

# The Greek Economy

Quarterly Bulletin

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FOUNDATION FOR ECONOMIC & INDUSTRIAL RESEARCH

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## Contents

<b>1. BRIEF OVERVIEW</b>	<b>11</b>
<b>2. ECONOMIC ENVIRONMENT</b>	<b>23</b>
<b>2.1 Trends and Prospects of the World Economy</b>	<b>23</b>
A. The Global Environment	23
B. The economies of the EU and the Euro area	29
<b>2.2 The economic environment in Greece</b>	<b>39</b>
A. Economic climate	39
B. Fiscal developments and outlook	45
C. Financial developments	52
<b>3. PERFORMANCE AND OUTLOOK</b>	<b>61</b>
<b>3.1 Macroeconomic Developments</b>	<b>61</b>
<b>3.2 Developments and prospects in key areas of the economy</b>	<b>83</b>
<b>3.3 Export performance of the Greek economy</b>	<b>92</b>
<b>3.4 Employment – Unemployment</b>	<b>99</b>
<b>3.5 Consumer and Producer Prices</b>	<b>109</b>
<b>3.6 Balance of Payments</b>	<b>117</b>
<b>4. DIGITAL PAYMENTS AFTER THE CAPITAL CONTROLS: SUPPORT MEASURES AND TAX REVENUES</b>	<b>123</b>
<b>APPENDIX</b>	<b>129</b>



## Foreword

This is the third IOBE bulletin on the Greek economy for 2018. Its publication takes place in the aftermath of a major event for the Greek economy and society - the completion of the third Economic Adjustment Programme in August. Following this event, the smooth transition to the post-programme environment constitutes the major challenge, in terms of maintaining the achieved fiscal consolidation, continuation of the reforms, and restructuring of the loan portfolios of the banks, in order to boost the credibility of the Greek state and domestic economy. As every IOBE quarterly bulletin, this report includes four chapters and an appendix with key structural indicators. The bulletin starts with an outline of the necessary first steps of the Greek economy immediately after the completion of the economic adjustment programme. 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 second quarter of 2018 and its outlook for the current half of the year and for 2019, based on the latest reports of the International Monetary Fund, the European Commission and ECB; ii) an outline of the economic climate in Greece in the third quarter of this year, based on data from the latest IOBE business and consumer surveys; iii) an assessment of the execution of the State Budget in the first eight months of 2018; iv) an outline of the developments in the domestic financial system between June and September 2018.

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

Chapter 4 presents the findings of a study on the impact of digital payments penetration after the imposition of capital controls in Greece.

The report is based on data that were available up to 22/10/2018.

IOBE's next quarterly bulletin on the Greek economy will be published in late January 2019.



# THE ECONOMY'S NEXT STEPS AFTER THE PROGRAMME

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An eight-year cycle, during which the Greek economy underwent three successive programmes of financial support and adjustment, ended in August. The features of the framework within which the economy will run in the post-programme period are clearly beginning to take shape. The policy decisions that will be taken will play a crucial role with regard to whether the Greek economy will enter a period of sustainable development over the medium term or the existing risks will intensify and lead to an extension of the crisis.

During the programmes, significant consolidation and adjustment of the Greek economy was achieved, which should not be underestimated. The public sector no longer produces deficits, as its finances remain in surplus overall. The external sector is balanced, which in part is due to the positive contribution of exports. This is the second consecutive year with a positive growth rate of the economy. Significant part of the competitiveness loss has been recovered, through a reduction of the unit labour cost. In addition, the risk of a disastrous exit from the common currency has subsided considerably and it no longer affects the Greek economy with the great intensity of previous years.

However, particular qualitative characteristics of the adjustment that took place raise concerns and make the coming period critical for the course that the economy will take in the medium term. The current mix of taxes and spending has features that raise obstacles to achieving high growth rates.

Significant consolidation and adjustment of the Greek economy

Budget surplus with a policy mix that is incompatible with strong growth over the medium term

Adjustment mainly through recession and much less through a structural transformation of the economy

Regarding the external balance, export growth should be much stronger in order to cover the inevitable increase in imports. At the level of competitiveness, there is a risk that an increase in labour remuneration will lead to regress, to the extent that there is no significant improvement in productivity and the business environment. The recorded pace of growth, although positive, falls short of the rate that would mark a convergence with the euro area. To a large extent, the concern arises from the fact that the adjustment was achieved mainly through recession and not through structural transformation of the economy.

It follows that while there is a basis for positive economic growth, this should not be perceived as automatic and in no way as assured. When and under what conditions the country will achieve meaningful access to the markets for the financing of its economy, which is currently hampered, is an issue of major significance. For the time being, the economy remains in an intermediate zone, where there is no longer protection from the programmes, yet market access has not been achieved. The existence of the so-called "safety cushion" should not cause complacency, for at least two reasons. Firstly, as the period of disorderly funding expands, the possibility of financing difficulties increases, especially if one considers the likelihood of international environment deterioration. Secondly, the overall financing of the Greek economy, including firms, banks and households, and not only the public sector, is an equally important issue.

To achieve this particularly critical goal of access to stable funding, there should be a credible growth framework. This in turn requires the consolidation of the credibility of economic policy and, in particular, that even after leaving the programmes there will be no relapse to irresponsible fiscal policies or setback in areas of structural reforms that are crucial for the competitiveness of the Greek economy. At the same time, a shift in economic policy is required, so as to render the Greek economy an attractive destination for international investment and human capital.

Market access and the financing of the whole economy, and not only the public sector, are critical

At the fiscal level, it is now clear that, while achieving significant surplus in principle enhances the credibility of economic policy, the fact that the surplus is not financed mainly through growth but, instead, reflects a mix that is non-compatible with robust growth in the medium term, hampers the conditions of external financing of the economy. Points of particular interest include the low level of public investment, the low property values due to distortive attributes of the corresponding taxes, and the excessive burden on labour from social security contributions that necessitates a broader reform of the pension system.

While it is imperative that the policy steps converge to support growth, public debate and political disputes have lately been dominated by only one issue - the possibility to postpone or suspend the pre-legislated cuts of part of the pensions that retirees received before the adoption of the latest relevant law. It is true that for many of them the planned reduction would slash pensions to painfully low levels. This will also cause a significant decrease to those who



have paid relatively more social security contributions during their working lives. Moreover, this would be a further reduction in pensions that have already been cut in previous years. After all, the ultimate aim of economic policy should be to improve the well-being of all citizens, workers and pensioners.

However, the argument that dominates the current debate seems to ignore critical aspects of the problem. Firstly, any economic policy measure now should not create the impression that it would move in fiscally irresponsible or anti-growth directions. If this happens, any postponement in the reduction of pensions will be very short-lived and the cuts will become inevitable very soon, while the postponement will have intermediate and negative wider effects on the economy. Secondly, the move towards creating two categories of pensioners, who have the same characteristics yet receive different amounts, will create significant practical problems, besides questions of moral nature. Thirdly, while the pension cuts over the past few years were particularly large and painful, a relatively larger burden of the crisis was shouldered by the young unemployed and employees. Their support, with a reduction of the contributions that they pay, special programmes for enhancing their entry prospects to the labour market, support for creating families and other means, must be a priority, both for reasons of social and intergenerational justice, and for the sake of strengthening the growth prospects. The solution ultimately should take into account all the different aspects of the problem. The aim should be to create conditions that would enable the gradual increase of all pensions, in conjunction with the rise of wages and economic growth.

The economic policy measures must not create the impression that they move in fiscally irresponsible or anti-growth directions

On the side of the financing of the economy, it is certainly of crucial importance to improve the functioning of the banks as fast as possible. The achieved rise in deposits, as the effects of the summer of 2015 gradually wane, and the measures tackling the non-performing loans, are positive developments, yet they do not move with the fast pace that could have been achieved if there was stronger growth momentum in the wider economy. Naturally, the banks also have to play a critical role in supporting this growth momentum. The importance of the issue highlights why there is no time to lose, nor is there room for complacency, in these first few months after the formal end of the last programme.

As the country enters a period of elections, which as experience shows tends to aggravate the economy by raising the uncertainty and postponing necessary fiscal and other measures, the particularly critical current conditions and the characteristics that render the growth fragile should not be overlooked. The sense of alertness should be even more pronounced, given that deterioration or even elements of crisis in the international and European environment in the near future cannot be ruled out.

Particularly critical current conditions, which should not be overlooked as the country enters a period of elections

In the international environment, the high debt build-up at all levels, the search for balance between emerging and mature markets together with growing trends of trade protectionism create a background that might launch

Risk for reduction of foreign demand and higher cost of financing

a reduction of foreign demand and increase of financing costs for economies with the characteristics of our own. Such a development could be triggered if the disagreements on fiscal policy between major Eurozone members intensify or if a deal with the United Kingdom with positive economic attributes falls through. Meanwhile, there is a delay in the measures of deepening and hardening of the Eurozone, and of the Banking Union in particular. In view of these risks, and given the high level of public debt, the insistence on reforming the structural characteristics of the Greek economy, which would enable a strong shift to growth, is indispensable.



## 1. BRIEF OVERVIEW

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### **Growth of the world economy in 2018 at a similar rate as in the previous year**

According to the data available so far for the second quarter of this year (IMF International Financial Statistics), the world economy grew at an average rate of 3.6% in the second quarter of 2018, at the same rate as in the preceding quarter, yet slightly faster in the corresponding quarter of 2017 (3.4%). In the developed economies, the GDP growth rate stood at 2.4% on average in the second quarter of 2018, compared with 2.5% in the preceding quarter and 2.3% in the same quarter of the previous year. The GDP of the OECD members and the 20 major world economies (G20) increased by 2.5% and 3.9% respectively in the second quarter of 2018, against 2.6% and 3.9% in the preceding quarter.

Among the major developed economies (G7), the growth rate accelerated further in the examined quarter only in the US and the United Kingdom, by 0.3 and 0.1 percentage points respectively, reaching 2.9% and 1.2%. In contrast, the biggest slowdown occurred in France, from 2.2% to 1.7%. Among the major Asian developing economies, the growth of the Chinese economy marginally declined, with the growth rate ranging between 6.7% and 6.9% for at least ten quarters. The growth of the Indian economy accelerated to 8.0%, from 7.5% in the previous quarter and 5.9% a year ago. In Latin America, Brazil grew by 1.0%, its lowest rate since the start of the recovery in the second half of last year.

The growth of the world economy this year is expected to be weaker than anticipated earlier, however it will be similar to that of last year. This development is supported by a series of factors, such as the «output gap» in many developed economies, the gradual increase in US interest rates, as well as the intense pressure on the price level and the value of the currencies of several emerging economies. Primarily the trade protectionist measures taken by major economies, and the possibility of a no deal between the European Union and the UK on Brexit, gradually weaken

the international trade momentum. The instability in major emerging markets, such as Argentina and Turkey, increases the perceived risk, as reflected in their bond yields, hampering investment confidence.

