expectations indicator increased quarter on quarter in Services and Private Construction, while by contrast it decreased in Industry and Retail Trade. Year on year, the expectations for price changes strengthened in all sectors except Services, where the indicator remained the same. For 2018 overall, the price expectations recovered in Industry and Private Construction and remained mostly stable in Retail Trade and Services. In greater detail:

Figure 3.18

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



Source: IOBE

The balance of price expectations strengthened quarter on quarter in Services and Private Construction, and weakened in Industry and Retail Trade.

In Industry, the price expectations indicator decreased quarter on quarter in the fourth quarter. In particular, the indicator dropped by 2 points, from +7 point in the preceding quarter (up from 0 points in the same quarter of the previous year). For 2018 overall, the indicator was on average 3 points higher than in 2017 (from 0). About 8% (from 6% on average) of the companies in the sector predicted a fall in prices in the upcoming period, while the percentage of those anticipating price growth increased to 12%, and the remaining 80% (from 82%) were anticipating price stability.

In Retail Trade, the positive balance of price expectations balanced out, from 3 points in the preceding quarter, lower by 4 points year on year. For 2018 overall, the indicator stood at 2 points on average. About 6% (from 2%) of the companies in the sector were expecting a fall in prices in the short term, while the percentage of those forecasting price growth decreased to 5% with the remaining 89% (from 92%) of the businesses expecting price stability. The price expectations weakened slightly quarter on quarter in the third quarter of the year in Food-Beverages-Tobacco and Department Stores and increased in Textiles-Clothing-Footwear, Household Appliances and Motor Vehicles – Spare Parts.

The average index for the anticipated price changes in Services in the examined quarter slightly improved quarter on quarter to -3 (from -5) points, posting a higher level than in the same quarter of the previous year (-5 points). In the current quarter, 13% (from 11%) of the companies in the sector were expecting a fall in prices, while 10% (from 6%) were expecting an increase. At the branch level, the index increased in IT Services and Land Transport and dropped in Financial Intermediaries, Hotels – Restaurants – Travel Agencies and Other Business Activities.

Finally, in Private Construction, the negative balance of -28 points from the previous quarter decreased to -15 points, strengthening compared to the same period of the preceding year as well (-26 points). About 17% (from 28%) of the businesses in the sector were anticipating prices to decline, while the percentage of those expecting inflation during the examined quarter increased slightly to 2% (from 0%), with 80% (from 72%) predicting price stability.

Box 3.3.

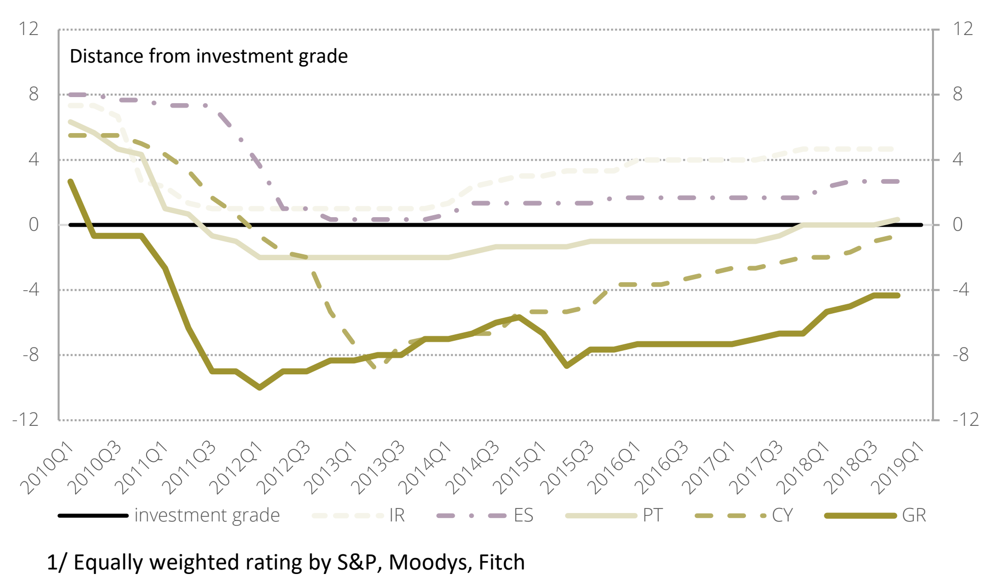
Factors that affected the rate of change of the HICP, 2010 – 2018

The HICP in Greece fluctuated significantly between 2010 and 2018. It is interesting to note the factors that led to those fluctuations. The main factors impacting prices were energy costs, indirect taxation, domestic demand and other factors. The impact of domestic demand and other factors can be approximated by the fluctuation of HICP with constant taxes, excluding energy goods.

In more detail, regarding the CPI trends since 2010, the index increased by 4.7% in the first year, recording the highest rate of change for the period under examination. Out of this, 2.3 percentage points came from a series of hikes in indirect taxation (VAT increase, new excise duty on electricity, increase in the excise duties of alcohol, tobacco and fuel) and by 2 points due to changes in energy prices, while the impact of domestic demand and other factors was weaker (0.5 p.p.). In the two years that followed, the impact of the prices of energy goods, due to a surge in oil prices, and the impact of indirect taxation, were the main drivers the inflation, which was lower than in 2010, at 3.1% and 1% respectively. Despite a surge in oil prices in 2012, inflation eased due to weaker domestic demand and other factors, such as labour costs, by 0.6 percentage points, as a result of the fiscal consolidation and the reduction of the minimum wage that year. In 2013, the mild inflationary pressures from the energy cost (+0.7 p.p.) did not offset the negative impact of domestic demand and indirect taxation, by 1.1 and 0.4 points respectively, and as a result, the rate of change of the CPI turned negative (-0.8%).

Figure 3.19

Annual HICP change and impact of energy prices, indirect taxation, domestic demand and other factors



In 2014-2015, deflation intensified from the negative impact of domestic demand and other factors and energy prices, despite the inflationary pressures from indirect taxes in 2015. The price index decline in both years, by 1.4% and 1.1%, respectively. In more detail, in 2014 domestic demand contributed 0.8 percentage points to deflation, while indirect taxes and energy goods also created deflationary pressures, albeit to a lesser extent (-0.6 and -0.1 p.p. respectively). In 2015, energy prices contributed 1.3 percentage points to deflation, while the negative impact of domestic demand was weaker (-0.6 p.p.).

Table 3.12

Annual HICP Change and contribution of its main components

	2010	2011	2012	2013	2014	2015	2016	2017	2018
HICP Change	+	+	+	-	-	-	+	+	+
Significance of Impact on Change									
Energy Goods	2nd	2nd	1st	--	3rd	1st	--	2nd	2nd
Indirect Taxation	1st	1st	2nd	2nd	2nd	--	1st	1st	3rd
Domestic Demand-Other Factors	3rd	3rd	--	1st	1st	2nd	--	--	1st

Source: Eurostat, Processing: IOBE

In 2016, the price indicator remained stable, as a result of a balance between the negative impact of domestic demand (-1.1 p.p.) and energy goods (-0.5 p.p.) and the positive impact of indirect taxation (+1.6 p.p.). The increase in energy prices and indirect taxes in 2017-2018 created inflationary pressures and, as a result, the inflation rate turned positive again, at 1.1% and 0.8% respectively.

Summing up the impact of the main factors influencing the HICP, the trend of the Harmonized Index of Consumer Prices over the period 2010-2018 seems to match the trend of indirect taxation, as evident in all years except 2015 (Table 3.11). The impact of the prices of energy goods follows at second place, while the factor that influenced the HICP trend the least over this period was domestic demand and other factors.

3.6 Balance of Payments

- Higher current account deficit in the first eleven months of 2018, at €3.8 billion, from €1.7 billion in 2017
- Higher deficit from increase in:
    - Goods account, by €2.5 billion
    - Primary income account, by €919.8 million
- Higher surplus in the Services account by €1.3 billion

Current Account

In January-November of 2018, the Current Account had a deficit totalling €3.8 billion, against a deficit of €1.7 billion in 2017. The expansion of the deficit happened gradually, as over June-September 2019, the account had lower surplus year on year, while in October-November, it had higher deficit compared to the previous year. In total for these eleven months, an increase of the deficit in the Goods Account and in the Primary Income Account was only partially offset by the higher surplus in the Services Account.

Regarding the trends in the individual components, the deficit of the Goods Account reached €20.7 billion in the first eleven months of this year, expanding by €2.5 billion year on year, against a similar increase in 2017. Exports totalled €30.0 billion, stronger by 17.4% (€4.4 billion),[42] compared to a 13.9% increase in 2017, with a significant rise in ships (38.0%), fuels (31.3%) and other goods (11.9%). Imports reached €50.6 billion, higher by 15.8% (€6.9 billion), with a rise in ships (66.8%), fuels (34.6%) and other goods (9.7%). The deficit of the Fuels Account also increased, to €4.7 billion from €3.3 billion in 2017, while it should be noted that both imports and exports of fuels were influenced by an increase in oil prices, with an average monthly growth of 35.3% over January-November 2018. The deficit of the Goods Account excluding fuel and ships stood at €15.9 billion in the first eleven months of 2018, against €14.9 billion, higher year on year by 7.0%, as alongside the boost of exports in this category by €2.2 billion, imports increased by €3.2 billion.

The surplus in the Services Account stood at €18.9 billion in the examined period, higher by €1.3 billion year on year, against stronger growth in 2017 by €1.9 billion. In particular, total receipts from services amounted to €35.1 billion, up by 10.3% compared to 2017 (€3.3 billion), while the total payments for services reached €16.2 billion in 2018, €2 billion more than in the preceding year. At the constituent categories, the receipts from travel services reached €15.9 billion, up by

[42] The figures in brackets represent an absolute change compared with the corresponding period of the previous year, unless stated otherwise.

9.7%, the receipts from transport services increased by 14.7% to €15.2 billion, while lastly the receipts from other services decreased by 2.1% to €4.0 billion. The increase in transport revenue tends to reduce their gap with travel revenue to the lowest level since 2013. On the side of imports, the payments for travel services increased sharply, by 10.2%, to €1.9 billion, the payments for transport services increased by 16.5% to €10.1 billion, while the payments for other services reached €4.2 billion, higher by 10.6% compared with 2017.

The Primary Income Account more than doubled its deficit last year, reaching €1.5 billion in the first eleven months of last year, compared to a €625.8 million deficit in 2017, due to the significant increase in the payment of dividends and interest rates in February, July and November. Revenues amounted to €5.8 billion, lower year on year by €141.2 million, while payments increased by 11.9%, to €7.3 billion. In greater detail, income from labour remained at approximately €200 million, income from investments declined by 16.0%, to €2.7 billion, while other primary income (subsidies and taxes on production) increased by 15.5%, to €2.9 billion. Payments for labour slightly increased at €1.2 billion, and those for other primary income increased by 1.5%, to €372.9 million.

The deficit of the Secondary Income Account fell to €410.7 million, from €456.5 million in 2017, with receipts standing at €1.8 billion, while payments remained stable close to €2.2 billion.

Capital Account

The Capital Account[43] was in a surplus of €387.4 million, against €445.0 million in 2017, as receipts increased to €860.4 million, while payments increased to €473.0 million.

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 €3.4 billion in the examined period, against €1.2 billion in 2017.

Financial Account

The Financial Account was in a deficit of €2.7 billion in the first eleven months of 2018, compared to a deficit of €2.4 billion in 2017.

In greater detail, the net receivables of residents from direct investment abroad increased by €650.5 million, while the net liabilities to non-residents (investments of non-residents in the country) strengthened by €3.4 billion. In the category of portfolio investments, the claims of the residents to non-residents increased by €659.2 million, as according to the Bank of Greece, the placements of residents in bonds and treasury bills abroad increased, while the liabilities to non-residents increased by €1.4 billion, due to increase in the purchase of bonds and treasury bills.