In the Euro area, the gradual tightening of the expansionary monetary policy in the current half will reflect on growth rate. Upon the end of the expansion of the quantitative easing programme (Q-E) of the ECB at the end of this year, the monetary policy will continue to have a stimulating effect, albeit weakened, by maintaining very low interest rates. In an environment of escalating restrictions on international trade, the positive contribution of net exports to GDP growth in Europe will gradually subside. The main sources of uncertainty in the short term and over the coming year in the Euro area are trade protectionism, political euro-scepticism, which has already affected policy implementation (e.g. in Italy), delay in the deepening of the Euro area institutions and high public debt and stock of non-performing loans.

As assessed since the start of this year, the US fiscal package has significantly boosted domestic demand, accelerating the pace of growth. However, the pro-cyclical fiscal policy is foreseen to push output above its potential level. The Fed continues its course of gradual interest rate increases, as the markets anticipate another increase by the end of this year. This strategy boosts the yields of US Treasury Bonds, becoming a pole of attraction for capital from the Eurozone and other economies. The protectionist trade policy measures, which hamper the supply of imported raw materials and exports, are expected gradually to run counter to these developments.

Regarding the developments in the major developing economies, the government's reaction to US trade policy, the rapidly increasing credit expansion and the rising fiscal deficit remain significant challenges for the Chinese economy. The recovery in Russia is aided by the rise of international oil prices, which exacerbates its dependence on them. Income inequality remains a major economic policy challenge in the country.

Under these developments and prospects of the world economy, IOBE projects the growth of global GDP in 2018 to be in the region of 4.0%.

### **Growth slowdown quarter on quarter in the second quarter of 2018, increase of GDP by 2.1% overall in the first half**

The Greek economy grew by 1.8% during the second quarter, 0.3 percentage points faster than in the corresponding quarter of 2017. However, the GDP growth rate was lower in comparison with the previous quarter, for the first time since the beginning of the recovery of the Greek economy, by 0.7 percentage points. In the first half of 2018, GDP was 2.1% higher year on year.

Regarding the trends in individual components of GDP in the first half of this year, domestic consumption increased marginally, by 0.3%, at a similar rate as a year ago (0.4%). Its increase came from growth in the second quarter by 0.6%, as it remained unchanged year-on-year in the first quarter. Among the components of total consumption, the increase was driven by private consumption, with a rise by 0.4%, albeit smaller than last year (0.8%). Public consumption was lower by 0.9% compared to the first half of last year, when the fall was notably stronger (2.0%).

Investment expenditure declined in the first half by 5.0% compared with the corresponding period of 2017, when it had increased strongly, by 13.3%. The decline came exclusively from lower gross

fixed capital formation by 7.6%, while depreciation expenses increased by 8.3%. Investment in fixed capital dropped this year in both quarters, at a weakening rate. Almost all the decline of fixed capital formation came from extensive fall in Transport - Military Equipment, by 53.5%. This decline is mainly the result of the «base effect» from the strong increase in the corresponding period of last year, by 78.4% or €1.37 billion. In turn, this change was due to a similar trend in investment in ships in the same period of 2017 (81.8% or €1.06 billion increase of imports). The much smaller formation of fixed capital in this kind of means of transportation (-73.3% fall in the imports of ships) was the key driver of the drop in the category of Transport - Military Equipment and thus in overall fixed capital investment. This effect is expected to occur, with notably lower intensity, in the final quarter of this year as well.

In the external sector of the economy, the strong export expansion during the first quarter carried over to the next quarter. As a result, exports increased year on year by 8.5% in the first half of this year. Their growth was stronger than last year, when it reached 7.4%. Both key export components contributed to this increase, with the positive impact from the exports of goods slightly stronger than the impact from the exports of services (8.9% or €1.4 billion, against 8.0% or €1.0 billion). 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 10.2%, while the exports of goods had increased by 5.9%.

On the other side of the external sector, imports, the trend changed between the first two quarters from negative to positive. This is related to the change in the trend of imports of goods, as the imports of services have increased steadily and strongly since the beginning of the year. Overall in the first half of 2018, imports increased by 0.6% year on year, slowing down strongly in comparison with the corresponding period of last year (8.0%). The imports of services increased for the third consecutive year, about as strongly as a year earlier (14.0% against 13.4%). The trend change of the imports of goods in the second quarter did not prevent their decline overall in the first half of 2018 by 2.3%. The much stronger increase in exports resulted in a significant restriction of the trade balance deficit, by 63.7%, to €1.3 billion or 1.3% of GDP.

### **Growth of the Greek economy in 2018 by about 2.0%, a slight acceleration next year to about 2.4%**

The recent conclusion of the third adjustment programme, without a follow-up programme or loan agreement, is one of the major political and economic milestones achieved in recent years. It marks primarily the achievement of certain quantitative fiscal objectives (e.g. high primary surpluses), which are a significant indication of the sustainability of public finances in Greece, although, for the examination of the stability of a fiscal consolidation process, importance should also be given to qualitative – structural characteristics. This also entails the adoption of reforms and structural changes in various policy areas, such as the structure and the functioning of the State, and its role in production activity, the social security system, the labour market, and the operation and supervision of certain product and services markets. The implementation and the outcome of these changes usually depend not only on legislation, but also on the conditions and the possibilities for making use of them in every field of activity of the State, the businesses and the households.

The smooth transition from the framework of programmes, with reviews of their implementation, policy commitments, prior actions for their conclusion and the link of the reviews with funding from the official sector, necessary for debt servicing, to an environment with milder supervision of the agreed structural changes, without direct dependence of public sector funding on this, given that there is a cash buffer, is probably the issue with the biggest stakes in the current period. The steady commitment to the fiscal targets set for the coming years and the unswerving implementation of the reforms scheduled for this period are the main challenges for maintaining and enhancing the credibility of the Greek state and the Greek economy in general.

Significant changes are taking place or are expected to occur in the global environment. Most of them are likely to be detrimental. The major current international economic developments include the intensification of the US protectionist trade policy and the corresponding countermeasures, the strengthening of the Euro-scepticism, as reflected on the political developments in Italy and in the United Kingdom, and the conclusion of the QE programme at the end of 2018 by the ECB, after almost four years.

In greater detail, after the conclusion of the third programme, the smooth transition to the post-programme period, with no deviations from the pursuit of the medium-term fiscal targets and the implementation of planned reforms, is a major economic policy issue. Potential revisions that do not affect the above and use any "fiscal space" are legitimate, for example in the direction of reducing the high direct and indirect taxation, and social security contributions, which provided almost 3/5 of the fiscal consolidation between 2010 and 2017 (9.4 of 16.1 percentage points of GDP). 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.

Apart from the adjustment of pensions and the compensating interventions on the expenditure side, other fiscal measures for 2019 are not envisaged in the draft state budget for the new year, on either the revenue or the expenditure side. The alternative measures for the coming year, apart from the pension cuts, include tax deductions of €491 million and additional expenditure of €275 million. Furthermore, no additional measures were taken for the current year in the final review of the third programme. It is possible that a "social dividend" will be distributed at the end of 2018, albeit lower than in 2016 and 2017, as in the draft budget the primary fiscal surplus for 2018 is projected to exceed the target by a lower margin. Consequently, there will be no additional pressures on household disposable income in the second half of this year, which is quite likely to carry over to 2019, especially under the scenario that the pension cuts will not be implemented, fully or in part. In fact, if the alternative measures are implemented in full, there would probably be a boost of income.

Other recent or expected significant developments affecting household incomes: a) return of retroactive cuts to the armed forces personnel (with estimated cost of around €800 million for this year), b) decision of the labour dispute intermediation service OMED for raising the minimum wage and recognition of allowances in Food Services - Tourism c) decision of the Ministry of Labour for extension of the collective bargaining agreements in September in four sectors, a practice that will probably be implemented in other sectors as well, and d) adjustment of the minimum wage, as the relevant process is already underway and is expected to be completed in early 2019. The first three developments are expected to strengthen the income of people that are already employed, while the size and impact of the last measure cannot be assessed yet.

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 its recovery, by attracting investment. The ambiguity regarding the 2019 fiscal measures is considered to be one of the causes that have inhibited the retreat of the government bond yields since August 2018. Another development that has hurt the appeal of Greek securities, not only of the public, but also of the private sector, and mainly of the domestic financial market, is the Folli Follie Group case. The trust in the banking system is the most important factor for the availability of funds and the ease of access to capital. The last stress test, from which no need arose for recapitalising the banks, is considered to have contributed to the easing of the concern about the adequacy of their capital. Besides, after the stress test, the credit rating of the four largest banking institutions was upgraded. These developments led to the gradual acceleration of the return of deposits. According to the latest data, since May, the first month after the announcement of the results of the stress test, until August, the deposits that come from the private sector (non-financial corporations and households) increased by 4.0% or €4.9 billion, reaching €128.5 billion. After this change, the deposits reached their highest level since February 2015.

The recent lifting of all restrictions on capital transfers within Greece and the further relaxation of the restrictions on transfers outside the country are expected to influence the inflow of deposits in the rest of 2018 and in early 2019. However, the inflow of deposits observed so far is not sufficient to change significantly the credit policy of the banks. In fact, while at the end of 2017 and in the first two months of 2018, credit to non-financial corporations increased slightly, since March credit returned to contraction, which strengthened in April and May (-2.0%), while at the beginning of August it was around -1.0%. Concerning credit to households, it remained on a downtrend, with a marginal slowdown of the contraction from the start of the year until August, from 2.4% to 2.0%. According to the banking institutions, the downtrend in the credit to firms is due to low demand. On the business side, many corporations keep facing problems because of past bank loans, which keeps them in the category of legal entities that have defaulted on their obligations in the past.

Further reduction of the non-performing loans and easier access of the banks to the global financial markets are necessary conditions for increasing the supply of credit, in addition to the continuation and expansion of the return of deposits. The electronic platform for out-of-court settlement of debts and the electronic auctions are expected to contribute more to the former objective. The non-performing exposures (NPEs) remained on a downtrend until June, at a rate of 4.1% in the second quarter, faster than in the second quarter (2.1%). After their new retreat, the NPEs reached €88.6 billion or 47.6% of the total exposures by the end of June, exceeding the relevant reduction target. That said, their management affects the assets, the net capital and the profitability of the banks, which puts great pressure on the bank stock prices. In order to reduce these pressures, greater attention should be paid to the quality characteristics of the NPE reduction, as collections and liquidations should strengthen, while the write-offs and sell-offs at low prices should be reduced. Consequently, credit is expected to continue to contract in the short-term, at least until the end of the current and the start of the following year.

As noted repeatedly in previous reports, the scarcity of bank credit together with the easing of the caution on the prospects of the Greek economy, especially after the conclusion of the third adjustment programme, will lead many enterprises, primarily those listed on the stock markets, to utilise financing tools available through the capital markets. That said, the ongoing case of Folli Follie Group, but also the latest financial results of the banking institutions, have dampened the



trust of investors in the Greek capital market and in Greek enterprises. Therefore, in order for the trust in the domestic capital markets and its institutions to recover, it is vital that this matter is investigated and resolved as soon as possible. Until then, the raising of funds through the tools available in these markets is expected to be limited. That said, the enterprises that have raised funds in this way implement their investments plans without delays.

The difficulties in finding financing are less pronounced for many of the export companies, as the recent significant increase in export activity boosted their liquidity and the availability of capital. These effects will likely continue in the current year, as according to the recent forecasts on the world economy, the growth rate in the Euro area, the major destination of Greek exports, will be slightly lower than last year. However, it is now possible that international trade conditions for firms not only in Greece but also in the EU and beyond will not be as beneficial in 2019 as in previous years. This is mainly due to the adoption of protectionist measures in the US and counter-measures by its major trading partners. The consequences of those policies cannot be assessed yet. A first approach comes from the recent revision of the IMF forecasts on the growth rate of global trade for 2019, which also incorporates the negative effects of a possible failure of the Brexit negotiations, by 0.5 p.p., to 4.0%. In Greece, the impact of these measures is expected to be mostly indirect, through effects on the exports of EU and third countries that in turn will diminish the demand of these countries for Greek products.

The demand for Greek exports from the Euro area is also expected to decline in 2019, due to the end of the ECB quantitative easing (QE) programme at the end of 2018. As the Greek sovereign bonds were not included in the QE, the Greek economy benefited indirectly from the programme, thanks to the stimulus on the other Eurozone countries, which constitute the major destination of Greek exports. As regards developments in other indicators that affect export activity, the expected stability of the euro/dollar exchange rate in the current half of the year, at levels similar or slightly lower than those in the same period of last year, will not restrain the competitiveness of products and services in the Euro area. Having said that, at these levels the exchange rate no longer buffers the effects of the much higher year on year oil price, which has kept rising, with some interruptions.

As to the 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 than in previous years (e.g. regional airports, the Asteras Vouliagmenis investment, the first phase of the Athens International Airport expansion, new TRAINOSE trains). Regarding the progress of the implementation of the privatisation programme in the current year, so far six major tenders have been completed, totalling more than €2.18 billion. Despite the fact that the number of tenders scheduled for completion this year exceeds notably the number of completed tenders, if more privatisations that are in their second phase, such as Hellenic Petroleum, Egnatia Odos, and small ports – marinas, are completed, the proceeds target envisaged in last year's budget (€2.74 billion) might be accomplished. Investment in the privatisations completed this year is expected to take place from late 2019 – early 2020, as it takes time to approve and license the relevant investment plans.

In contrast to the stronger investment boost from privatisation this year, the contribution of the Public Investment Programme (PIP) will most probably be sluggish this year as well. In the first eight months of 2018, the PIP grants did not exceed €1.48 billion, €105 million less than in the corresponding period of last year, yet spending last year overall was the lowest since at least the year 2000. One of the reasons for the under-execution of PIP came from the fact that the revenues



were lower than expected for this period by €166 million or 10.3%, yet the shortage of grants against the target for this period is much larger at €923 million. Given the significant under-execution of the PIP during two thirds of 2018, the grant target set for the year overall is not expected to be met for one more year. Having said that, the few grants that will be awarded this year will constitute a low basis of comparison for the implementation of PIP in 2019. In the draft of the State Budget for 2019, the forecast for its expenditure in the basic scenario is €550 million higher than the corresponding expenditure for 2018, at €7.3 billion, while in the alternative fiscal scenario it is higher by €250 million. Together with the possibility of more accelerated implementation of the PIP next year given this year's delays, the PIP is quite likely to have a stronger contribution to investment next year.

Investment recovery is expected this year, after many years of strong fall, in Construction as well. It comes 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, has declined steadily since the beginning of 2018.

Considering the trends in economic indicators and the anticipated developments (mainly those linked to the completion of the third economic adjustment programme, the developments in the banking sector, and the likely suspension of the pre-legislated for next year pensions cuts) for the forecasting of the GDP components and other macroeconomic indicators, the recovery of household consumption from the second quarter is anticipated to carry over to the current half of the year and perhaps strengthen. As predicted since the start of this year, it will be mainly boosted by further decline of unemployment, due to the expansion of employment and income in mainly in export branches of services, the public sector and in construction activities. A positive impact is also expected to come from stronger household expectations after the conclusion of the adjustment programme, but also because of the quite likely suspension of the pre-legislated for next year pension cuts. The fiscal measures adopted from the beginning of the current year will prevent stronger growth of private consumption. As a result of the above effects and considering the recent GDP revision for 2017, private consumption is anticipated to increase slightly in 2018 overall, by about 0.6%.

The momentum of household consumption in 2019 will largely depend on the likely suspension, in full or in part, of the pre-legislated pension cuts. The positive effects from the growth in international trade on employment and income domestically will weaken, Tourism will continue to create new jobs, while employment is also expected to rise in the public sector and in Construction. The outcome of the procedure for readjustment of the minimum wage will be a crucial factor for the trend in disposable income and employment. The first forecast for private consumption in 2019 is for growth of about 1.4%.

Regarding public consumption, as the fiscal consolidation in 2018 was focused mainly on higher revenue from direct and indirect taxes, and social security contributions, rather than spending cuts, public consumption was expected to slightly increase. However, it declined in the first half, for the third consecutive year in the corresponding period. The available so far data on budgetary implementation do not show that there are revenue shortages against the targets that could substantiate cuts in public expenditure, including public consumption. Taking into consideration the current trends in public consumption and the fact that its level has been similar or higher in the last two quarters, compared with the two previous ones in the same year, it is now considered

likely that public consumption will continue to weaken, a trend that is strengthened by the recent upward revision of the estimate for last year, by about 1.0% overall in 2018.

The fiscal interventions set in the MTF5 2019-2022 focused primarily on expenditure, exclusively from pension cuts, rather than from other public consumption spending. None of the compensatory measures involve public consumption. The alternative package of fiscal measures of the draft state budget includes the recruitment of 7.500 employees, which if implemented will expand public consumption. In any case, given that the regular staff of the public sector has remained stable since September 2015, there is room for growth, based on the relevant rules of withdrawals-recruitment. The increase of employment in the public sector is expected to have a major role in setting the trend of public expenditure in 2019, which is anticipated to expand by 1.5%.

Regarding the investment prospects, the easing of the caution about the Greek economy and the improvement of the investment climate from the conclusion of the third programme and the outcome of the bank stress test, were moderated by the recent tumult in the stock market. The current circumstances are not considered favourable for raising capital by issuing securities on the financial markets, a funding tactic successfully followed by a number of large companies last year. The return of private sector deposits is not yet sufficient for a change in the trend of credit supply. The effort to limit NPEs will continue to have a negative effect on this development. If the return of deposits continues and strengthens, while the NPEs decline rapidly, it is likely that a mild expansion of credit to non-financial corporations will start next year.

The further boost of export demand in the current year will boost investment activity in export-oriented branches of Manufacturing, Tourism, and Transport. However, the protectionist trade policies and the conclusion of the ECB quantitative easing programme will weaken this stimulus in the coming year. Investment recovery is expected this year, after prolonged decline, in Construction, from residential construction activity and the implementation of investment plans of concluded privatisation – concession deals. The PIP grants are expected to stand at the very low level recorded in the previous year. However, the privatisations and concessions completed in previous years give a greater impetus to investment activity this year, which probably will strengthen in the coming years, given the fairly good implementation of the privatisation programme in 2018. Based on the expected trends and perspectives in factors affecting investment and considering its small increase in the first half of the year, investment is projected to increase overall in 2018 by around 4.0%, while in 2019 investment activity will likely strengthen, with a double-digit growth rate (12%-14%).

In the external sector of the Greek economy, the continuous strong growth in the EU and the US will continue to contribute to the strong increase of exports in the second half of 2018. It is now considered possible that the impact of the US protectionist trade policy measures and countermeasures on the exports of Greece will become more pronounced in 2019. As the value of Greek exports of goods for which import restrictions were imposed takes up a small share of the total value of Greek exports of goods, the impact is expected to be mostly indirect, from the impact at the EU level. The stronger growth of international tourist flows in early summer, and of the corresponding receipts, signify a further strengthening of the contribution of tourism to domestic economic activity this year. The lower euro-dollar exchange rate, compared to the first four months of 2018, is not boosting competitiveness, as it is hovering at about the same level as a year before. Considering the developments in international trade and in related indicators, exports are

anticipated to increase by about 8.0% on average in the current year and to continue to expand in the coming year, albeit at a weaker rate, by about 5.0 – 5.5%.

Following the change in the trend in imports from negative in the first quarter of the year to positive in the second, their growth is expected to strengthen overall in the current half of the year, mainly due to strong fixed capital formation rather than domestic consumption expenditure. However, the overall increase in investment and thus their positive impact on imports will be notably weaker than initially anticipated, limiting the growth of imports to 3.5%. The stronger domestic demand in the coming year, due to significant increase in both investment and consumption, will affect imports, which are expected to be about 6 – 6.5% higher than this year.

Considering the anticipated and likely developments and trends in the current and the coming year in the factors that determine the components of GDP, our forecast is that output will increase by about 2.0% in 2018 and by about 2.4% in 2019.

### **State budget: met targets until August mainly by lower PIP and secondarily by higher ordinary revenue**

According to data on the implementation of the State budget between January and August this year, the overall balance was in deficit this year at €1.22 billion, about as much as last year (-€1.27 billion), yet €2.16 billion lower than the target (-€3.38 billion). The primary surplus was lower year on year by €383 million, reaching €3.16 billion, yet it was much higher than the target, by €1.24 billion. The year-on-year decline of the primary surplus came solely from higher primary expenditure, by €970 million. The net revenue of the Ordinary Budget was higher by €192 million year on year, despite far fewer receipts from privatisations. The revenue of the Public Investment Programme was higher by €245 million, while its expenditure was almost €100 million lower than a year ago.

In contrast to the year-on-year comparisons, both targets for the first five months were over-achieved, which came mainly from higher revenue of the State budget, by €2.82 billion. The State budget expenditure was lower than anticipated by €1.22 billion, primarily from lower than the target PIP expenditure (-€923 million), while the expenditure of the Ordinary Budget was lower than the target by €304 million. On the revenue side, the net proceeds of the Ordinary Budget exceeded the target by €1.1 billion, yet the revenue of the Public Investment Programme was €166 million short of the target.

### **Draft State budget 2019: Primary surplus slightly larger than in MTFS 2019 – 2022 in the baseline scenario; marginally greater target in the alternative scenario**

According to the Draft State Budget for 2019, General Government primary surplus of €7.88 billion or 4.14% of GDP, following the methodology of the enhanced surveillance framework that succeeded that of the loan contract with the ESM, is projected in the baseline scenario. This estimate is higher compared to both the corresponding prediction in MTFS 2019 – 2022 (€7.52 billion or 3.96% of GDP) and the target of 3.5% for next year. The expected slightly larger primary surplus is mainly due to anticipated lower deficit of the State Budget, by €304 million, to €3.8 billion,

and higher surplus of the Social Security Funds by €294 million, to €4.1 billion. In turn, the reduction in the deficit in the State Budget will come mainly from higher than initially anticipated revenue from taxes on goods and services by €710 million, through a similar increase of VAT receipts.

For the coming year, the Draft State Budget includes a scenario with alternative to the MTFS 2019 – 2022 fiscal interventions, with an estimated total of €1.1 billion. These interventions include a reduction of the property tax ENFIA by a weighted average of 10%, reduction of the social security contributions of the self-employed, redefinition of the rental subsidy measure, and subsidy of social security contributions for 15 – 24 years old employees. Under this scenario, lower primary surplus in accordance with the methodology of enhanced surveillance is projected, at €6.77 billion or 3.56% of GDP, marginally higher than the 3.5% target.