In the category of other investments, the claims of residents to non-residents declined by €5.9 billion, with a net decrease of €3.4 billion in the deposits and repos of residents (credit institutions

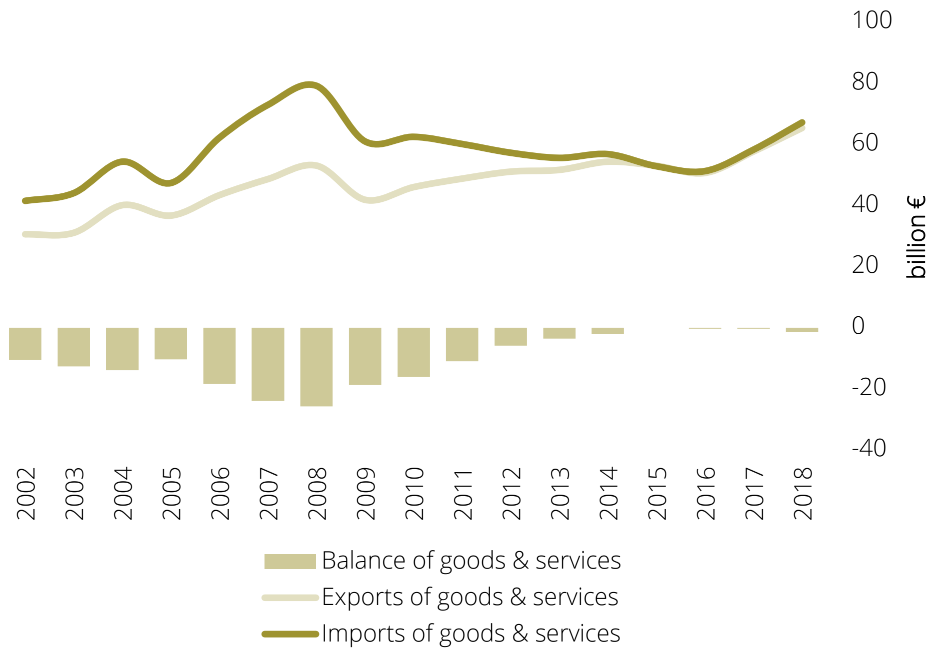
[43] The capital account reflects capital transfers, i.e. ad-hoc receipts and payments between residents and non-residents related to fixed capital formation. Capital transfers include mainly some of the transfers (receipts) from the budget of the EU to the General Government (receipts from the Structural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

and institutional investors) abroad. The liabilities declined by €7.2 billion, reflecting the reduction of the deposits and repos of non-residents in Greece by €23.9 while public and private sector debt to non-residents increased by €21.1 billion. Finally, the Reserve Assets of the country totalled €6.5 billion at the end of November 2018, same as in 2017.

Figure 3.20

Imports-Exports of Goods and Services (January – November) 2002-2018

The deficit in the Goods and Services Account tripled in January-November 2018 to €1.8 billion from €604.2 million in 2017

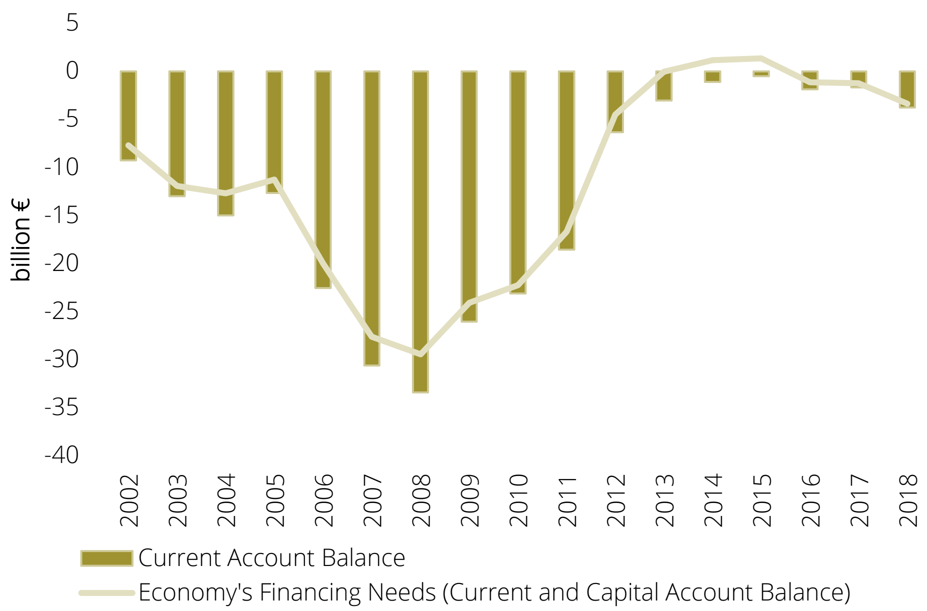


Source: Bank of Greece – Processing: IOBE

Figure 3.21

Current Account (January – November) 2002-2018

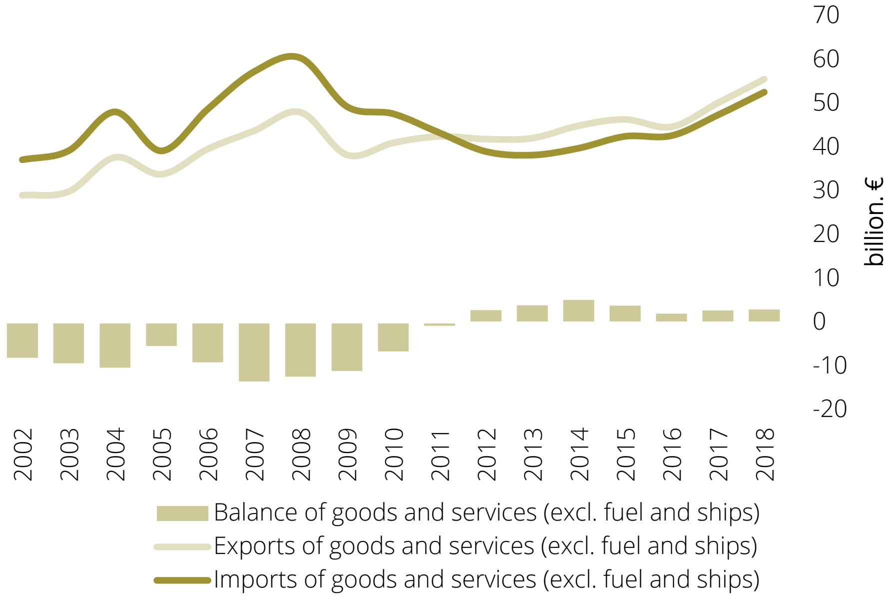
Increase in the Current Account deficit in 2018 by €3.8 billion, with the borrowing needs of the economy tripling in comparison to 2017 (€3.4 against €1.2 billion)



Source: Bank of Greece – Processing: IOBE

Figure 3.22

Imports-Exports of Goods excluding fuel and ships (January – November), 2002-2018



The surplus of the goods and services account excluding fuels and ships stood at €3.0 billion in the first eleven months of 2018, from €2.7 billion in 2017

Source: Bank of Greece, Processing: IOBE

Table 3.13

Balance of Payments

		January – November			November		
		2016	2017	2018	2016	2017	2018
I	CURRENT ACCOUNT (I.A + I.B + I.C + I.D)	-1,884.1	-1,686.5	-3,761.8	-1,462.4	-1,125.2	-1,416.9
	GOODS AND SERVICES ACCOUNT (I.A + I.B)	-596.5	-604.2	-1,805.5	-1,317.2	-969.3	-1,017.8
I.A	GOODS ACCOUNT (I.A.1 - I.A.2)	-16,241.3	-18,199.2	-20,666.0	-1,808.1	-1,456.1	-1691.9
	Oil balance	-2.643.8	-3,334.2	-4,716.5	-476.6	39.3	-294.7
	Trade balance excluding oil	-13,597.6	-14,865.0	-15,949.5	-1,331.5	-1,495.4	-1,397.3
	Ships balance	24.9	-17.0	-55.3	10.6	-3.9	-0.4
	Trade balance excluding ships	-16,266.2	-18,182.3	-20,610.7	-1,818.7	-1,452.2	-1,691.5
	Trade balance excluding oil and ships	-13,622.5	-14,848.0	-15,894.2	-1,342.1	-1,491.5	-1,396.9
I.A.1	Exports	22,362.0	25,480.3	29,908.7	2,153.6	2,535.4	2,975.7
	Oil	5,508.1	7,087.2	9,308.4	517.7	749.8	985.9
	Ships (sales)	109.9	94.0	129.7	13.1	12.7	3.3
	Goods excluding oil and ships	16,744.0	18,299.2	20,470.6	1,622.8	1,772.9	1,986.5
I.A.2	Imports	38,603.3	43,679.5	50,574.7	3,961.7	3,991.4	4,667.6
	Oil	8,151.9	10,421.4	14,024.9	994.3	710.5	1,280.6
	Ships (buying)	85.0	111.0	185.1	2.5	16.6	3.7
	Goods excluding oil and ships	30,366.4	33,147.2	36,364.7	2,964.9	3,264.4	3,383.4
I.B	SERVICES ACCOUNT (I.B.1-I.B.2)	15,644.8	17,595.0	18,860.6	490.8	486.8	674.1
I.B.1	Receipts	27,937.6	31,822.6	35,095.5	1,677.3	1,812.8	2,186.1
	Travel	13,025.9	14,440.2	15,846.8	222.2	228.7	325.8
	Transportation	11,392.6	13,258.9	15,210.2	1,055.8	1,223.1	1,466.6
	Other services	3,519.1	4,123.4	4,038.5	399.3	361.0	393.7
I.B.2	Payments	12,292.8	14,227.6	16,234.9	1,186.5	1,326.0	1,512.0
	Travel	1,869.7	1,740.2	1,917.3	165.7	128.0	151.0
	Transportation	7,264.2	8,669.3	10,095.7	699.8	823.8	996.4
	Other services	3,158.9	3,818.0	4,221.9	320.9	374.1	364.6
I.C	PRIMARY INCOME ACCOUNT (I.C.1-I.C.2)	-798.0	-625.8	-1,545.6	-56.8	-83.5	-288.9
I.C.1	Receipts	5,687.6	5,929.8	5,788.7	451.2	313.6	412.2
	From work (wages, compensation)	193.0	200.2	201.6	18.3	16.7	20.8
	From investments (interest, dividends, profit)	2,563.8	3,227.2	2,709.4	224.6	224.1	303.0
	Other primary income	2,930.8	2,502.4	2,877.6	208.3	72.9	88.4
I.C.2	Payments	6,485.6	6,555.6	7,334.2	508.0	397.2	701.1
	From work (wages, compensation)	1,099.5	1,232.3	1,243.4	107.9	107.9	117.4
	From investments (interest, dividends, profit)	4,998.5	4,956.0	5,717.9	367.0	265.5	556.3
	Other primary income	387.5	367.3	372,9	33.1	23.8	27.3
I.D	SECONDARY INCOME ACCOUNT (I.D.1-I.D.2)	-489.6	-456.5	-410,7	-88.3	-72.4	-110.2
I.D.1	Receipts	1,680.6	1,754.5	1,832,4	147.8	106.8	132.8
	General government	976.9	834.1	959,2	69.4	24.3	29.5
	Other sectors	703.7	920.4	873,2	78.3	82.5	103.3
I.D.2	Payments	2,170.2	2,211.0	2,243,1	236.1	179.2	243.0
	General government	1,641.1	1,577.0	1,537,4	187.3	134.9	154.9
	Other sectors	529.1	634.0	705.7	48.8	44.3	88.0
II	CAPITAL ACCOUNT (II.1-II.2)	756.2	445.0	387.4	116.8	83.2	282.4
II.1	Receipts	972.8	606.0	860.4	138.0	92.9	314.3
	General government	916.0	520.6	555.3	133.9	85.6	230.6
	Other sectors	56.8	85.3	305.1	4.1	7.3	83.6
II.2	Payments	216.6	161.0	473.0	21.2	9.7	31.8
	General government	28.4	2.8	3.9	0.2	0.4	1.5
	Other sectors	188.2	158.2	469.1	21.0	9.3	30.3
	BALANCE OF CURRENT AND CAPITAL ACCOUNT (I+II)	*-1,127.8*	*-1,241.5*	*-3,374.3*	*-1,345.6*	*-1,042.1*	*-1,134,.5*
III	FINANCIAL ACCOUNT (III.A+III.B+III.C+III.D)	-366.1	-768.7	-2,259.3	-780.5	-926.1	-612.2
III.A	DIRECT INVESTMENT*	-3,731.9	-2,396.8	-2,703.0	-149.8	-116.6	-303.8
	Assets	-1,609.3	485.7	650.5	53.7	102.8	77.9
	Liabilities	2,122.7	2,882.5	3,353.4	203.5	219.4	381.7
III.B	PORTFOLIO INVESTMENT**	8,964.7	-9,741.8	-824.7	665.4	712.8	946.2
	Assets	6,682.7	-9,930.4	659.2	580.6	1.627.8	133.7
	Liabilities	-2,282.1	-188.6	1,484.0	-84.8	915.0	-812.5
III.C	OTHER INVESTMENT*	-6,120,3	11,300.8	1,298.4	-1,218.1	-1.478,3	-1.243,6
	Assets	-13,950.9	-11,142.3	-5,926.9	-1,110.7	-1.820,9	-700,0
	Liabilities	-7,8306	-22,443.1	-7,225.3	107,4	-342,5	543,6
	(Loans of general government)	6,520.1	5,511.7	19,9767	13,4	1,8	-15,2
III.D	CHANGE IN RESERVE ASSETS***	521.5	69.0	-30.0	-78.0	-44.0	-11.0
IV	BALANCE ITEMS (I +II +IV +V = 0)	761.8	472.7	1,115.0	565.0	116.0	522.3
	RESERVE ASSETS (STOCK)***				6,531	6,471	6.,507