### **Decline of unemployment to about 19.5% this year, weaker reduction in 2019**

The start of the tourist season in the second quarter, as well as the significant increase of employment in Education, which is difficult to explain given the period it took place, were the main drivers of the decline of the unemployment. In particular, the unemployment rate dropped to 19.0%, below 20% for the first time since the third quarter of 2011, 2.1 percentage points lower than in the corresponding quarter of 2017. In total during the first half, unemployment was marginally higher than 20% (20.1%), also 2.1 p.p. lower than a year earlier. The decline in unemployment came mainly from a rise in employment by 1.8% or 66,800 (59.6% of the reduction of unemployment) and secondarily from a decline of the labour force (by about 45,300). The strongest year-on-year employment growth in the first half of 2018 was recorded in Health Services – Social Protection, by 21,800 (9.7%). Part of this increase stemmed from the hiring of 4,200 people in public hospitals through two special employment programmes, the first of which was extended in January 2018. Agriculture – Forestry – Fishing came next, with 15,100 more jobs (3.3%). Sectors with significant contribution to employment last year, such as Wholesale-Retail Trade, Tourism and Manufacturing had a much milder increase this year.

The anticipated further boost of export demand, perhaps weaker for products and stronger for services than in the first half of this year, will continue to maintain and create new jobs in the current year in export-oriented sectors and mainly in Tourism and Transport. However, the protectionist trade policies and the conclusion of the ECB QE programme will weaken the rise of exports, and thus their contribution to the creation of new jobs, in the following year. The stronger expectations of the households after the conclusion of the programme and the further relaxation of the capital controls will probably affect their consumption demand, boosting employment in related sectors (e.g. Wholesale-Retail Trade, Food Services). Consumption demand next year is not expected to suffer pressure from new fiscal measures, while if all measures of the draft state budget, proposed as alternative to those envisaged in the MTFS 2019-2022, are implemented, the disposable income will increase slightly in comparison to 2018.

Employment in Construction is estimated to have risen since the beginning of 2018, due to recovery of building activity in residential construction projects and the implementation of investment projects following the conclusion of privatisation and concession deals. The recovery of activity and employment in the construction sector is now considered likely to continue in 2019. In addition, employment will also increase in the public sector both with fixed-term and open-ended contracts (e.g. programmes of fixed-term employment by the Manpower Employment Organisation OAED, increase of the regular personnel). Taking into account the factors that affect

employment, the forecast for the unemployment rate in 2018 is revised to 19.3%, while for 2019 a weaker reduction is expected, to slightly less than 18.0%.

### **Lower inflation in 2018**

In the third quarter of 2018, the rate of change of the domestic Consumer Price Index (CPI) remained positive for the second consecutive quarter, at 1.0%, after a CPI drop in Q1 2018. As a result, the inflation rate in the first nine months of 2018 stood at 0.5%, compared with 1.2% in the same period of 2017. The price rise was driven mainly by the growing energy prices, as it is no longer moderated by the euro/dollar exchange rate, which has fluctuated since last August at levels slightly lower than last year. The indirect taxes had a marginal inflationary effect. By contrast, domestic demand seems to recover mildly, as the harmonised price index without energy goods and with stable taxes for the first eight months of the year rose for the first time since 2011, by 0.2%. The inflationary effects of the indirect taxes were reflected in the price increase in Alcoholic Beverages – Tobacco (3.1%), the largest price increase among the constituent categories of the CPI, coming from the hike (from 01/01/2017) in the indirect taxes on tobacco, and in Hotels-Cafes-Restaurants, by 1.3%. Transport recorded the second highest rise (2.8%), driven by the cost of oil.

As the euro/dollar exchange rate is no longer anticipated to provide a buffer, the inflationary pressure from the rise in the global oil price is anticipated to carry over to the first months of 2019, at least. It may then weaken slightly, due to the gradual slowdown in global trade and growth. The boost of inflation from the changes in indirect taxes implemented from the beginning of 2018 is and will remain marginal, much lower than in 2017. Since hikes of current taxes or/and new ones are not envisaged in MTF5 2019-2022 and in the draft of the State Budget for 2019, they will be no such effect on the price level next year. The lifting of the VAT discount in the six islands that received the largest refugee flows might have a slightly positive impact on prices. The aforementioned strengthening of the household expectations following the conclusion of the third programme, together with the fact that no further pressures from fiscal measures on disposable income are expected for next year, will likely maintain or even increase their consumption, boosting inflation. Taking into account the aforementioned trends and forecasts, the average rate of change of the CPI in the current year is expected to be around 0.8%. The first projection for 2019 is that inflation will slightly increase to around 1.3%.

### **Study: Digital payments after the capital controls - Support measures and tax revenues**

Following the imposition of capital controls in 2015, the usage of payment card in Greece increased impressively. The value of card transactions more than tripled between 2014 and 2017. Their spread lifted off with the imposition of the capital controls and remained on an uptrend, aided further by the measures of law 4446/2016.

The study conducted by IOBE that is presented in brief in the fourth chapter of this report examines the size, the qualitative features and the causes of the increase in the use of digital payments between 2014 and 2017. The main aim of the study is to examine the effects of recent policies on the use of Electronic Means of Payment (EMP) and especially in the use of payment cards. In

addition, this study examines the effect of the usage of EMP on tax revenues and presents some policy options for further spread of the EMP use in Greece.

## 2. ECONOMIC ENVIRONMENT

### 2.1 Trends and Prospects of the World Economy

#### A. The Global Environment

- The world economy grew at a rate of 3,6% in the second quarter of 2018
- Forecast for 3.7% for 2018, supported by strong growth in the US and high global liquidity
- High growth in 2018 and 2019, but slower than initially anticipated
- Deterioration in economic expectations, risks from the escalations of trade protectionism, high public and increasing private debt, instability in some emerging markets
- Expectations of a tighter monetary policy by the Fed cause inflationary pressures and capital outflows in many emerging markets

The world economy grew at an average rate of 3.6% in the second quarter of 2018<sup>1</sup>, compared to 3.4% in the corresponding quarter of 2017, yet slightly lower than the average rate for 2017 overall (3.8%). In the latest forecasts by international institutions<sup>2</sup>, the global growth rate was kept high at 3.7% for both 2018 and 2019. Note, however this that prediction is revised downwards by 0.2 p.p. in comparison with the previous quarter, while many economies have already begun to slow down. This is the result of 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. The emerging "trade war" between major economies, and the possibility of a no deal between the European Union and the UK on Brexit, threaten the

<sup>1</sup> IMF International Financial Statistics, the world growth rate is based on preliminary figures from countries that had sent data up until 18/10/2018.

<sup>2</sup> World Economic Outlook, IMF, October 2018



international trade momentum, while 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.

The acceleration of global economic activity in the second quarter of 2018 came mainly from a further boost of domestic demand in developed and developing economies. In the developed economies, the ample liquidity supply by the central banks in the Euro area and Japan and the expansionary fiscal policy in the US continue to provide a strong boost. In the developing economies, growth came mainly from countries like China and India, while recession was recorded in Brazil, Turkey and Argentina.

Table 2.1

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

Economy	2017	2018		2019	
		Forecast	Difference from previous forecast*	Forecast	Difference from previous forecast*
World	3.7	3.7	-0.2	3.7	-0.2
Developed	2.3	2.4	-0.1	2.1	-0.1
Developing	4.7	4.7	-0.2	4.7	-0.4
USA	2.2	2.9	0.0	2.5	-0.2
Japan	1.7	1.1	-0.1	0.9	0.0
Canada	3.0	2.1	0.0	2.0	0.0
United Kingdom	1.7	1.4	-0.2	1.5	-0.1
Eurozone	2.4	2.0	-0.4	1.9	-0.1
Germany	2.5	1.9	-0.6	1.9	-0.1
France	2.3	1.6	-0.5	1.6	-0.4
Italy	1.5	1.2	-0.3	1.0	-0.1
Emerging Europe	6.0	3.8	-0.5	2.0	-1.7
Turkey	7.4	3.5	-0.9	0.4	-3.6
Developing Asia	6.5	6.5	0.0	6.3	-0.3
China	6.9	6.6	0.0	6.2	-0.2
India	6.7	7.3	-0.1	7.4	-0.4
Commonwealth of Ind. States	2.1	2.3	0.1	2.4	0.3
Russia	1.5	1.7	0.0	1.8	0.3
Middle East & North. Africa	2.2	2.4	-1.0	2.7	-1.0
Latin America	1.3	1.2	-0.8	2.2	-0.6
Brazil	1.0	1.4	-0.9	2.4	-0.1
Sub-Saharan Africa	2.7	3.1	-0.3	3.8	0.1
World Trade	5.2	4.2	-0.9	4.0	-0.7

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

Source: World Economic Outlook, IMF, October 2018

The adoption of a series of measures and countermeasures between countries and economic regions in the direction of trade protectionism continued in the third quarter of 2018, signifying the risk of reversing the positive international trade momentum. After the US imposed tariffs of



25% and 10% on the imports of steel and aluminium respectively, a series of countries (Canada, Mexico, Russia, China, and EU) responded with the levy of tariffs on a range of products imported from the US. During the first round of measures and countermeasures in the second quarter of the year, the total value of trade affected by the new tariffs was limited at a few dozen billion euro. During the second round of retaliatory measures between the US and China in September 2018, the total value of trade flows of the products subjected to additional duties reached €300 billion, while both sides threatened to expand the duties to higher volumes of trade. Apart from the restrictive measures, both those taken so far and their potential escalation, the global growth rate may also be affected by the decreasing predictability in economic policy in countries with major trade significance. The gradual limitation of global liquidity by the major central banks, as well as the expected termination of the quantitative easing programme by the ECB, is expected to have a negative effect on global demand and thus on global trade. In the latest IMF report on the world economy (October 2018), the growth rate of the world trade volume revised downwards, by almost 1 p.p. compared to the corresponding forecasts in the previous quarter, over concerns about the impact of further trade protectionism escalation. Nevertheless, it is anticipated to remain high, at 4.2% in 2018 and 4.0% in 2019, following its growth by 5.2% in 2017.

The IMF downward revision concerns the majority of countries and geographical areas, which nevertheless are projected to continue to grow. Such an economic environment of growth, with strong liquidity provision by the central banks, still provides an opportunity for economic policy to focus on the quality of growth and on maintaining sound and counter-cyclical fiscal management, especially in countries with high levels of debt and adverse demographic trends. The Euro area, the UK, and a series of emerging economies like Turkey, Argentina, Brazil and the Middle East are indicative examples of countries or areas with a significant growth downgrade.

Meanwhile, the global economic environment presents significant challenges. In the developed economies, apart from the tendency of strengthening trade protectionism, the long-term growth prospects deteriorate, due to aging of the population, financial system risks, and unequal wealth distribution. In the developing economies, further challenges arise from the capital outflow due to 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.

In the developed economies, the GDP growth rate stood at 2.4% on average in the second quarter of 2018, compared with 2.5% in the first quarter and 2.3% overall in the previous year. The GDP of the OECD members and the 20 major world economies (G20) increased by 2.5% and 3.9% respectively in the second quarter of 2018, against 2.6% and 3.9% in the preceding quarter.