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. CRISIS, DEMOGRAPHIC CHANGES AND IMPACT ON EDUCATION

- The number of students fell from 1.53 million in 2000 to 1.49 million in 2009 (-3.1%) and further to 1.44 million in 2016 (-5.9% in relation to 2000)
- The student-teacher ratio in Greece is lower compared to that of the EU, OECD and G-20.
- The total number of students are projected to decline from 1.48 million in 2008 to approximately 1.05 million (29.2% or 432.300 fewer students) by 2035, should there not be radical changes
- Reduction of teachers in 2035 in relation to 2009 by 38.7% in the scenario of adjustment and 55.2% in that of convergence

4.1 Introduction

In the context of this IOBE study, we examined the effects of the 2008 crisis and the ensuing fiscal consolidation on the functioning of the education system.[44] In particular, the study analyses the trends in key indicators of the education system, before and after the crisis, and the impact of demographic changes and the drop in the student population. To understand better the future consequences and the challenges that education is facing today, this study includes various scenarios pertaining to the future of the education system, differing with respect to education policy interventions in the upcoming years (no-action scenario, adjustment-to-current-conditions scenario, and European convergence scenario).

[44] The study is available on the IOBE website (in Greek): http://iobe.gr/docs/research/RES_05_F_17122018_REP.pdf

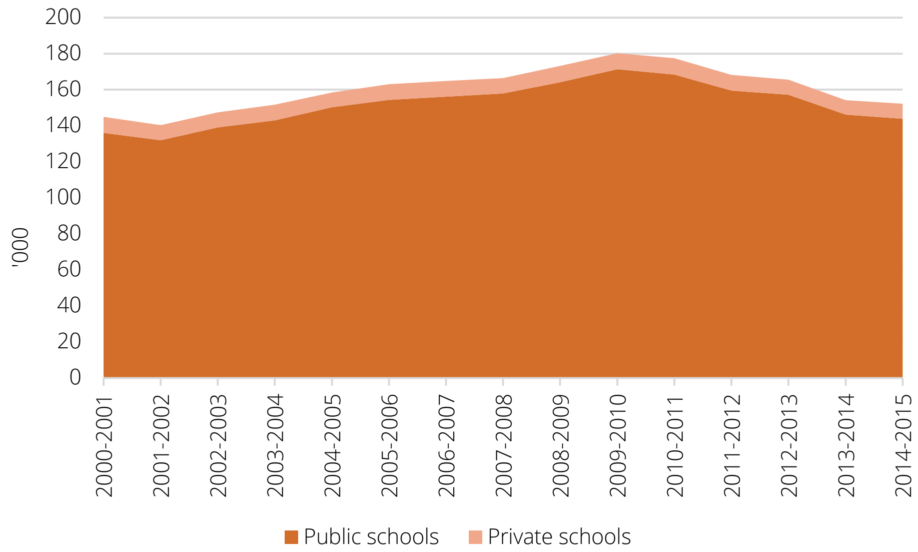
4.2 Impact of the crisis

The key findings and conclusions of the study regarding the impact of the crisis are as follows:

As part of the broader fiscal expansion that took place before the crisis, the number of teachers in public and private primary and secondary education increased from 145,000 in 2000 to 180,300 in 2010 (+24.3%). However, after the outbreak of the crisis and in the context of the fiscal consolidation that ensued, the number of teachers dropped significantly to 152,200 in 2014 (-15.6% in relation to 2008).

Figure 4.1

Number of Teachers by School Type (2000-2014)



Source: ELSTAT

The fluctuations in the number of teachers that occurred before and after the start of the crisis significantly altered the teacher-student ratio in both primary and secondary education. In more detail, before the crisis, the student-teacher dropped from 10.6 (in 2000) to 8.2 (in 2009). After the beginning of the crisis the student-teacher ratio increased anew to 9.5 (in 2017).

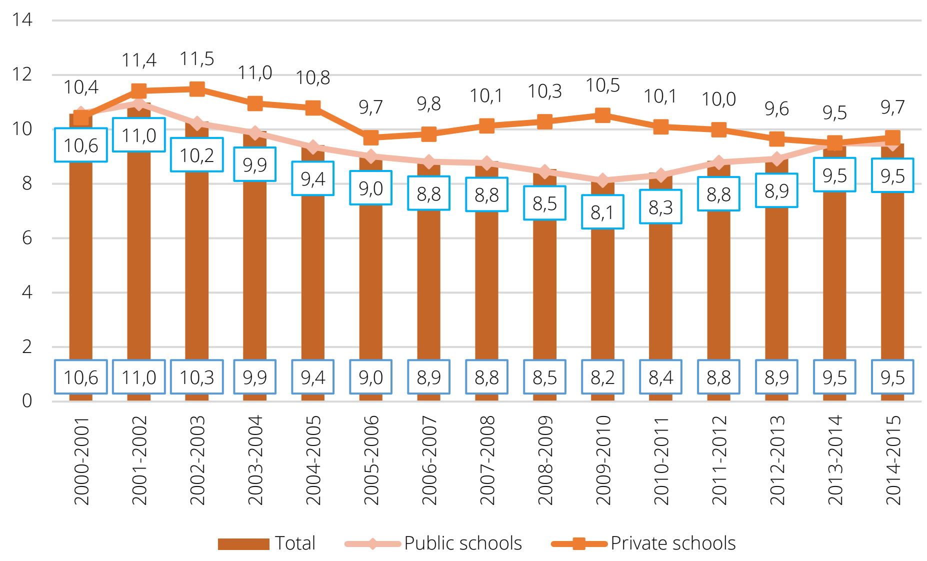
Despite the extent of the fiscal consolidation implemented since 2010, the student-teacher ratio in primary and secondary education in Greece has remained lower than the average of the European Union and the OECD. In addition, these ratios are lower than the average of other European countries, in both central regions of the country (Attica, Central Macedonia), where most students reside, and in more remote areas with smaller population and geographical challenges (e.g. remote schools in island or mountainous regions).

Therefore, the lack of teachers, occurring each year in Greek schools, is mostly due to inability of the central administration to match educational staff with needs, and to deficiencies in the school network infrastructure and curricula.

After the outbreak of the crisis and as result of a halt in recruitment, the permanent/substitute teacher ratio changed significantly. In primary schools, from 7% in 2004 and 6.6% in 2008 the share of substitute teachers reached 18.7% in 2015. In upper secondary schools, it increased from 3.1% in 2003 and 3.8% in 2009 to 6.8% in 2015 in the schools with general programmes, while in the schools with vocational programmes it changed from 7.4% in 2002 and 4.8% in 2009 to 8.9% in 2015.

Figure 4.2

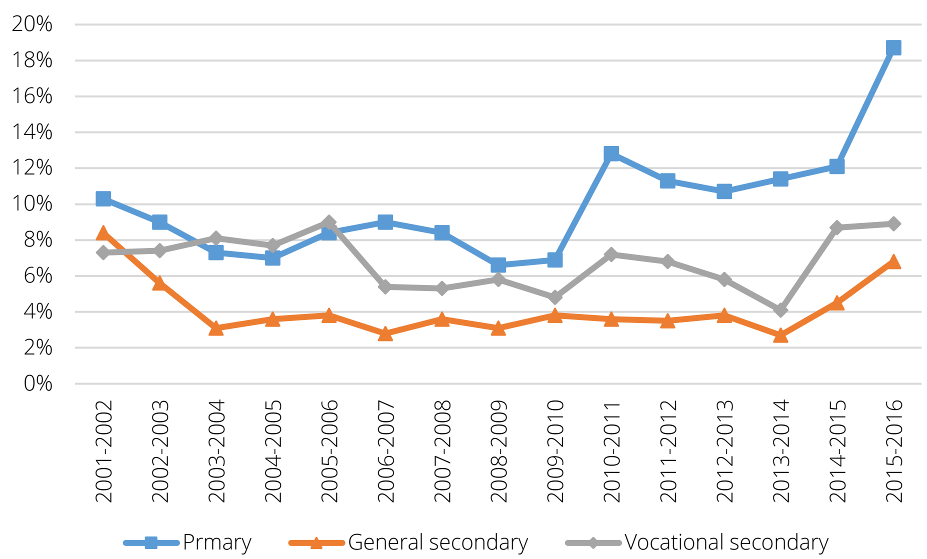
Number of students per teacher (2000-2014)



Source: ELSTAT, Processing: IOBE

Figure 4.3

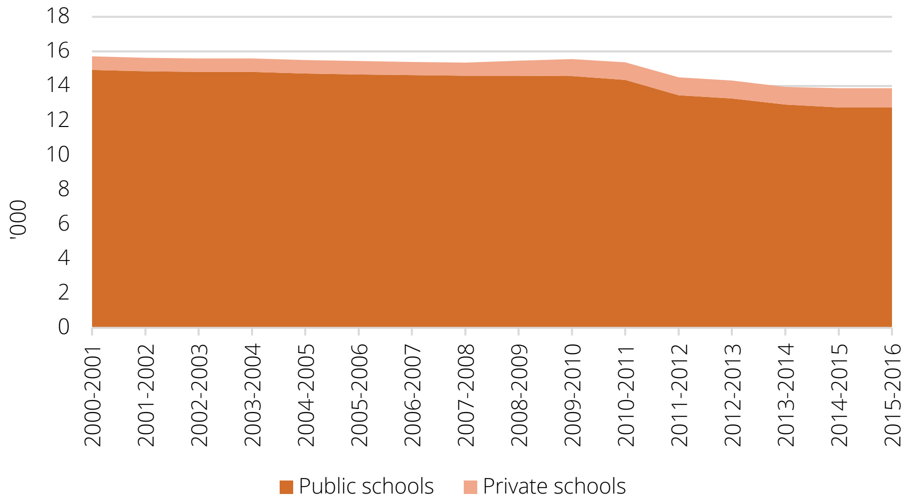
Share of substitute in total teachers (2001-2015)



Source: ELSTAT, Processing: IOBE

Figure 4.4

Number of schools per school type (2000-2015)



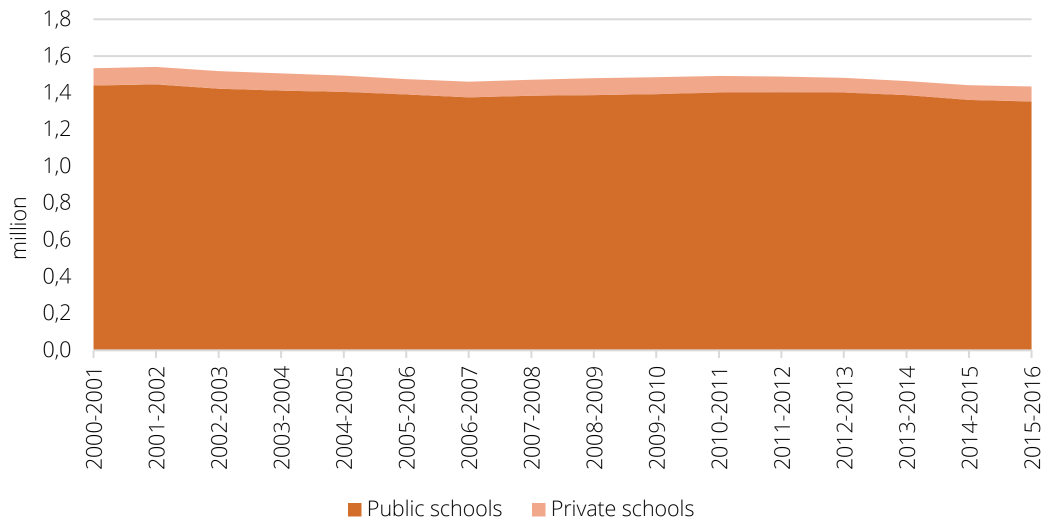
Source: ELSTAT

The number of schools was slowly decreasing before the crisis (by -1.1%, from 15,714 in 2000 to 15,547 in 2009), while its pace has accelerated since, as part of the rationalisation and the fiscal consolidation that ensued with the crisis outbreak. As a result, the number of schools decreased further to 13,870 in 2015 (10.8% drop).