Among the developed countries, the growth rate in the US strengthened in the second quarter of 2018, for the eighth consecutive quarter, to 2.9%, from 2.6% in the previous quarter and 2.2% on 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 expected to reach 2.9% in 2018, and 2.5% in 2019. Meanwhile, the Fed continues its course of gradual interest rate increases, with the eighth consecutive increase since the end of 2015 taking place in September and the markets anticipating another increase by the end of this year. 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 slowed down in the second quarter of 2018 for the third consecutive quarter to 2.2% from 2.4% in the previous quarter and in 2017. In the United Kingdom, the GDP grew by 1.2%, against 1.1% in the first quarter of the year and 1.7% on average in 2017. The difficulties in the ongoing negotiations on the post-Brexit period put pressures on the pound, while the uncertainty hampers investment and private consumption, through a deterioration of expectations. That said, the increase of the interest rates by the Bank of England in August, the second one in the last decade, eased in part the negative pressures on the pound. At the same time, however, the high private debt of households creates challenges for the banking system, while the mid-term growth prospects are affected negatively by the possibility of trade barriers if a deal with the EU on Brexit is not achieved.

In Canada, the growth rate continued to weaken between April and June 2018, in part due to the gradually tightening monetary framework in the country. It stood at 1.9%, compared with 2.3% in the previous quarter and 3.0% at 2017. The projections of international organisations converge to an annual growth close to 2.1% for 2018 and 2.0% for 2019.

In Japan, the growth rate slightly accelerated, to 1.3% in the second quarter of 2018, in comparison with 1.1% in the first quarter and 1.7% overall in 2017, mainly because of a boost in domestic demand. In addition, the unemployment rate is at extremely low levels in the second quarter of 2018, at 2.4%. The price change accelerated during the second quarter of 2018, to about 1.1%, from 0.7% in the second quarter, but the monetary policy is expected to continue to be loose until prices approach the inflation target of 2%. Having said that, the main challenges to the Japanese economy are the ageing of the population and the persistently low inflation.

The emerging and developing economies expanded at an average rate of 4.7% in the second quarter of 2018, at a similar rate with the preceding quarter, achieving their best performance since 2013. However, the IMF revised down its projections on the growth rate of the developing economies, to 4.7% for 2018 and 2019, from 4.9% for 2018, and 5.1% for 2019 in its spring forecast. Similar downward revision of the forecasts was recorded in geographical regions with strong trade relations with Greece, such as Emerging Europe (3.8% at 2018 and 2.0% at 2019, compared to 4.6% and 3.7% for the previous period respectively) and the Middle East and North Africa (2.4% at 2018 and 2.7% at 2019, compared to 3.4% and 3.7% in previous forecasts respectively). The rest of this subsection presents the key trends and economic policy challenges for five of these economies, which produce in total almost 1/3 of the world GDP.

In detail, the economy of China kept growing at a steady, although lower rate in the second quarter of this year, at 6.7%, while preliminary data for the third quarter indicate a rate of 6.5%, against 6.8% in the first quarter and 6.9% in 2017. Domestic demand and particularly public investment, and exports that were boosted by the double-digit depreciation of the Chinese currency in the second quarter of 2018, gained ground in terms of their contribution to GDP growth in mid-2018. The growth rate of China is expected to slow down slightly in 2018 and 2019, to 6.6% and 6.2% respectively because of the escalating trade war and the need for more restraining policies in the future. The rapidly increasing credit expansion and the rising fiscal deficit remain significant

challenges for the Chinese economy. 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, the policy reaction to a possible escalation of the protectionist trade measures will affect the trend of the world economy.

In India, which represents 7.4% of the world GDP, the economy strengthened significantly in the second quarter of 2018, for the fourth consecutive quarter, to 8.0% from 7.5% in the preceding quarter, and 6.7% in 2017, mainly from the strong momentum of investment and exports. Despite that, the growth rate is expected to decline in comparison with previous predictions and to reach 7.3% in 2018, and 7.4% in 2019, because of the negative impact of high fiscal deficit and non-performing loans.

In Russia, which represents 3.2% of the world GDP, the mild recovery continued for the seventh consecutive quarter, at a rate of 1.7%, recording a small acceleration in comparison with the previous quarter and 2017 (1.3% and 1.5% respectively). The recovery rate in Russia is expected to remain at 1.7% in the current year, aided by the rebound of international oil prices and the subsequent boost of consumption and investment. In 2019 it is anticipated to slow down marginally to 1.8%. The dependence on the international prices of energy commodities and income inequality are key challenges ahead for the Russian economy.

The growth momentum of the biggest economies of Latin America - Argentina, Brazil and Mexico - weakened in 2018. Argentina faced a sharp decline in economic activity in the second quarter of the year, by -2.1%, compared with growth by 3.9% in the previous quarter and 2.9% in 2017. With fiscal imbalances and a high level of private debt in US dollars, the country faced significant capital outflows, which intensified with the recovery of the US interest rates, leading to a large depreciation of the peso, by more than 40% in real effective terms since the beginning of the year, and an application for IMF financing. In order to restrain the capital outflows, the central bank of Argentina has increased the interest rates by 20% since the beginning of the year. At the same time, the economic recovery in Brazil slowed down significantly in the second quarter of 2018, to 1.0%, after growth of 1.2% and 2.1% in the two preceding quarters. The economy of Brazil remained on a growth path for the fifth consecutive quarter following three years of recession between 2014 and 2016. The IMF revised downwards its forecast for the growth of the economy, to 1.4% in 2018, and 2.4% in 2019, from 2.3% and 2.5% respectively six months ago. The high unemployment rate constitute a big challenge for Brazil.

The economic situation in Turkey deteriorated significantly in 2018, due to growing inflationary pressures, capital outflows and Turkish bond yields. The economy maintained a significant growth rate in the second quarter of 2018 at 5.2%, mainly based on consumption and public investment, yet it was much lower than in the previous quarter (7.2%). The recently revised forecasts predict a slowdown of growth to 3.5% in 2018 and only 0.4% in 2019, from 7.4% in 2017. The inflation rate is the highest since 2003, reaching 24.5% in September (from 12.8% in the second quarter), as the national currency has lost about 1/3 of its value in real effective terms in the second quarter, despite the fact that the central bank increased interest rates by 11 p.p. in the second quarter of the year, in order to stop capital outflows from the country. International organisations and previous reports by IOBE have noted the fragile structure of the recent growth of the Turkish economy, driven by fiscal stimulus, high private lending in a foreign currency, the increasing negative trade and fiscal balances, as well as its large «output gap». There is no doubt that

economic developments in Turkey have a direct effect on Greece, since inter alia Turkey is the third largest destination for Greek exports of goods.

The IFO estimates on the economic climate in the world economy in the third quarter of 2018 point to a weakening of expectations after seven years of improvement. In particular, the balance the world economic climate estimates declined to 2.9 points, from 16.5 points in the preceding quarter. Regarding the assessment of the current situation, the balance declined to 17.5 points, from 27.4 points in the preceding quarter, remaining positive for the seventh consecutive quarter, after six years of negative values. Finally, the expectations over the coming six months deteriorated, for the first time since 2011, after seven consecutive years of positive values.

Table 2.2

IFO - Economic climate in the Euro area (balances)

Quarter/Year	III/16	IV/16	I/17	II/17	III/17	IV/17	I/18	II/18	III/18
Economic climate	-6.6	-0.7	3.0	13.5	13.2	17.1	26.0	16.5	2.9
Assessment of current situation	-16.8	-14.9	-8.7	5.1	12.5	17.2	28.3	27.4	17.5
Expectations	4.1	14.6	15.5	22.2	14.0	16.9	23.9	6.1	-10.6

Source: IFO Institute, Centre for Economic Studies

Table 2.3

IFO - Economic climate in the Euro area (balances)

Quarter/Year	III/16	IV/16	I/17	II/17	III/17	IV/17	I/18	II/18	III/18
Economic climate	4.6	8.3	17.3	26.4	35.2	37.0	43.2	31.1	19.6
Assessment of current situation	6.2	2.4	8.0	21.9	33.4	42.9	51.3	49.9	41.4
Expectations	2.9	14.3	27.0	31.0	37.1	31.3	35.4	13.8	-0.1

Source: IFO Institute, Center for Economic Studies

The economic climate in the Euro area also deteriorated in the third quarter of 2018, with the economic sentiment index falling to 19.6 points, from 31.1 points in the second quarter, lower than in the beginning of 2017. As regards the assessment of the current situation, the balance marginally declined, to 41.4 points, from 49.9 points in the preceding quarter, a performance that remains strong. The expectations balance became marginally negative in the third quarter, for the first time since the end of 2012.

The inflation rate in the developed economies of the G7 group increased to 2.4% in the third quarter of 2018, from 2.2% in the preceding quarter, under the influence of rising international oil prices as well, yet it remained below the target of major central banks. This phenomenon remains more acute in Japan, where the rate of price change stood at 1.1% in the first quarter of 2018, with "core" inflation, without the impact of oil prices, lower than the inflation target of "close to 2%", both in Japan and in the Eurozone. In the latter, the total inflation rate reached 2.1% in the third quarter, for the first time after 22 quarters, while in the US it stood higher at 2.6%. The inflation rate in the major developing economies of the BRICS group (Brazil, Russia, India, China and South Africa) exceeded 4% in the third quarter, after posting its lowest level in eight years in the last quarter, at 3.1%. This is partly due to the fact that the gradual increase in US interest rates sparked currency devaluation and inflationary pressures in emerging markets.

In the developed economies, the monetary policy stance continues to supply abundant liquidity to households and enterprises. However, 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 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 September 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, one of which within the final quarter of 2018. Respectively, the Bank of Canada has carried out three small interest rate rises since July 2017, while the Bank of England raised slightly the interest rates in August 2018. At the same time, the ECB announced that its asset purchasing programme will expire by the end of 2018. However, the central bank of the Euro area will maintain its policy of re-investing the funds from the repayment of bonds that mature. In addition, the markets anticipate that the intervention interest rates are going to remain at the same low levels for at least 2018 and for the first half of 2019. As noted repeatedly in previous reports, the expectations of further interest rate hikes in developed economies causes changes in the capital flows and the exchange rates, with strengthening of the dollar and currency devaluations in emerging markets in the medium term.

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

- Growth in the Euro area slowed down to 2.2% in the second quarter of 2018, from 2.3% in the previous quarter and 2.5% a year ago
- Weakening of the economic sentiment indicators, deceleration of exports, but also continuing positive impact from high liquidity
- Expectations for continued growth at 2.0% in 2018 and 1.8% in 2019, but with a possibility of a slowdown over the medium term due to gradual overheating
- Inflation in the Euro area closer to the target of 2%, unemployment at its lowest rate in a decade
- Main sources of uncertainty: trade protectionism, political euro-scepticism, high public debt and stock of non-performing loans, delay in the deepening of the Euro area institutions

In the second quarter of 2018, the economies of the European Union and the Euro area grew at a slower pace, by 2.1% and 2.2% respectively, from 2.3% and 2.4% in the first quarter of this year and 2.5% in the corresponding quarter of 2017. According to the latest forecasts of the European Central Bank,<sup>3</sup> growth in the Euro area is expected to continue to decline, to 2.0% and 1.8% for 2018 and 2019 respectively. Note the danger of gradual overheating of the European economies, as in all EU economies except Greece and Italy, the GDP is expected to exceed potential output by the end of 2018 (European Commission estimates, May 2018).