The crisis also severely affected private education, where the number of students fell from 94,200 in 2000 and 93,400 in 2009, to 70,700 in 2015 (-24.9% in relation to 2000). The number of teachers declined from 9,000 in 2000 and 8,900 in 2009, to 8,300 in 2014 (8.4% in relation to 2000).

Figure 4.5

Total number of students per school type (2000-2015)



Source: ELSTAT

To sum up, the analysis revealed that despite the extent of the fiscal consolidation that ensued with the start of the crisis and the reduction in the number of teachers and schools, the management and utilisation of the educational staff and the school infrastructure by the public administration lags behind that of other EU countries and the OECD.

The most significant effect of the crisis on education that was revealed in the analysis concerns the drop in total student population, from 1.53 million in 2000 to 1.49 in 2019 (3.1%) and 1.44 million in 2015 (-5.9% in relation to 2000).

This development is due to:

a) Emigration of families, mostly of foreign nationals, after the outbreak of the crisis, as between 2011 and 2015 the number of repatriated and foreign students dropped by 55.9% (from 159,500 to 70,300).

b) A drop in the number of births from 2009 onwards that intensified over time (with 2016 being an exception, recording an increase in comparison to 2015). The reduction in births after the beginning of the crisis by 25.1%, from 118,300 in 2008 to 88,600 in 2017, has started to reflect in the number of kids in preschool (from 162,000 in 2014 to 155,200 in 2015) and the first grade of primary school (from 111.300 in 2014 to 102,000 in 2017).

These changes in student population, which constitute indirect and deeper consequences of the crisis on education, have not yet manifested and reflected fully on the education indicators. On the one hand, the drop in the student numbers due to the surge in emigration has already taken place, without it being certain that is has stopped or has fully played out. On the other, the drop in student numbers due to the decline in childbirths following the crisis has only recently started to reflect on the education numbers. The impact of the drop in childbirths occurring from 2010 up until at least 2017 is expected to manifest gradually and with more intensity in the upcoming years, changing radically the education system.

4.3 Scenarios of future development

The various scenarios on the future development of the education system, formulated in this study to showcase the impact of the crisis (no-action scenario, adjustment-to-current-conditions scenario, European convergence scenario) show that, provided there are no radical changes that cause a significant increase in childbirth, a mass repatriation of Greeks or immigration from other countries into Greece, the total number of students will drop from 1.48 million in 2008 to approximately 1.05 million by 2035 (29.2% or 423,300 fewer students), when the drop in childbirth occurring in 2017 would have fully fed into the education system.

The impact of the demographical changes since the start of the crisis have already reflected on the numbers in pre-primary (since 2014) and primary schools (since 2015), while they will become evident in lower secondary schools from 2021, in higher secondary schools with general or vocational programme from 2024 and in tertiary education from 2027 onwards.

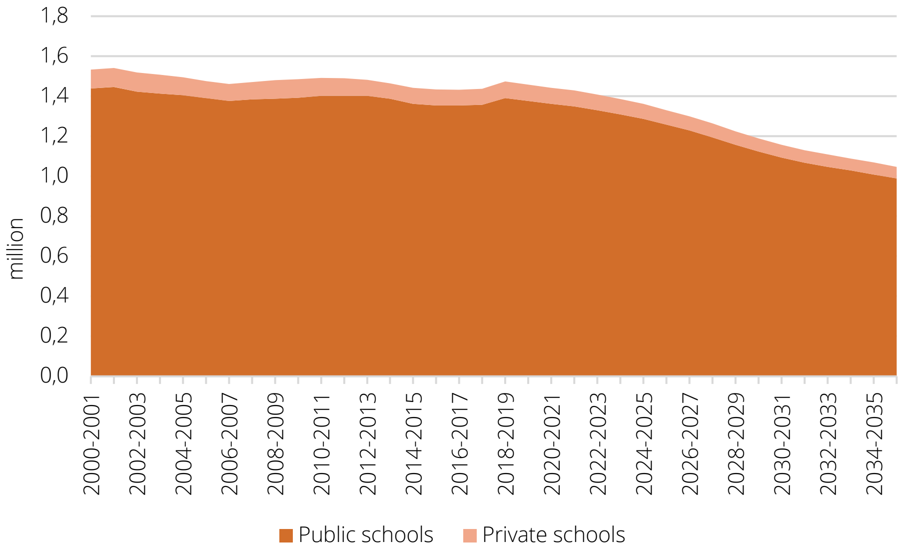
Depending on the education policy direction and choices with respect to managing the teaching staff, the school network infrastructure and the school curriculum in the upcoming years (no action, adjustment to current conditions, or convergence to European standards), the above outlook for decline in student population implies that:

a) The number of schools might drop to 10,700 in 2035, from 15,500 in 2008 (reduction by 30.8% or 4,800 schools)

b) The number of teachers might drop from 180,300 in 2009 to 110,500 in 2035 (decline by 38.7% in the adjustment-to-current-conditions scenario) or to 80,700 (55.2% drop under the European convergence scenario).

Figure 4.6

Total number of students per school type (2000-2035)



Source: IOBE

The reduction of students is expected to gradually impact the various teacher specialities required for the operation of the schools, starting from primary schoolteachers and the speciality teachers (English, French, German, Physical Education, Music, Arts, Informatics) that teach in primary schools. The prospect of gradual expansion of the two-year mandatory pre-school education from 2018 moderates the impact of the demographic changes and temporary suspends its manifestation in the number of pre-school children (2019) and in the need for pre-school teachers (2021). Over 2018-2020, these impacts will start showing in other secondary education specialities, intensifying over time, as the fall in the number of students will strengthen. The size of the teacher surplus due to demographic changes, in total and per speciality, will also depend on how teacher departures and retirements will evolve, and on the teacher recruitment policy that will be followed in the upcoming years.

The analysis shows that if in the upcoming years, the number of students entering tertiary education departments that primarily cater to the employment needs of the education sector remains stable, the number of graduates from departments with teaching specialities (e.g. language teachers, mathematicians, physicists, religious studies, primary school teachers etc.) will significantly deviate from the projected needs for teachers in those fields.

The anticipated in the upcoming years reduction in the number of teachers needed to run the education system will also impact the connection between higher education and employment, as the education sector (private and public schools, private tutoring schools) absorbs a large number higher education graduates and especially holder of university degrees. As shown in other recent IOBE studies, the education sector employs the largest share of tertiary education graduates, more in relation to other EU countries (IOBE, 2018).[45] At the same time, the number of graduates seeking employment as substitute teachers exceeds 100,000 (IOBE, 2017).[46]

In light of this, aside from the unemployment, under-employment and employment mismatch of tertiary education graduates, which limit the efficiency of public and private investment in education, the likelihood of continued emigration and "brain-drain" from Greece in the upcoming years is becoming more pronounced. This prospect, aside from its economic implication, further exacerbates the demographic problem of the country, as it pertains to the emigration of young people at a reproductive age.

In addition, the outlook for a drop in the student population, stemming from the current demographic numbers, will severely impact the entrance of students into higher education, as upper secondary school graduates from general programmes aiming to enter higher education will drop from 71,800 (2008) to 54,200 in 2035 (-24.5% or 17,600 fewer students), while the first-year university students will drop from 68,000 to 51,800 in 2035 (-23.8% or -16,200), given the current graduate-to-entry ratio. The first effects on higher education entry are expected to appear from 2027 onwards. If the number of first-year undergraduate students remains in 2015-2035 at the same levels as in 2014 (75,200), its difference with the number of general upper secondary school graduates will widen significantly after 2026.

Finally, the demographic changes will also impact the labour market and the real economy (growth, entrepreneurship, investment) through the reduced supply of new graduates, skills and qualifications. In particular, if education flows and student preferences don't change radically, the already feeble in comparison to other European countries number of students in vocational upper secondary education will drop from 106,500 in 2008 to 80,500 in 2035 (-26,000 or -24.4%), while the number of graduates per year will drop from 37,300 in 2010 to 24,100 in 2035 (-5,300 or -18.1%). The effects of these developments will manifest from 2027, intensifying over time. In case that the number of students opting for vocational upper secondary education increases, the number of graduates from the general upper secondary schools and the people entering higher education will drop accordingly, causing an even more significant impact on higher education.

[45] "Tertiary Education In Greece: Impact of the Crisis and Challenges", IOBE (2017)
[46] "Education and the Labour Market in Greece: Impact of the Crisis and Challenges" IOBE (2018)

4.4 Conclusions

To conclude, the study revealed that the education system is facing two significant challenges.

The challenge of European convergence: boost efficiency and performance of the education system

As the comparative indicators with other EU and OECD countries show, despite the fiscal consolidation that began with the outbreak of the crisis and lasted for years, the drop in the number of teachers and the growth in the student-teacher ratio recorded after 2010, there is still significant room for reform in order to improve the efficiency of education and the return of public and private investment in it.

The convergence of the student-teacher ratio at every education level with those of the EU and OECD countries and the corresponding improvement of the efficiency and return of the public education expenditure can provide significant benefits to the overall functioning and quality of the provided education. Besides, it is worth noting that the large decrease in the student-teacher ratio before the crisis did not lead to an improvement in the performance of the students, as evident from the global comparative PISA reports by the OECD, the only available with annual comparative data on student performance over that period.

The relation between student-teacher ratio and student performance is determined primarily by a) the number of student and teachers, b) the way teachers are managed and utilised (work and teaching hours), c) the way other administrative and support staff in schools and their support infrastructure is managed and utilised, d) the structure and management of schools (size of schools and classes) and e) the school schedule (working hours, daily and weekly school curriculum for classes, breaks and other activity).

The demographic challenge: The shock of the upcoming contraction

The notable drop in childbirth in Greece during the crisis is a topic with various dimensions and impacts. The present study focused on the impact of the demographic changes on the functioning of the education system, indicating that the challenges that education is facing, are considerable. Provided no radical developments that completely overturn current demographical trends occur, the drop in childbirth that has already taken place is expected to gradually lead the education system and the national school network to shrink, with noteworthy implications especially for remote regions, making regional imbalances more acute. As shown in this study, the upcoming contraction could even amount to a third of the total number of schools and students in the next 15 years, with corresponding consequences on the needs for teaching staff.

The process of contraction has already begun, as aside from the impact of emigration on the wider student population; the demographic changes have already started to affect the numbers in preschools and primary schools. In the upcoming years, the effects are expected to become more pronounced and extend to all education levels, including higher education. The impact on first-year higher education students could influence its total size and structure, but also the employment opportunities of its graduates.

The demographic changes are also expected to extent their impact beyond the education system, to the labour market and the supply of skills, and to employment and economic development. On the one hand, the supply of skills will decline, especially in the –already weak- supply of labour and skills from technical and vocational secondary education. On the other, the education sector, which employs the largest number of higher education graduates, is also project to shrink accordingly. In light of this outlook, the already significant mismatch between higher education and the needs of the labour market will become more acute, a development that could possibly lead to further youth emigration and further worsening of the demographic trends in the country.

The significance of the challenge can be understood better if, firstly, we take into account the difficulty in reversing the trend in childbirth, especially given that the drop came also from the emigration of Greeks and foreigners at reproductive ages. Secondly, the duration of the crisis and of the period with reduced childbirth rates (from 2009 on and continuing as of 2017) transcends the duration of education in every tier (primary, secondary, tertiary), which implies that each education level will experience the contraction shock independently, regardless of the concurrent trends in the other two levels. The extent and duration of the impact of the demographic contraction depend on the effectiveness of the policy interventions pursed in the near future.

Lastly, the study includes proposals to deal effectively with the double challenge that Greek education and public education policy are facing.

APPENDIX

Table 1: GDP growth

	Annual Data (%)									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Austria	1.5	-3.8	1.8	2.9	0.7	0.0	0.8	1.1	2	2.6
Belgium	0.8	-2.3	2.7	1.8	0.2	0.2	1.3	1.7	1.5	1.7
Bulgaria	6.0	-3.6	1.3	1.9	0.0	0.9	1.3	3.5	3.9	3.8
France	0.3	-2.9	1.9	2.2	0.3	0.6	1.0	1.1	1.2	2.2
Germany	1.1	-5.6	4.1	3.7	0.5	0.5	1.9	1.7	2.2	2.2
Denmark	-0.5	-4.9	1.9	1.3	0.2	0.9	1.6	2.3	2.4	2.3
Czech Republic	2.7	-4.8	2.3	1.8	-0.8	-0.5	2.7	5.3	2.5	4.4
EU	0.5	-4.3	2.1	1.7	-0.4	0.3	1.8	2.3	2	2.4
Greece	-0.3	-4.3	-5.5	-9.1	-7.3	-3.2	0.7	-0.4	-0.2	1.5
Estonia	-5.4	-14.7	2.3	7.6	4.3	1.9	2.9	1.9	3.5	4.9
Euro area	0.4	-4.5	2.1	1.6	-0.9	-0.2	1.3	2.1	2	2.4
United Kingdom	-0.3	-4.2	1.7	1.6	1.4	2.0	2.9	2.3	1.8	1.8
Ireland	-3.9	-4.6	1.8	3.0	0.0	1.6	8.3	25.1	5	7.2
Spain	1.1	-3.6	0.0	-1.0	-2.9	-1.7	1.4	3.6	3.2	3
Italy	-1.1	-5.5	1.7	0.6	-2.8	-1.7	0.1	0.9	1.1	1.6
Croatia	2.0	-7.3	-1.5	-0.3	-2.3	-0.5	-0.1	2.4	3.5	2.9
Cyprus	3.9	-1.8	1.3	0.3	-3.1	-5.9	-1.4	2	4.8	4.2
Latvia	-3.5	-14.4	-3.9	6.4	4.0	2.4	1.9	3	2.1	4.6
Lithuania	2.6	-14.8	1.6	6.0	3.8	3.5	3.5	2	2.4	4.1
Luxembourg	-1.3	-4.4	4.9	2.5	-0.4	3.7	5.8	3.9	2.4	1.5
Malta	3.3	-2.5	3.5	1.3	2.7	4.6	8.1	10.6	5.7	6.6
Netherlands	2.2	-3.7	1.3	1.6	-1.0	-0.1	1.4	2	2.2	2.9
Hungary	0.9	-6.6	0.7	1.7	-1.6	2.1	4.2	3.5	2.3	4.1
Poland	4.2	2.8	3.6	5.0	1.6	1.4	3.3	3.8	3.1	4.8
Portugal	0.2	-3.0	1.9	-1.8	-4.0	-1.1	0.9	1.8	1.9	2.8
Romania	8.3	-5.9	-2.8	2.0	1.2	3.5	3.1	3.9	4.8	7
Slovakia	5.6	-5.4	5.0	2.8	1.7	1.5	2.8	4.2	3.1	3.2
Slovenia	3.3	-7.8	1.2	0.6	-2.7	-1.1	3.0	2.3	3.1	4.9
Sweden	-0.6	-5.2	6.0	2.7	-0.3	1.2	2.6	4.5	2.7	2.1
Finland	0.7	-8.3	3.0	2.6	-1.4	-0.8	-0.6	0.1	2.5	2.8

Table 2: General Government Debt as % of GDP

	Annual Data (%)									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Austria	68.7	79.9	82.7	82.4	81.9	81.3	84	84.8	83	78.3
Belgium	92.5	99.5	99.7	102.6	104.3	105.5	107	106.5	106.1	103.4
Bulgaria	13	13.7	15.3	15.2	16.7	17	27	26.2	29.6	25.6
France	68.8	83	85.3	87.8	90.6	93.4	94.9	95.6	98.2	98.5
Germany	65.2	72.6	80.9	78.6	79.8	77.5	74.7	70.8	67.9	63.9
Denmark	33.3	40.2	42.6	46.1	44.9	44	44.3	39.9	37.9	36.1
Czech Republic	28.3	33.6	37.4	39.8	44.5	44.9	42.2	40	36.8	34.7
EU	60.8	73.4	78.9	81.5	83.9	85.8	86.5	89.9	89.1	86.8
Greece	109.4	126.7	146.2	172.1	159.6	177.4	178.9	175.9	178.5	176.1
Estonia	4.5	7	6.6	6.1	9.7	10.2	10.7	9.9	9.2	8.7
Euro area	68.7	79.2	84.6	86.6	89.7	91.6	91.9	84.4	83.3	81.6
United Kingdom	49.9	64.1	75.6	81.3	84.5	85.6	87.4	87.9	87.9	87.4
Ireland	42.4	61.5	86.1	110.3	119.6	119.4	104.5	76.8	73.4	68.4
Spain	39.5	52.8	60.1	69.5	85.7	95.5	100.4	99.3	99	98.1
Italy	102.4	112.5	115.4	116.5	123.4	129	131.8	131.6	131.4	131.2
Croatia	39	48.3	57.3	63.8	69.4	80.5	84	83.7	80.2	77.5
Cyprus	45.1	53.8	56.3	65.7	79.7	102.6	107.5	108	105.5	96.1
Latvia	18.2	35.8	46.8	42.7	41.2	39	40.9	36.8	40.3	40
Lithuania	14.6	28	36.2	37.2	39.8	38.8	40.5	42.6	39.9	39.4
Luxembourg	14.9	15.7	19.8	18.7	22	23.7	22.7	22.2	20.7	23
Malta	62.6	67.6	67.5	70.1	67.8	68.4	63.8	58.6	56.3	50.9
Netherlands	54.7	56.8	59.3	61.6	66.3	67.8	68	64.6	61.9	57
Hungary	71.6	77.8	80.2	80.5	78.4	77.1	76.6	76.6	75.9	73.3
Poland	46.3	49.4	53.1	54.1	53.7	55.7	50.3	51.3	54.2	50.6
Portugal	71.7	83.6	96.2	111.4	126.2	129	130.6	128.8	129.2	124.8
Romania	12.4	22.1	29.7	34	36.9	37.5	39.1	37.8	37.3	35.1
Slovakia	28.5	36.3	41.2	43.7	52.2	54.7	53.5	52.2	51.8	50.9
Slovenia	21.8	34.6	38.4	46.6	53.8	70.4	80.3	82.6	78.7	74.1
Sweden	37.8	41.4	38.6	37.9	38.1	40.7	45.5	44.2	42.4	40.8
Finland	32.7	41.7	47.1	48.5	53.9	56.5	60.2	63.6	63	61.3

Table 3: General Government Balance as % of GDP

	Annual Data (%)									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Austria	-1.5	-5.3	-4.4	-2.6	-2.2	-2.0	-2.7	-1.0	-1.6	-0.8
Belgium	-1.1	-5.4	-4.0	-4.1	-4.2	-3.1	-3.1	-2.5	-2.4	-0.9
Bulgaria	1.6	-4.1	-3.1	-2.0	-0.3	-0.4	-5.5	-1.7	0.2	1.1
France	-3.3	-7.2	-6.9	-5.2	-5.0	-4.1	-3.9	-3.6	-3.5	-2.7
Germany	-0.2	-3.2	-4.2	-1.0	0.0	-0.1	0.5	0.8	0.9	1.0
Denmark	3.2	-2.8	-2.7	-2.1	-3.5	-1.2	1.1	-1.5	-0.4	1.1
Czech Republic	-2.0	-5.5	-4.2	-2.7	-3.9	-1.2	-2.1	-0.6	0.7	1.5
EU	-2.5	-6.6	-6.4	-4.6	-4.3	-3.3	-2.9	-2.3	-1.7	-1.0
Greece	-10.2	-15.1	-11.2	-10.3	-8.9	-13.2	-3.6	-5.6	0.5	0.8
Estonia	-2.7	-2.2	0.2	1.2	-0.3	-0.2	0.7	0.1	-0.3	-0.4
Euro area	-2.2	-6.3	-6.2	-4.2	-3.7	-3.0	-2.5	-2.0	-1.6	-1.0
United Kingdom	-5.2	-10.1	-9.4	-7.5	-8.2	-5.4	-5.4	-4.2	-2.9	-1.8
Ireland	-7.0	-13.8	-32.1	-12.7	-8.0	-6.1	-3.6	-1.9	-0.5	-0.2
Spain	-4.4	-11.0	-9.4	-9.6	-10.5	-7.0	-6.0	-5.3	-4.5	-3.1
Italy	-2.6	-5.2	-4.2	-3.7	-2.9	-2.9	-3.0	-2.6	-2.5	-2.4
Croatia	-2.8	-6.0	-6.5	-7.8	-5.2	-5.3	-5.1	-3.4	-0.9	0.9
Cyprus	0.9	-5.4	-4.7	-5.7	-5.6	-5.1	-9.0	-1.3	0.3	1.8
Latvia	-4.2	-9.1	-8.7	-4.3	-1.2	-1.2	-1.5	-1.4	0.1	-0.6
Lithuania	-3.1	-9.1	-6.9	-8.9	-3.1	-2.6	-0.6	-0.3	0.3	0.5
Luxembourg	3.3	-0.7	-0.7	0.5	0.3	1.0	1.3	1.3	1.6	1.4
Malta	-4.2	-3.2	-2.4	-2.4	-3.5	-2.4	-1.8	-1.0	0.9	3.5
Netherlands	0.2	-5.4	-5.0	-4.3	-3.9	-2.4	-2.3	-2.0	0.0	1.2
Hungary	-3.7	-4.5	-4.5	-5.4	-2.4	-2.6	-2.6	-1.9	-1.6	-2.2
Poland	-3.6	-7.3	-7.3	-4.8	-3.7	-4.1	-3.6	-2.7	-2.2	-1.4
Portugal	-3.8	-9.8	-11.2	-7.4	-5.7	-4.8	-7.2	-4.4	-2.0	-3.0
Romania	-5.4	-9.2	-6.9	-5.4	-3.7	-2.1	-1.3	-0.7	-2.9	-2.9
Slovakia	-2.4	-7.8	-7.5	-4.3	-4.3	-2.7	-2.7	-2.6	-2.2	-0.8
Slovenia	-1.4	-5.8	-5.6	-6.7	-4.0	-14.7	-5.5	-2.8	-1.9	0.1
Sweden	1.9	-0.7	0.0	-0.2	-1.0	-1.4	-1.6	0.2	1.1	1.6
Finland	4.2	-2.5	-2.6	-1.0	-2.2	-2.6	-3.2	-2.8	-1.7	-0.7