Investment gave a significant boost to growth in both regions in the second quarter of 2018, in contrast with consumption, the contribution of which declined. This positive contribution of net

<sup>3</sup> Eurosystem staff macroeconomic projections for the euro area, ECB, September 2018

exports remained unchanged in both regions in comparison to the previous quarter, albeit at lower rate than in 2017.

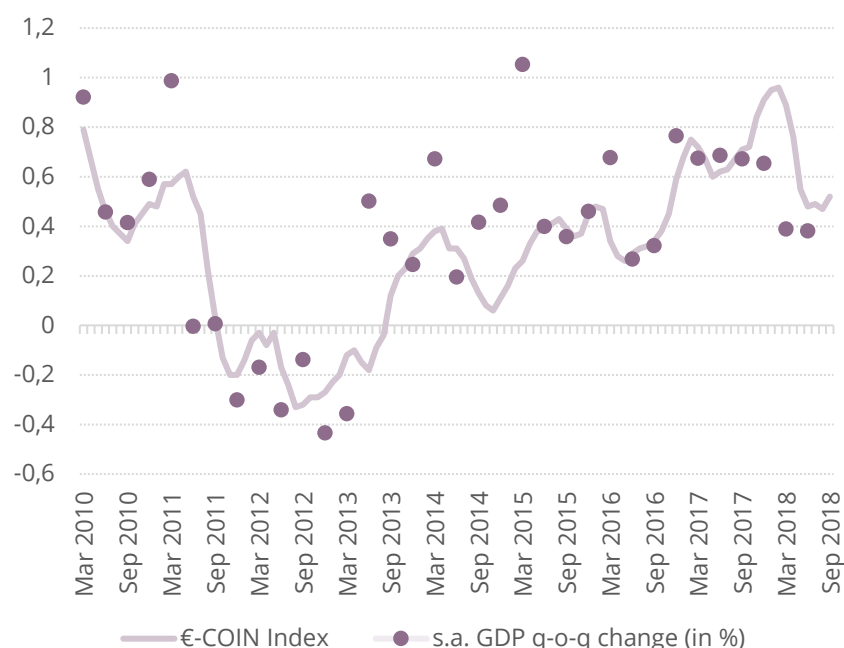
The composition of the GDP expenditure components remained similar in the EU and the Euro area, with consumption representing 75% and 74%, investments 21%, exports 47% and 49%, and imports 44% and 45% of GDP in the two regions respectively.

The highest growth rates in the EU in the second quarter of 2018 (in terms of year-on-year changes in seasonally adjusted data) were recorded in Ireland (9.1%), Malta (5.7%) and Poland (5.0%). Greece (1.8%), although converging on the average growth of the Euro area, recorded the 6th lowest growth rate in the EU in the second quarter of 2018. The lowest growth rates were recorded in Denmark (0.6%), the United Kingdom (1.2%), and Italy (1.2%). In terms of a 12-month moving average, Greece recorded the 5<sup>th</sup> lowest rate of growth in the EU, at 1.9%. Lower growth rates were recorded in Denmark (0.6%), the United Kingdom (1.4%), Italy (1.5%), and Belgium (1.6%). In contrast, the highest growth in the EU on a 12-month moving average basis was recorded in Ireland (9.4%), Malta (5.9%), Romania (5.9%) and Slovenia (5.1%).

Figure 2.1

Monthly Index €-COIN and Euro area GDP

The indicator €-COIN for the Euro area remained steady in Q2 of 2018, at its lowest level since Q4 of 2016



Source: CEPR and Bank of Italy

Regarding the economic climate and the key leading indicators of economic activity in the Euro area and the European Union, the €-COIN index<sup>4</sup> remained stable in the third quarter of the year, at 0.49 points, its weakest quarterly performance since the fourth quarter of 2016, capturing a shift of the climate in the Eurozone economy. The index dropped for the first time after four quarters

<sup>4</sup> 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.



of uninterrupted growth, influenced by the trade protectionist measures and the uncertainty regarding Brexit negotiations.

The economic sentiment indicator of the European Commission for the EU and the Euro area declined in the third quarter of 2018, for the third consecutive quarter after recording its best performance since the year 2000 in the final quarter of 2017. In September 2018, the economic sentiment indicator stood at 111.3 points for the EU and 110.9 points for the Euro area, lower by 0.9 and 0.7 points respectively compared with the previous month, yet remaining 1.3 and 1.9 points higher than in September 2017.

Overall in the third quarter of 2018, the indicator in the EU stood lower by 0.5 points quarter on quarter, yet it was at the same level with the respective quarter of last year. In the Euro area, the indicator was lower by 1.0 points quarter on quarter and 0.3 points year on year.

Table 2.4

Economic Sentiment Indicator EU & Euro Area (1990-2017 average = 100)

Month	Jan-17	Feb-17	Mar-17	Apr-17	May-17	June-17	July-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
EU	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	June-18	July-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
EU	114.8	114.4	112.7	112.4	112.8	112.2	112.3	112.2	111.3			
Euro area	114.9	114.3	112.8	112.7	112.5	112.3	112.1	111.6	110.9			

Source: European Commission (DG ECFIN), July 2018

At the EU level, the sentiment weakened quarter-on-quarter in the third quarter of the year in 16 countries, with the largest fall recorded in Slovakia (-4.1 points), Slovenia (-3.5 points), Estonia (-3.1 points), and Bulgaria (-2.1 points). By contrast, the sentiment strengthened in 11 countries, with the 8th largest gain recorded in Greece (0.5 points) behind countries like Malta (4.4 points) and the United Kingdom (2.4 points). Despite the improvement in the second quarter of 2018, the economic sentiment index in Greece remained the third lowest in the ranking, ahead of Slovakia and Romania. It is now lower by 8.0 points than the EU average.

More comprehensive information on the GDP components in the Euro area and the EU for the second 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 (May and July 2018) for the EU, and the latest ECB report (September 2018) on the Euro area are also presented.

In greater detail, according to Eurostat data for the second quarter of 2018 (year-on-year changes in seasonally adjusted data), private consumption in the European Union increased by 1.7%, compared to 1.9% growth in the first quarter and 2.0% in 2017. Consumption in the Euro area increased by 1.4%, against growth by 1.7% in the previous quarter and last year. The European Commission envisages slight weakening of the growth in household consumption in the EU in comparison with last year, to 1.8% in 2018 and 2019. Correspondingly for the Euro area, the ECB projects a slowdown of private consumption to 1.5% in 2018 and a recovery to 1.7% in 2019 (Table

2.5). Among the EU countries, the strongest growth in private consumption in the first quarter of 2018 was recorded in Bulgaria (8.0%), Malta (6.5%) and Hungary (5.7%). In contrast, Greece recorded the fourth lowest growth rate in private consumption (1.0%), ahead of Belgium (0.7%), France (0.8%) and Italy (0.8%).

Table 2.5

Key economic figures, EU, Euro area (annual % change in real terms, unless otherwise noted)

	EU 28			Euro area		
	2017	2018	2019	2017	2018	2019
GDP	2.4	2.1	2.0	2.5	2.0	1.8
Private Consumption	1.9	1.8	1.8	1.7	1.5	1.7
Public Consumption	1.1	1.4	1.3	1.2	1.4	1.4
Gross Investment	3.4	4.2	3.2	2.8	4.0	3.2
Exports of goods and services	5.3	5.2	4.3	5.6	3.1	3.8
Imports of goods and services	4.5	5.1	4.4	4.2	3.5	4.5
Employment	1.5	1.1	0.9	1.6	1.4	0.9
Unemployment (% labour force)	7.6	7.1	6.7	9.1	8.3	7.8
Inflation	1.7	1.9	1.8	1.5	1.7	1.7
Balance of General Government (% GDP)	-1.0	-0.8	-0.8	-1.0	-0.6	-0.8
Debt of General Government (% GDP)	83.1	81.2	79.1	86.6	84.8	82.8
Current Account (% GDP)	2.2	2.2	2.2	3.5	3.2	2.8

Sources: For GDP and inflation in the EU - European Economic Forecast, Summer 2018, European Commission, July 2018. For the remaining indicators in the EU - European Economic Forecast, Spring 2018, European Commission, May 2018. For the Euro area - Eurosystem staff macroeconomic projections for the euro area, ECB, September 2018.

The growth of public consumption continued unchanged both in the EU (1.1%) and the Euro area (1.2%) in the first quarter of 2018, in comparison with the preceding quarter. In the respective quarter of 2017 public consumption had increased by 1.1% in the EU and by 1.3% the Euro area. For 2018 and 2019, the European Commission anticipates growth by 1.4% and 1.3% respectively in the EU, while the ECB revised upwards its forecast about the growth rate in the Eurozone to 1.4% for both years, from 1.3% in the previous quarter. The countries with the strongest growth in the first quarter of this year were Malta (9.3%), Slovenia (5.1%), Ireland (4.2%), and Bulgaria (4.0%), while public spending declined most in Romania (-2.5%), Greece (-2.0%), and Cyprus (-0.5%).

Investment growth strengthened in the second quarter of 2018 in the EU, but weakened in the Euro area, to 3.1% and 2.8% respectively, compared to 2.9% and 3.1% in the previous quarter. However, the growth in both regions was significantly lower than in the corresponding quarter of 2017, when investments had increased by 4.7% in the EU and 4.1% in the Euro area. The European Commission and the ECB anticipate acceleration of the investment growth this year by 4.2% in the EU and by 4.0% for the Euro area respectively. For next year, the institutions expect significantly weaker growth at 3.2% in both regions. The strongest rise in investment in the second quarter of 2018 was recorded in Cyprus (40.8%), Malta (37.2%) and Romania (13.9%), while investment declined in Ireland (-31.9%) and Finland (-0.7%). Greece recorded a small rise, by about 1.7%.