Table 4: Share of population at risk of poverty or social exclusion*

	Annual Data (%)									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Austria	20.6	19.1	18.9	19.2	18.5	18.8	19.2	18.3	18.0	18.1
Belgium	20.8	20.2	20.8	21.0	21.6	20.8	21.2	21.1	20.7	20.3
Bulgaria	44.8	46.2	49.2	49.1	49.3	48.0	40.1	41.3	40.4	38.9
France	18.5	18.5	19.2	19.3	19.1	18.1	18.5	17.7	18.2	17.1
Germany	20.1	20.0	19.7	19.9	19.6	20.3	20.6	20.0	19.7	19.0
Denmark	16.3	17.6	18.3	17.6	17.5	18.3	17.9	17.7	16.8	17.2
Czech Republic	15.3	14.0	14.4	15.3	15.4	14.6	14.8	14.0	13.3	12.2
EU	:	:	23.7	24.3	24.7	24.6	24.4	23.8	23.5	22.4
Greece	28.1	27.6	27.7	31.0	34.6	35.7	36.0	35.7	35.6	34.8
Estonia	21.8	23.4	21.7	23.1	23.4	23.5	26.0	24.2	24.4	23.4
Euro area	21.7	21.6	22.0	22.9	23.3	23.1	23.5	23.1	23.1	22.1
United Kingdom	23.2	22.0	23.2	22.7	24.1	24.8	24.1	23.5	22.2	22.0
Ireland	23.7	25.7	27.3	29.4	30.0	29.5	27.6	26.0	24.2	:
Spain	23.8	24.7	26.1	26.7	27.2	27.3	29.2	28.6	27.9	26.6
Italy	25.5	24.9	25.0	28.1	29.9	28.5	28.3	28.7	30.0	28.9
Croatia	:	:	31.1	32.6	32.6	29.9	29.3	29.1	27.9	26.4
Cyprus	23.3	23.5	24.6	24.6	27.1	27.8	27.4	28.9	27.7	25.2
Latvia	34.2	37.9	38.2	40.1	36.2	35.1	32.7	30.9	28.5	28.2
Lithuania	28.3	29.6	34.0	33.1	32.5	30.8	27.3	29.3	30.1	29.6
Luxembourg	15.5	17.8	17.1	16.8	18.4	19.0	19.0	18.5	19.8	21.5
Malta	20.1	20.3	21.2	22.1	23.1	24.0	23.8	22.4	20.1	19.2
Netherlands	14.9	15.1	15.1	15.7	15.0	15.9	16.5	16.4	16.7	17.0
Hungary	28.2	29.6	29.9	31.5	33.5	34.8	31.8	28.2	26.3	25.6
Poland	30.5	27.8	27.8	27.2	26.7	25.8	24.7	23.4	21.9	19.5
Portugal	26.0	24.9	25.3	24.4	25.3	27.5	27.5	26.6	25.1	23.3
Romania	44.2	43.0	41.5	40.9	43.2	41.9	40.3	37.4	38.8	35.7
Slovakia	20.6	19.6	20.6	20.6	20.5	19.8	18.4	18.4	18.1	16.3
Slovenia	18.5	17.1	18.3	19.3	19.6	20.4	20.4	19.2	18.4	17.1
Sweden	14.9	15.9	15.0	16.1	15.6	16.4	16.9	18.6	18.3	17.7
Finland	17.4	16.9	16.9	17.9	17.2	16.0	17.3	16.8	16.6	15.7

Table 5: Inflation

	Annual Data (%)							Change (%)	
	2012	2013	2014	2015	2016	2017	2018	2018/17	2017/16
Austria	2.6	2.1	1.5	0.8	0.3	1.7	1.9	0.2	1.5
Belgium	2.6	1.1	0.5	0.6	0.2	1.5	1.7	0.2	1.3
Bulgaria	2.4	0.4	-1.6	-1.1	1.8	2.2	2.3	0.1	0.5
France	2.2	1.0	0.6	0.1	-1.3	1.2	2.6	1.4	2.5
Germany	2.1	1.6	0.8	0.1	0.7	2.4	2.0	-0.5	1.8
Denmark	2.4	0.5	0.4	0.2	0.0	1.1	0.7	-0.3	1.0
Czech Republic	2.6	1.5	0.4	0.3	0.4	1.7	1.9	0.1	1.3
EU	2.5	1.4	0.5	0.0	0.8	3.6	3.4	-0.2	2.8
Greece	1.0	-0.9	-1.4	-1.1	-0.2	0.3	0.7	0.5	0.5
Estonia	4.2	3.3	0.5	0.1	0.0	1.1	0.8	-0.4	1.1
Euro area	2.8	2.6	0.4	0.0	-0.3	2.0	1.7	-0.3	2.4
United Kingdom	1.9	0.5	1.5	0.0	0.3	1.2	2.1	0.9	0.9
Ireland	2.4	1.5	0.3	0.0	-0.6	1.3	1.6	0.3	1.9
Spain	3.3	1.3	-0.2	-0.6	0.0	1.3	1.2	-0.1	1.4
Italy	3.3	2.3	0.2	0.1	-1.2	0.7	0.8	0.1	1.9
Croatia	3.1	0.4	0.2	-0.3	0.1	2.9	2.6	-0.3	2.8
Cyprus	2.3	0.0	-0.3	-1.5	0.7	3.7	2.5	-1.2	3.0
Latvia	3.2	1.2	0.7	0.2	0.0	2.1	2.0	-0.1	2.1
Lithuania	2.9	1.7	0.2	-0.7	0.5	2.4	2.9	0.5	1.9
Luxembourg	3.3	1.0	0.7	0.1	0.9	1.3	1.7	0.5	0.4
Malta	2.8	2.6	0.8	1.2	0.1	1.3	1.6	0.3	1.2
Netherlands	5.7	1.7	0.3	0.2	1.0	2.2	2.1	-0.1	1.3
Hungary	3.7	0.8	0.0	0.1	-0.2	1.6	1.2	-0.4	1.8
Poland	2.8	0.4	0.1	-0.7	0.6	1.6	1.2	-0.4	0.9
Portugal	3.4	3.2	-0.2	0.5	-1.1	1.1	4.1	3.0	2.2
Romania	3.7	1.5	1.4	-0.4	-0.2	1.6	1.9	0.4	1.7
Slovakia	2.8	1.9	-0.1	-0.3	-0.5	1.4	2.5	1.1	1.9
Slovenia	0.9	0.4	0.4	-0.8	0.4	0.8	1.2	0.3	0.5
Sweden	3.5	1.4	0.2	0.7	1.1	1.9	2.0	0.2	0.7
Finland	3.2	2.2	1.2	-0.2	0.6	2.7	-	-	2.0

Table 6: GDP per capita (in PPS, EU-28=100)

	Annual Data (%)								
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Austria	127	126	128	132	131	130	129	128	127
Belgium	118	120	120	121	120	119	118	118	117
Bulgaria	43	44	45	46	46	47	47	48	49
France	108	108	108	107	108	107	105	104	104
Germany	117	120	123	124	124	126	124	124	124
Denmark	125	129	128	127	128	128	127	126	128
Czech Republic	85	83	83	82	84	86	87	88	89
EU	100	100	100	100	100	100	100	100	100
Greece	94	85	75	72	72	72	69	68	67
Estonia	64	65	71	74	75	76	76	77	79
Euro area	109	108	108	107	107	107	106	106	106
United Kingdom	107	108	106	107	108	109	109	107	105
Ireland	129	130	130	132	132	137	178	177	181
Spain	101	96	93	91	89	90	91	91	92
Italy	106	104	104	102	98	96	95	97	96
Croatia	62	59	60	60	60	59	59	61	62
Cyprus	105	100	96	91	84	81	82	84	85
Latvia	52	53	57	60	62	63	64	64	67
Lithuania	56	60	66	70	73	75	75	75	78
Luxembourg	255	257	265	260	261	270	266	260	253
Malta	81	84	83	84	85	88	92	94	96
Netherlands	137	134	133	133	134	130	130	128	128
Hungary	64	65	66	66	67	68	68	67	68
Poland	59	62	65	67	67	67	69	68	70
Portugal	82	82	77	75	77	77	77	77	77
Romania	51	51	52	54	54	55	56	59	63
Slovakia	71	74	75	76	77	77	77	77	76
Slovenia	85	83	83	82	82	82	82	83	85
Sweden	123	125	126	127	125	124	125	122	121
Finland	117	116	117	115	113	111	109	109	109

Table 7: Average labour productivity (euro per hour worked, EU=100)

	Annual Data								
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Austria	117.9	115.4	115.7	117.7	117.0	116.5	117.7	116.6	116.9
Belgium	129.6	131.3	129.7	130.7	130.2	130.6	130.2	129.4	128.8
Bulgaria	39.4	41.3	42.2	43.5	42.9	43.8	44.1	45.4	46.7
France	117.5	117.0	116.6	114.9	116.2	115.6	115.4	114.9	115.1
Germany	104.1	105.2	106.4	105.2	104.7	106.4	106.1	105.8	106.2
Denmark	109.6	115.2	114.6	114.4	115.2	115.2	114.3	111.9	113.6
Czech Republic	79.2	77.1	77.4	76.2	76.6	79.1	79.7	80.2	80.5
EU	100.0	100.0	100.0	100.0	100.0	100.0	100	100	100
Greece	98.1	89.5	85.5	85.9	86.9	86.2	83.2	81	79.6
Estonia	66.6	70.6	72.0	73.3	73.3	73.8	70.9	71.8	74.7
Euro area	108.6	107.8	107.7	107.1	107.2	107.3	107.2	107.1	107
United Kingdom	103.8	103.6	101.8	102.2	101.9	101.8	101.6	101.4	99.9
Ireland	135.0	141.0	142.6	144.8	141.5	145.7	189.7	190.2	189.2
Spain	105.5	101.9	101.3	103.1	103.4	103.4	102.2	101.9	101.6
Italy	114.9	112.8	112.2	110.1	108.7	107.2	106.3	107.4	106.8
Croatia	68.5	67.2	70.2	72.4	73.4	70.7	70.2	71.3	71.7
Cyprus	95.2	91.5	89.9	88.7	86.8	85.0	84.8	84.3	84.3
Latvia	56.1	58.8	61.4	62.9	62.5	64.6	63.8	64.8	68
Lithuania	61.2	67.2	71.3	73.0	74.1	74.6	73.3	72.1	75.5
Luxembourg	162.8	162.5	166.3	162.1	163.4	170.0	168.2	163.2	160.7
Malta	94.0	94.7	91.2	90.3	89.6	91.0	95.1	95.5	95.9
Netherlands	115.7	113.4	112.1	111.9	113.8	111.9	112.5	111.6	111.1
Hungary	72.4	73.0	74.1	72.8	73.1	71.1	69.8	67.8	68
Poland	65.3	70.1	72.7	74.1	73.9	73.6	74	74.2	75.9
Portugal	79.5	79.8	76.4	76.7	79.6	78.9	78.2	78	76.5
Romania	51.4	50.6	51.6	55.6	56.3	56.6	58.6	61.6	65.3
Slovakia	79.2	83.5	81.5	82.4	83.7	83.9	82.6	81.7	80.9
Slovenia	80.1	79.5	80.7	80.1	80.5	81.4	80.7	80.7	81
Sweden	116.2	116.7	116.2	116.2	114.0	113.3	114.2	113.7	112.2
Finland	113.4	112.6	112.5	109.5	108.3	107.2	107.7	108.8	108.7

Table 8: Employment rate for people aged 20-64 (*)

	Annual Data (%)				Q3			Change (%)	
	2014	2015	2016	2017	2016	2017	2018	2018/17	2017/16
Austria	74.2	74.3	74.8	75.4	75.5	75.9	76.7	0.8	0.4
Belgium	67.3	67.2	67.7	68.5	67.5	68.5	70.1	1.6	1.0
Bulgaria	65.1	67.1	67.7	71.3	68.5	73.0	73.5	0.5	4.5
France	69.2	69.5	70.0	70.6	70.3	70.8	71.6	0.8	0.5
Germany	77.7	78.0	78.6	79.2	79.0	79.5	80.2	0.7	0.5
Denmark	75.9	76.5	77.4	76.9	77.7	77.7	78.6	0.9	0.0
Czech Republic	73.5	74.8	76.7	78.5	77.0	79.0	80.1	1.1	2.0
EU	69.2	70.0	71.0	72.1	71.5	72.6	73.5	0.9	1.1
Greece	53.3	54.9	56.2	57.8	57.2	58.9	60.6	1.7	1.7
Estonia	74.3	76.5	76.6	78.7	77.3	79.3	79.4	0.1	2.0
Euro area	68.1	68.9	69.9	70.9	70.3	71.3	72.2	0.9	1.0
United Kingdom	76.2	76.8	77.5	78.2	77.7	78.3	78.7	0.4	0.6
Ireland	68.1	69.9	71.4	73.0	71.8	73.3	74.4	1.1	1.5
Spain	59.9	62.0	63.9	65.5	64.5	66.2	67.6	1.4	1.7
Italy	59.9	60.5	61.6	62.3	61.9	62.7	63.3	0.6	0.8
Croatia	59.2	60.6	61.4	63.6	62.9	65.6	66.3	0.7	2.7
Cyprus	67.6	67.9	68.7	70.8	69.2	71.9	74.6	2.7	2.7
Latvia	70.7	72.5	73.2	74.8	73.1	75.5	77.7	2.2	2.4
Lithuania	71.8	73.3	75.2	76.0	75.7	76.3	78.1	1.8	0.6
Luxembourg	72.1	70.9	70.7	71.5	70.0	71.8	71.6	-0.2	1.8
Malta	66.4	67.8	69.6	71.4	72.0	73.6	76.3	2.7	1.6
Netherlands	75.4	76.4	77.1	78.0	77.4	78.3	79.6	1.3	0.9
Hungary	66.7	68.9	71.5	73.3	72.1	73.8	74.6	0.8	1.7
Poland	66.5	67.8	69.3	70.9	69.7	71.3	72.8	1.5	1.6
Portugal	67.6	69.1	70.6	73.4	71.4	74.1	75.7	1.6	2.7
Romania	65.7	66.0	66.3	68.8	67.7	70.3	71.3	1.0	2.6
Slovakia	65.9	67.7	69.8	71.1	70.1	71.3	72.7	1.4	1.2
Slovenia	67.7	69.1	70.1	73.4	70.4	74.1	75.9	1.8	3.7
Sweden	80.0	80.5	81.2	81.8	82.1	82.7	83.3	0.6	0.6
Finland	73.1	72.9	73.4	74.2	74.5	74.8	77.2	2.4	0.3

(*) employed persons aged 20-64 as a share of the total population of the same age group

Table 9: Employment rate of workers aged 55-64 (*)

	Annual Data (%)				Q3			Change (%)	
	2014	2015	2016	2017	2016	2017	2018	2018/17	2017/16
Austria	45.1	46.3	49.2	51.3	49.7	51.8	54.2	2.4	2.1
Belgium	42.7	44.0	45.4	48.3	45.6	49.2	50.4	1.2	3.6
Bulgaria	50.0	53.0	54.5	58.2	55.6	60.4	61.7	1.3	4.8
France	46.9	48.7	49.8	51.3	50.1	51.1	52.3	1.2	1.0
Germany	65.6	66.2	68.6	70.1	68.9	70.5	71.7	1.2	1.6
Denmark	63.2	64.7	67.8	68.9	69.0	70.2	71.7	1.5	1.2
Czech Republic	54.0	55.5	58.5	62.1	59.0	62.6	65.4	2.8	3.6
EU	51.8	53.3	55.2	57.1	55.6	57.5	59.2	1.7	1.9
Greece	34.0	34.3	36.3	38.3	37.2	38.8	41.7	2.9	1.6
Estonia	64.0	64.5	65.2	68.1	68.1	67.7	70.6	2.9	-0.4
Euro area	51.7	53.3	55.3	57.1	55.6	57.4	59.1	1.7	1.8
United Kingdom	61.0	62.2	63.4	64.1	63.4	63.9	65.6	1.7	0.5
Ireland	53.0	55.6	57.2	58.6	56.5	58.7	60.4	1.7	2.2
Spain	44.3	46.9	49.1	50.5	49.5	50.8	52.7	1.9	1.3
Italy	46.2	48.2	50.3	52.2	50.5	52.4	53.9	1.5	1.9
Croatia	36.2	39.2	38.1	40.3	38.9	43.2	45.2	2.0	4.3
Cyprus	46.9	48.5	52.2	55.3	52.9	57.8	62.2	4.4	4.9
Latvia	56.4	59.4	61.4	62.3	60.7	62.9	66.5	3.6	2.2
Lithuania	56.2	60.4	64.6	66.1	64.8	65.5	67.1	1.6	0.7
Luxembourg	42.5	38.4	39.6	39.8	38.4	39.8	40.8	1.0	1.4
Malta	37.8	40.3	44.1	45.3	47.7	48.8	49.2	0.4	1.1
Netherlands	59.9	61.7	63.5	65.7	63.8	66.0	68.3	2.3	2.2
Hungary	41.7	45.3	49.8	51.7	50.6	52.4	54.9	2.5	1.8
Poland	42.5	44.3	46.2	48.3	46.6	49.4	49.8	0.4	2.8
Portugal	47.8	49.9	52.1	56.2	53.2	57.1	59.6	2.5	3.9
Romania	43.1	41.1	42.8	44.5	43.6	45.7	47.9	2.2	2.1
Slovakia	44.8	47.0	49.0	53.0	49.5	53.3	54.4	1.1	3.8
Slovenia	35.4	36.6	38.5	42.7	37.6	42.8	47.3	4.5	5.2
Sweden	74.0	74.5	75.5	76.4	76.1	76.8	78.2	1.4	0.7
Finland	59.1	60.0	61.4	62.5	62.4	62.4	65.5	3.1	0.0

(*) % employed persons aged 55-64 as a share of the total population of the same age group

Table 10: Employment growth (persons aged at least 15)

	Annual Data (%)				Q3	
	2014	2015	2016	2017	2018/17	2017/16
Austria	0.1	0.8	1.8	1.0	1.4	0.5
Belgium	0.3	0.0	0.9	1.0	2.9	1.6
Bulgaria	1.3	1.6	-0.6	4.0	-0.9	5.2
France	2.2	0.0	0.5	1.0	1.0	0.8
Germany	0.7	0.7	2.5	0.8	0.1	1.2
Denmark	0.7	1.4	2.6	-0.5	1.5	-0.1
Czech Republic	0.8	1.0	1.7	1.6	0.6	1.9
EU	1.3	1.1	1.5	1.4	1.0	1.5
Greece	0.6	2.0	1.8	2.0	1.7	2.2
Estonia	0.5	2.3	-0.1	2.2	-0.1	1.8
Euro area	0.9	1.0	1.7	1.3	1.1	1.4
United Kingdom	2.2	1.5	1.4	1.2	0.9	1.1
Ireland	2.5	3.2	3.7	2.8	2.8	2.1
Spain	1.2	2.9	2.6	2.6	2.5	2.7
Italy	0.2	0.7	1.2	0.9	0.5	1.0
Croatia	3.2	1.1	0.5	2.3	0.3	3.1
Cyprus	-0.4	-1.4	1.1	4.5	5.1	5.2
Latvia	-0.9	1.1	-0.6	0.0	1.8	0.7
Lithuania	1.9	1.0	1.3	-0.9	1.4	-1.2
Luxembourg	2.8	5.1	1.6	4.0	1.8	5.7
Malta	2.8	2.4	3.6	3.4	7.0	5.4
Netherlands	-0.9	1.1	1.3	1.9	2.1	1.8
Hungary	5.4	2.6	3.2	1.5	0.5	1.3
Poland	1.8	1.4	0.6	1.1	0.7	1.2
Portugal	2.3	1.3	1.4	3.3	1.9	3.2
Romania	0.9	-0.2	-0.8	2.4	0.1	2.2
Slovakia	1.4	2.4	2.8	1.2	1.4	1.2
Slovenia	0.5	1.0	0.1	4.5	1.2	5.6
Sweden	0.9	1.4	1.6	2.1	1.7	2.2
Finland	-0.7	-0.8	0.5	1.0	2.6	0.4

Table 11: Unemployment rate – Total population

	Annual Data (%)				Q3			Change (%)	
	2014	2015	2016	2017	2016	2017	2018	2018/17	2017/16
Austria	5.6	5.7	6.0	5.5	6.1	5.5	4.9	-0.6	-0.6
Belgium	8.5	8.5	7.8	7.1	7.9	7.2	5.9	-1.3	-0.7
Bulgaria	11.4	9.2	7.6	6.2	7.0	5.9	5.0	-0.9	-1.1
France	10.3	10.4	10.1	9.4	9.6	9.3	8.8	-0.5	-0.3
Germany	5.0	4.6	4.1	3.8	4.0	3.6	3.3	-0.3	-0.4
Denmark	6.6	6.2	6.2	5.7	6.3	5.9	:	:	-0.4
Czech Republic	6.1	5.1	4.0	2.9	4.0	2.8	2.3	-0.5	-1.2
EU	10.2	9.4	8.6	7.6	8.2	7.3	6.5	-0.8	-0.9
Greece	26.5	24.9	23.6	21.5	22.6	20.3	18.3	-2.0	-2.3
Estonia	7.4	6.2	6.8	5.8	7.5	5.2	:	:	-2.3
Euro area	11.6	10.9	10.0	9.1	9.6	8.7	7.7	-1.0	-0.9
United Kingdom	6.1	5.3	4.8	4.4	5.0	4.4	:	:	-0.6
Ireland	11.9	10.0	8.4	6.7	8.6	6.9	6.0	-0.9	-1.7
Spain	24.5	22.1	19.6	17.2	18.9	16.4	14.6	-1.8	-2.5
Italy	12.7	11.9	11.7	11.2	10.9	10.6	:	:	-0.3
Croatia	17.2	16.1	13.4	11.1	11.7	9.5	7.3	-2.2	-2.2
Cyprus	16.1	15.0	13.0	11.1	13.0	10.0	7.9	-2.1	-3.0
Latvia	10.8	9.9	9.6	8.7	9.5	8.5	7.0	-1.5	-1.0
Lithuania	10.7	9.1	7.9	7.1	7.5	6.6	5.9	-0.7	-0.9
Luxembourg	6.0	6.5	6.3	5.6	6.2	5.4	5.2	-0.2	-0.8
Malta	5.8	5.4	4.7	4.6	4.4	4.0	3.7	-0.3	-0.4
Netherlands	7.4	6.9	6.0	4.9	5.6	4.5	3.6	-0.9	-1.1
Hungary	7.7	6.8	5.1	4.2	4.9	4.1	3.8	-0.3	-0.8
Poland	9.0	7.5	6.2	4.9	5.9	4.7	3.8	-0.9	-1.2
Portugal	14.1	12.6	11.2	9.0	10.7	8.6	6.8	-1.8	-2.1
Romania	6.8	6.8	5.9	4.9	5.7	4.7	3.9	-0.8	-1.0
Slovakia	13.2	11.5	9.7	8.1	9.5	8.0	6.4	-1.6	-1.5
Slovenia	9.7	9.0	8.0	6.6	7.4	6.3	5.0	-1.3	-1.1
Sweden	7.9	7.4	6.9	6.7	6.3	6.2	6.1	-0.1	-0.1
Finland	8.7	9.4	8.8	8.6	7.6	7.7	6.5	-1.2	0.1