The growth of the exports of goods and services slowed down slightly in the second quarter of 2018, to 3.5% and 3.8% in the EU and the Euro area respectively, compared with 3.7% and 3.8% growth in the previous quarter, but also with a significantly stronger expansion by 4.8% and 4.7%

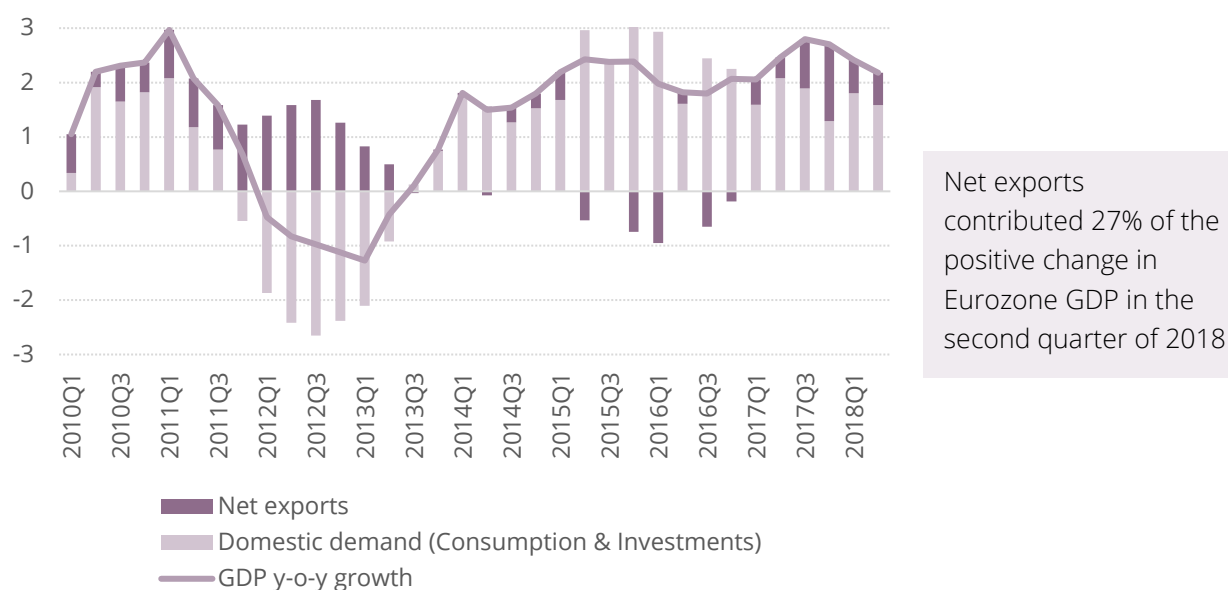


in the same quarter of 2017. For 2018 and 2019, the European Commission anticipates a steady decline in the growth of exports in the EU by 5.2% and 4.3% respectively. The ECB projects a significant slowdown of exports for the Euro area in 2018, to 3.1% from 5.6% in 2017, and a small pickup of their pace in 2019, to 3.8%. The strongest rise in exports in the second quarter of 2018 was recorded in Ireland (11.5%), Slovenia (10.2%) and Greece (9.4%), lifting Greece to the third place in terms of best exports performance in the EU. In contrast, exports declined in Bulgaria (-1.9%) and Denmark (-0.2%).

Imports expansion stayed steady in the second quarter in the EU at a pace of 3.0%, and marginally accelerated in the Euro area to 2.8%, in comparison to 2.7% in the preceding quarter. Their growth rate remains significantly lower than in the respective quarter of 2017, when they were expanding by 4.7% in the EU and by 4.3% in the Euro area. For 2018 and 2019, the European Commission anticipates growth by 5.1% and 4.4% respectively while the ECB projects a significant decrease in the growth rate this year to 3.5%, with a recovery to 4.5% in 2019. High rates of import growth were recorded in Cyprus (11.8%), Romania (10.6%) and Slovenia (9.2%), while imports declined only in Ireland (-6.7%). The lowest positive growth rate was recorded in the United Kingdom (0.6%). Greece ranked 14<sup>th</sup>, with an imports expansion of 4.3%.

Figure 2.2

Euro area – Contribution to real GDP growth (in percentage terms)



Source: Eurostat

As a result of the developments in the GDP components in the Euro area, the contribution of net exports remained positive yet steady in the second quarter (0.6%), yet its momentum has weakened from 2017 (0.8% on average for the year overall). Probably this trend is associated with the slowdown in the expansion of international trade and the early effects of protectionist trade measures. The contribution of domestic demand remained significant (1.6%), mainly due to the positive contribution of investment, albeit slightly weaker than in the preceding quarter (1.8%).

The harmonised inflation rate slightly strengthened in the third quarter of 2018, standing at 2.2% in the EU and at 2.1% in the Euro area, from 1.8% and 1.7% in the preceding quarter in the two

regions respectively. The price rise came primarily from the international oil prices. The 12-month moving average of the harmonised inflation stood at 1.8% and 1.6% in September 2018 in the EU and the Euro area respectively. The inflation rate based on the harmonised index excluding energy goods remained steady in the third quarter of 2018, at 1.4% and 1.3% in the EU and the Euro area respectively, compared to a corresponding annual change by 1.4% and 1.2% respectively in the preceding quarter. For 2018 and 2019, the ECB projects that the inflation in the Euro area will remain close to 1.7%, below yet closer to the ECB target of 2% (compared to 1.5% in 2017 and 0.2% in 2016). In September 2018, the highest inflation was observed in Romania at 4.7%, Hungary at 3.7% and Bulgaria at 3.6%, while the lowest inflation in the EU was recorded in Denmark at 0.5%, Greece at 1.1% and Ireland at 1.2%.

Employment, based on data from the Labour Force Survey of Eurostat, weakened in the second quarter of 2018 to 1.1% in the EU and 1.3% in the Euro area, against 1.4% rise in both regions in the first quarter. The European Commission projects a weakening of the employment growth in the EU in 2018 and 2019, to 1.1% and 0.9% respectively. The ECB also anticipates slower employment growth in the Euro area, at 1.4% in 2018 and 0.9% in 2019. The strongest employment growth in the second quarter of 2018 occurred in Cyprus (5.7%), Malta (5.6%), and Finland (3.1%), while contraction of employment was observed only in Romania (-1.3%) and Bulgaria (-0.4%). Greece ranked 15<sup>th</sup> with 1.7% growth.

Unemployment fell further to 6.9% in the EU and 8.3% in the Euro area, compared to 7.1% and 8.5% 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, to 7.1% and 6.7% respectively (from 7.6% in 2017), while the ECB anticipates lower unemployment rates for the Euro area at 8.3% this year and 7.8% last year, compared to 9.1% in 2017. In the second quarter of 2018, the highest unemployment rate was recorded in Greece (19.5%), followed by Spain (15.4%), Italy (10.6%), and France (9.1%). In contrast, the lowest unemployment over the same period was recorded in the Czech Republic (2.3%) and Germany (3.4%).

The fiscal performance improved slightly in both regions in 2017, with the European Commission projecting a further decline in the general government deficit in the EU in 2018 to 0.8% of GDP (from 1.0% in 2017). The ECB anticipates that the fiscal deficit in the Euro area will fall to 0.7% 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 and based on the excessive deficit procedure (EDP) it must comply with a deficit target of below 3% in 2018. Meanwhile, the European Commission raised objections about Italy's State Budget for 2019, which has maintained uncertainty and caused an increase in the returns of government bond yields in the Euro area's periphery. Public debt is anticipated to continue to decline gradually in the EU and the Euro area in 2018 and 2019, as it is projected to reach 81.2% and 79.1% of GDP respectively in the EU and 84.8% and 82.7% respectively in the Euro area. Despite the progress, public debt is anticipated to remain very high across many member states in 2018, with the largest rate in percentage of GDP in Greece (177.8%), Italy (130.7%), Portugal (122.5%), Cyprus (105.7%), and Belgium (101.5%). Meanwhile, the conditions of continued economic growth constitute an opportunity for countercyclical fiscal policies, especially in countries whose GDP is estimated to have exceeded potential output, thus increasing the risk of "overheating" in the short term.

As to the monetary policy framework, the European Central Bank continues to pursue accommodative monetary policy through steady very low interest rates and unconventional quantitative easing (QE) tools. Regarding the interest rates, the ECB has announced that it will not increase them until at least mid-2019, with the (market consensus forecasts) expecting their very gradual recovery, and near-zero levels until the beginning of 2020. The current bond purchase programme was tampered in late September 2018, from a monthly volume of €30 billion to €15 billion until December 2018, when the net asset purchases will expire. The ECB will maintain its policy of reinvesting the principal payments from maturing securities for an extended period of time after the end of the net asset purchases, and in any case for as long as necessary,<sup>5</sup> yet it will no longer partake in net asset purchases. Recall that since the beginning of 2015, when the QE programme began, the ECB has bought bonds of €2.5 trillion total value. In the box below (2.1) an attempt is made to outline the effect of the programme on bank credit expansion to the corporate sector in the member countries of the Euro area between 2015 and 2018.

The economy in Europe, and particularly in the Euro area, is facing a series of challenges that keep the policy makers on alert:

- Observed escalation of protectionist trade measures by trading partners such as the US
- Apparent difficulties in the ongoing Brexit negotiations, which seem to weigh more on the investment and consumer sentiment in the British economy and less on the Euro area economy for the time being, yet they remain a source of uncertainty for both economies
- Need of counter-cyclical fiscal policy in countries with a high level of public debt. 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 countries
- Rapidly ageing population with an impact on the sustainability of the social security system in many member states
- Refugee flows and integration possibilities in the economic activity
- Political developments and Euroscepticism

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<sup>5</sup> Press Release, Monetary policy decisions, ECB, September 2018

## Box 2.1

## ECB quantitative easing programme and trends in corporate bank lending in the Euro area

The international financial crisis of 2008 led the ECB to adopt an accommodative monetary policy stance through successive reductions in statutory interest rates in 2008-2009. In order to tackle the persistently low inflation expectations, weak economic activity and given the already low level of interest rates, the ECB also applied unconventional quantitative easing instruments. Their purpose was to increase liquidity in the market, reduce the cost of capital for companies and households and prop up the inflation rate close to the target of 2% over the medium term. Indicative tools included a programme for purchasing securities through the national central banks (Securities Markets Programme, 2010-2014), covered bond purchase programmes (CBPP1, CBPP2, 2009-2012), and the Outright Monetary Transactions framework to be used in special cases. The largest programme in terms of the volume of quantitative easing began in 2015, when the ECB launched an extensive programme for purchasing securities (Asset Purchase Program-APP), which included the purchase of sovereign bonds through secondary markets and the banks. The APP in its current form includes the following four programmes:

- Public Sector Purchase Programme (PSPP), which involves buying government bonds in the secondary markets. It has been implemented since March 2015, with the total ECB exposure at €2,082 billion by September 2018.
- Third Covered Bond Purchase Program (CBPP3). In effect since October 2014, with total exposure of €260 billion by September 2018.
- Corporate Sector Purchase Program (CSPP), in effect since June 2016, with total exposure of €171 billion by September 2018.
- Asset-Backed Securities Purchase Program (ABSPP). In effect since November 2014, with the ECB's total exposure at €27 billion by September 2018.