Table 12: Unemployment rate among men

	Annual Data (%)				Q3			Change (%)	
	2014	2015	2016	2017	2016	2017	2018	2018/17	2017/16
Austria	5.9	6.1	6.5	5.9	6.4	5.8	4.7	-1.1	-0.6
Belgium	9.0	9.1	8.1	7.1	7.9	7.5	6.3	-1.2	-0.4
Bulgaria	12.3	9.8	8.1	6.4	7.4	6.1	5.4	-0.7	-1.3
France	10.5	10.8	10.3	9.5	9.4	9.2	8.8	-0.4	-0.2
Germany	5.3	5.0	4.5	4.1	4.3	3.9	3.7	-0.2	-0.4
Denmark	6.4	5.9	5.8	5.6	5.6	5.6	:	:	0.0
Czech Republic	5.1	4.2	3.4	2.3	3.3	2.2	1.9	-0.3	-1.1
EU	10.1	9.3	8.4	7.4	8.0	7.1	6.3	-0.8	-0.9
Greece	23.7	21.8	19.9	17.8	18.9	16.5	14.3	-2.2	-2.4
Estonia	7.9	6.2	7.4	6.2	7.5	5.8	:	:	-1.7
Euro area	11.5	10.7	9.7	8.7	9.2	8.3	7.4	-0.9	-0.9
United Kingdom	6.4	5.5	5.0	4.5	5.1	4.4	:	:	-0.7
Ireland	12.7	10.8	9.1	7.1	9.1	7.1	5.9	-1.2	-2.0
Spain	23.6	20.8	18.1	15.7	17.4	14.8	13.1	-1.7	-2.6
Italy	11.9	11.3	10.9	10.3	10.2	9.6	:	:	-0.6
Croatia	16.6	15.6	12.7	10.4	10.8	8.8	6.8	-2.0	-2.0
Cyprus	17.1	15.1	12.7	10.9	12.5	9.5	7.2	-2.3	-3.0
Latvia	11.8	11.1	10.9	9.8	11.2	9.1	8.0	-1.1	-2.1
Lithuania	12.2	10.1	9.1	8.6	8.5	7.7	6.2	-1.5	-0.8
Luxembourg	5.8	5.9	6.1	5.6	6.0	5.3	4.9	-0.4	-0.7
Malta	6.1	5.5	4.4	4.5	4.1	3.9	3.8	-0.1	-0.2
Netherlands	7.2	6.5	5.6	4.5	5.2	4.2	3.6	-0.6	-1.0
Hungary	7.6	6.6	5.1	3.8	4.9	3.6	3.4	-0.2	-1.3
Poland	8.5	7.3	6.1	4.9	5.7	4.6	4.0	-0.6	-1.1
Portugal	13.8	12.4	11.1	8.6	10.5	7.9	6.3	-1.6	-2.6
Romania	7.3	7.5	6.6	5.6	6.3	5.3	4.3	-1.0	-1.0
Slovakia	12.8	10.3	8.8	7.9	8.7	7.8	6.0	-1.8	-0.9
Slovenia	9.0	8.1	7.5	5.8	6.7	5.1	4.3	-0.8	-1.6
Sweden	8.2	7.5	7.3	6.9	6.5	6.3	5.9	-0.4	-0.2
Finland	9.3	9.9	9.0	8.9	7.4	7.4	6.2	-1.2	0.0

Table 13: Unemployment rate among women

	Annual Data (%)				Q3			Change (%)	
	2014	2015	2016	2017	2016	2017	2018	2018/17	2017/16
Austria	5.4	5.3	5.6	5.0	5.8	5.0	5.2	0.2	-0.8
Belgium	7.9	7.8	7.6	7.1	7.9	6.9	5.4	-1.5	-1.0
Bulgaria	10.4	8.4	7.0	6.0	6.5	5.5	4.6	-0.9	-1.0
France	10.0	9.9	9.9	9.3	9.9	9.3	8.8	-0.5	-0.6
Germany	4.6	4.2	3.8	3.3	3.7	3.3	2.9	-0.4	-0.4
Denmark	6.8	6.4	6.6	5.9	7.1	6.2	:	:	-0.9
Czech Republic	7.4	6.1	4.7	3.6	4.9	3.5	2.9	-0.6	-1.4
EU	10.3	9.5	8.8	7.9	8.5	7.7	6.8	-0.9	-0.8
Greece	30.2	28.9	28.1	26.1	27.2	25.0	23.3	-1.7	-2.2
Estonia	6.8	6.1	6.1	5.3	7.5	4.5	:	:	-3.0
Euro area	11.8	11.0	10.4	9.5	10.1	9.1	8.1	-1.0	-1.0
United Kingdom	5.8	5.1	4.7	4.2	4.8	4.4	:	:	-0.4
Ireland	10.9	8.9	7.6	6.3	7.9	6.7	6.1	-0.6	-1.2
Spain	25.4	23.6	21.4	19.0	20.7	18.2	16.2	-2.0	-2.5
Italy	13.8	12.7	12.8	12.4	12.0	11.8	:	:	-0.2
Croatia	18.0	16.7	14.2	12.0	12.6	10.3	8.0	-2.3	-2.3
Cyprus	15.1	14.8	13.4	11.3	13.4	10.5	8.7	-1.8	-2.9
Latvia	9.8	8.6	8.4	7.7	7.9	7.9	5.9	-2.0	0.0
Lithuania	9.2	8.2	6.7	5.7	6.5	5.6	5.6	0.0	-0.9
Luxembourg	6.4	7.1	6.5	5.6	6.4	5.5	5.5	0.0	-0.9
Malta	5.3	5.2	5.2	4.7	4.7	4.2	3.4	-0.8	-0.5
Netherlands	7.8	7.3	6.5	5.3	6.1	4.9	3.6	-1.3	-1.2
Hungary	7.9	7.0	5.1	4.6	5.0	4.6	4.4	-0.2	-0.4
Poland	9.6	7.7	6.2	4.9	6.2	4.9	3.7	-1.2	-1.3
Portugal	14.5	12.9	11.3	9.5	10.8	9.3	7.3	-2.0	-1.5
Romania	6.1	5.8	5.0	4.0	4.9	4.0	3.3	-0.7	-0.9
Slovakia	13.6	12.9	10.8	8.4	10.6	8.2	6.8	-1.4	-2.4
Slovenia	10.6	10.1	8.6	7.5	8.2	7.7	5.9	-1.8	-0.5
Sweden	7.7	7.3	6.5	6.4	6.0	6.1	6.3	0.2	0.1
Finland	8.0	8.8	8.6	8.4	7.7	7.9	6.9	-1.0	0.2

Table 14: Long-term unemployment rate (**)

	Annual Data (%)				Q3			Change (%)	
	2014	2015	2016	2017	2016	2017	2018	2018/17	2017/16
Austria	33.7	30.5	33.7	35.2	31.7	34.0	26.8	-7.2	2.3
Belgium	52.8	52.9	52.8	51.3	51.7	44.0	45.0	1.0	-7.7
Bulgaria	59.6	61.9	59.6	55.9	61.9	54.8	61.8	7.0	-7.1
France	47.2	45.4	47.2	46.7	46.6	46.6	41.4	-5.2	0.0
Germany	42.7	45.3	42.6	43.6	41.5	41.3	41.1	-0.2	-0.2
Denmark	25.5	29.8	25.5	25.7	19.4	20.2	19.0	-1.2	0.8
Czech Republic	42.8	48.2	42.8	35.7	39.3	32.9	29.1	-3.8	-6.4
EU	48.6	50.2	48.6	47.0	46.6	45.1	43.1	-2.0	-1.5
Greece	72.4	73.6	72.4	73.2	73.7	75.6	71.5	-4.1	1.9
Estonia	32.6	40.0	32.6	35.3	32.7	38.3	20.9	-17.4	5.6
Euro area	51.5	52.8	51.5	50.4	50.4	48.9	46.7	-2.2	-1.5
United Kingdom	30.3	34.0	30.3	28.9	25.8	26.3	26.1	-0.2	0.5
Ireland	57.3	58.1	56.0	49.9	49.8	40.9	35.8	-5.1	-8.9
Spain	49.2	52.5	49.2	45.5	48.1	43.5	41.8	-1.7	-4.6
Italy	59.1	59.7	59.1	59.7	58.1	59.3	60.7	1.4	1.2
Croatia	53.2	66.2	53.2	42.5	49.7	43.0	42.2	-0.8	-6.7
Cyprus	45.3	46.7	45.6	41.6	45.3	43.6	31.9	-11.7	-1.7
Latvia	41.8	46.2	41.8	38.0	41.3	39.4	43.7	4.3	-1.9
Lithuania	38.8	43.3	38.8	38.3	37.3	37.9	33.3	-4.6	0.6
Luxembourg	37.0	30.3	37.0	40.0	36.7	36.4	26.9	-9.5	-0.3
Malta	45.3	48.2	45.2	47.4	39.9	43.6	33.6	-10.0	3.7
Netherlands	47.4	48.0	47.4	45.7	41.6	39.1	35.7	-3.4	-2.5
Hungary	47.7	46.8	47.7	41.3	45.8	37.8	37.1	-0.7	-8.0
Poland	35.9	40.1	35.9	31.9	33.7	32.7	26.0	-6.7	-1.0
Portugal	56.9	59.1	56.9	51.4	56.7	48.8	42.2	-6.6	-7.9
Romania	51.7	45.1	51.7	42.7	48.7	41.0	45.6	4.6	-7.7
Slovakia	61.4	66.9	61.4	63.4	59.0	61.7	61.5	-0.2	2.7
Slovenia	53.9	53.0	53.9	48.4	52.4	47.4	42.4	-5.0	-5.0
Sweden	22.4	24.1	22.4	22.8	20.1	20.2	21.3	1.1	0.1
Finland	29.4	27.5	29.4	27.4	28.2	27.5	21.2	-6.3	-0.7

Table 15: Unemployment rate of persons aged 15-24

	Annual Data (%)				Q3			Change (%)	
	2014	2015	2016	2017	2016	2017	2018	2018/17	2017/16
Austria	10.3	10.6	11.2	9.8	12.2	10.5	9.6	-0.9	-1.7
Belgium	23.2	22.1	20.1	19.3	21.8	19.1	16.3	-2.8	-2.7
Bulgaria	23.8	21.6	17.3	12.9	18.8	13.9	13.4	-0.5	-4.9
France	24.2	24.7	24.6	22.3	25.2	22.2	21.5	-0.7	-3.0
Germany	7.7	7.2	7.1	6.8	7.5	7.0	6.6	-0.4	-0.5
Denmark	12.6	10.8	12.0	11.1	13.3	12.9	11.0	-1.9	-0.4
Czech Republic	15.9	12.6	10.5	8.0	11.4	8.7	7.6	-1.1	-2.7
EU	22.2	20.4	18.7	16.9	18.5	16.6	15.2	-1.4	-1.9
Greece	52.4	49.	47.4	43.6	44.2	40.1	36.3	-3.8	-4.1
Estonia	15.0	13.1	13.5	14.1	12.7	10.9	16.4	5.5	-1.8
Euro area	23.7	22.4	20.9	18.8	20.4	18.3	16.7	-1.6	-2.1
United Kingdom	16.9	14.6	13.0	12.1	14.0	13.0	12.0	-1.0	-1.0
Ireland	23.9	20.9	16.8	14.4	17.2	16.1	14.9	-1.2	-1.1
Spain	53.2	48.3	44.5	38.7	41.9	36.0	33.0	-3.0	-5.9
Italy	42.7	40.3	37.8	34.8	34.5	32.3	29.2	-3.1	-2.2
Croatia	45.5	43.0	31.3	27.5	27.8	22.8	20.9	-1.9	-5.0
Cyprus	36.0	32.8	29.1	24.7	30.1	24.0	17.0	-7.0	-6.1
Latvia	19.6	16.3	17.3	17.0	19.3	17.6	11.0	-6.6	-1.7
Lithuania	19.3	16.3	14.5	13.3	13.1	12.0	9.9	-2.1	-1.1
Luxembourg	22.3	17.3	18.7	15.4	23.1	13.7	15.8	2.1	-9.4
Malta	11.7	11.8	11.0	10.5	10.7	10.1	10.6	0.5	-0.6
Netherlands	12.7	11.3	10.8	8.9	10.3	8.4	7.3	-1.1	-1.9
Hungary	20.4	17.3	13.0	10.7	12.7	11.3	10.7	-0.6	-1.4
Poland	23.9	20.8	17.6	14.8	18.0	14.7	12.7	-2.0	-3.3
Portugal	34.7	32.0	27.9	23.9	26.1	24.2	20.0	-4.2	-1.9
Romania	24.0	21.7	20.6	18.5	20.5	16.9	16.4	-0.5	-3.6
Slovakia	29.7	26.5	22.2	18.9	22.7	19.7	15.3	-4.4	-3.0
Slovenia	20.2	16.3	15.3	11.3	13.7	10.8	9.1	-1.7	-2.9
Sweden	22.9	20.4	18.8	17.9	14.7	14.8	14.2	-0.6	0.1
Finland	20.5	22.4	19.9	19.8	14.2	14.1	12.1	-2.0	-0.1

(*) For the exact definition of the share of population at risk of poverty or social exclusion, refer to:

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

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