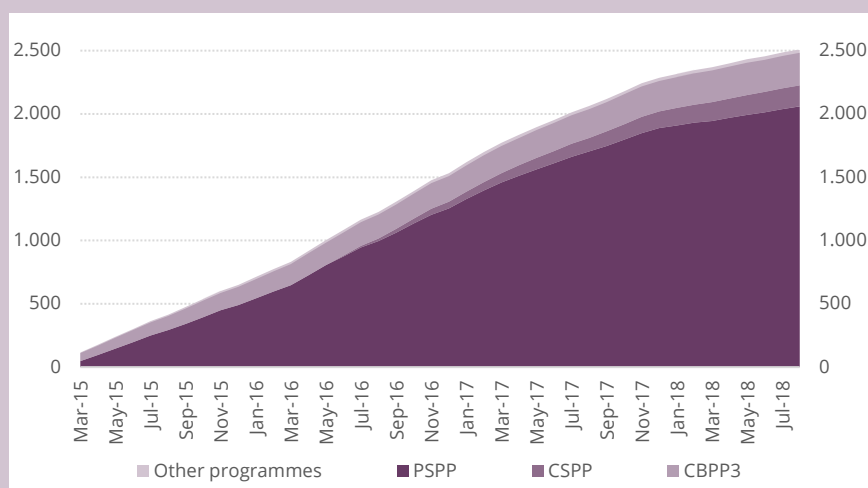
From 2015 to 2018, the ECB extended regularly the APP, increasing the net exposure at an average monthly growth rate of €60 billion in the first year (March 2015 - March 2016) and subsequently to €80 billion in the second year (April 2016 - March 2017). Then, the expansion was reduced to €60 billion per month between April 2017 and December 2017, falling to €30 billion between January 2018 and September 2018. As a result, the cumulative exposure of the ECB to the quantitative easing programme reached €2.5 trillion by August 2018 (Figure 2.3A). In June of this year, the ECB announced that the APP expansion will decline to €15 billion per month after September and until the end of 2018.

PSPP is the largest among the four active QE programmes, with cumulative ECB exposure of €2.08 trillion by September 2018. The PSPP allocation among the Eurozone member countries is also of interest. It should be noted that Greece was assessed from the outset as the only non-eligible member country, as an "investment grade", i.e. at least BBB rating, was a prerequisite for participation in the programme. For the same reason, Greece has remained ineligible for the programme. Figure 2.3B depicts the allocation of the PSPP finds in the Q2 of 2018, in three country groups, based on their credit rating. The total resources of the PSPP reached 11.7% and 7.1% of the total bank deposits and bank assets respectively in the Euro area, excluding Greece. Countries with medium rating (Group A) seem to have received the greatest influx of PSPP funds in relation to the size of their banking systems.

Figure 2.3

## Quantitative easing and corporate bank lending in the Euro area

## A. Total exposure of ECB quantitative easing programmes, 2015-2018 (in billion €)



## B. Total PSPP exposure in Eurozone member countries in the second quarter of 2018

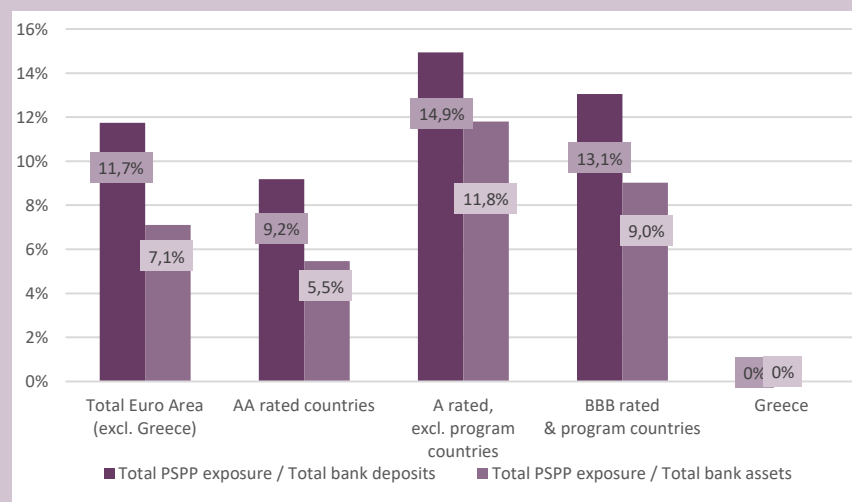
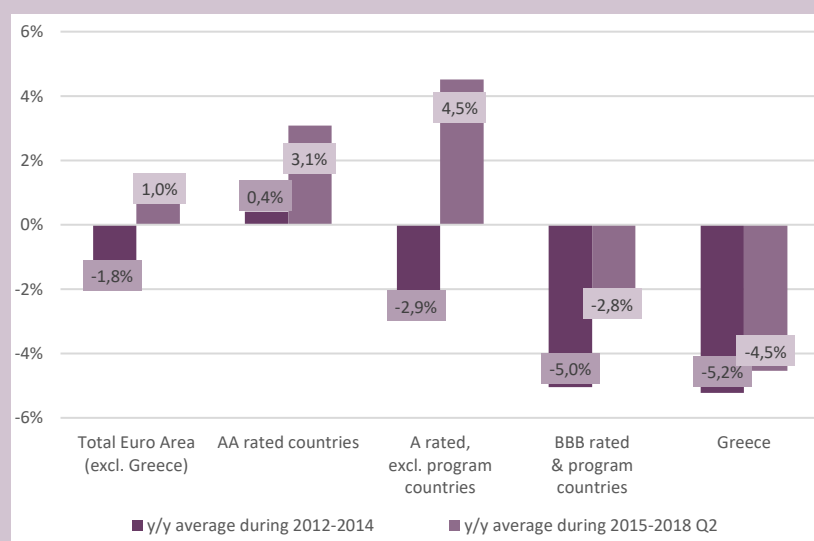


Figure 2.3C presents the trends of bank lending to the private business sector in the same country groups, comparing the average credit expansion before the extended quantitative easing programme (2012-2014) with the average throughout the programme duration (2015-2018). It follows from this that the credit contraction of 1.8% on average for the Euro area as a whole turned to credit growth of 1.0%. The increase in Bank lending was more pronounced in the countries with the greatest influx of capital through the PSPP, confirming the positive effect of the ECB programme on the liquidity of the real economy. In particular, countries with medium credit rating (group A) had the largest change in credit expansion, by 7.4 percentage points on average, followed by countries with high rating (group AA) where the credit expansion strengthened by 2.7 p.p. and countries with low rating (group BBB) where credit contraction eased by 2.2 p.p. on average.

## C. Expansion of bank credit to private non-financial corporations in Eurozone member countries



Note: The AA group includes countries with credit rating of at least AA-, namely Austria, Belgium, Germany, Estonia, Finland, France, Luxembourg and Netherlands. Category A comprises countries with credit rating between A and A+, namely Lithuania, Latvia, Malta, Slovenia and Slovakia, excluding countries with concluded support programmes. The BBB group includes countries with a concluded support programme as well as those with a rating up to BBB+, namely Cyprus, Spain, Ireland, Italy and Portugal. The credit expansion was calculated based on the annual changes in the stock of loans, i.e. it includes write-offs, re-evaluations and currency exchange rate differences.

Source: ECB. Data processing: IOBE

Among the countries with intermediate credit rating, Slovenia, Slovakia and Lithuania recorded the highest PSPP inflows of about 25%, 20% and 13% of all bank deposits respectively, with a boost of credit expansion by 6.8, 8.7 and 5.5 p.p. accordingly. Among the countries with AA grade, Finland, Austria, Belgium and Germany recorded the highest PSPP inflows of about 15%, 10.7% and 10.5% (in the last two countries) of all bank deposits respectively, while credit expansion changed by -1.0, 1.0, 3.5 and 3.3 p.p. Among the BBB countries, Spain, Italy and Portugal recorded the highest PSPP inflows of around 13.5%, 13.5% and 12.5% of the total bank deposits respectively, achieving an easing of the credit contraction by 4.7, 0.1 and 1.6 p.p. In Greece, whose bonds were not eligible for the ECB's APP, the strong credit contraction continued throughout 2015 to 2018, with only a small easing of about 0.7 p.p. compared with other countries with low rating. The only country with BBB grade that posted a lower reduction of credit contraction than Greece was Italy, and this may be due to other macroeconomic and financial factors, which are not controlled in this analysis.

In conclusion, although the pace of credit expansion of an economy is affected by many factors, there are indications that the extensive ECB quantitative easing programme influenced positively the bank lending to the private enterprises in the Euro area between 2015 and 2018. The increase in credit growth was more pronounced in countries with larger inflows from the ECB PSPP, which particularly holds for countries with medium credit rating, like Lithuania, Latvia, Malta, Slovenia and Slovakia, but also in countries with high rating. In contrast, the effect on credit growth seems to have been weaker in countries with low rating.

## 2.2 The economic environment in Greece

### A. Economic climate

- The Economic Sentiment Indicator increased in Greece in the third quarter of 2018, both quarter on quarter and year on year (to 103,9 from 103,4 and 99,5 points)
- Business sentiment improved in the third quarter of this year compared to the previous quarter in Industry and Retail Trade, and deteriorated in Services and Construction
- The Consumer Confidence Index strengthened quarter on quarter in the second quarter of 2018 (-47,5 from -50,7 points), while it was notably higher year on year (from -57,4 points)

*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 results of the surveys constitute leading indicators for various economic magnitudes and can be used to predict near-term developments and even the course of GDP.<sup>6</sup>*

The momentum of the Economic Climate Index in Greece during the last months is consistent with the macroeconomic developments and the short-term indexes in many sectors, where the trends have been mostly positive. The final review of the third adjustment programme, the creation of the cash buffer, that can cover the financing needs of the Greek public sector for 22 months and the results of the stress test for the banks, contribute to the stabilisation of the economic environment and allow for strengthening of the expectations, at least for some parts of the economy. The tumult in the domestic financial market during this period has an opposite effect. Although growth is not strong and the re-entry in the global markets will seemingly happen with many reservations and limitations, the decisions, on the one hand, to reduce the burden of debt servicing, and the commitment, on the other hand, to keep the economic policy under strict fiscal rules reduce the risks for economic derailment. In addition, factors with a positive impact in economic activity, like external trade and tourist flows, maintain their dynamic. In spite of the positive trends that transpire in marginal improvement of the business sentiment in the third quarter, the improvement in the economic sentiment is mainly driven by stronger consumer confidence. In greater detail:

The Economic Climate Index in Greece increased in the third quarter of 2018, to 103.9 points on average (from 103.4 in the previous quarter), at a higher level than the average from the same quarter of 2017 (99.5 points).

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

<sup>6</sup> 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 were 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.



averaged 111.9 points (from 112.5) in the third quarter of 2018 in the EU and 111.5 (from 112.5) points in the Euro area.

At the sector level, the business expectations in Greece deteriorated quarter on quarter in the third quarter of the year in Construction and Services and strengthened in Industry and in Retail Trade. On the demand side, the quarterly average of the rather weak consumer confidence improved. Compared to the same quarter of the preceding year, the index increased in Construction and Services and decreased in Industry and Retail Trade, while consumer confidence strengthened substantially. In greater detail:

The Consumer Confidence Index in Greece averaged -47.5 points in the third quarter of 2018 (from -50.7 points in the second quarter) significantly higher year on year (-57.4 points). At the country level, the Greeks maintained their top rank on the European pessimism scale. The corresponding average European index weakened in the Euro area (to -1.8 from -0.3), and in the EU (-1.8 from -0.9). The index improved year on year in the EU and deteriorated in the Euro area (-2.1 and -1.5 points respectively).

The quarter-on-quarter trends in the individual components that make up the overall indicator were positive in the third quarter of 2018. 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.

In particular, the percentage of those who were pessimistic about their household's financial situation over the next 12 months dropped to 56% (from 59%), while the share of respondents holding the opposite view remained at 6%. Furthermore, the percentage of Greek consumers with gloomy expectations about the country's economic situation marginally declined to 60% (from 62%), with 11% (from 9%) 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 88% (from 89%), while those that considered it possible remained at 10%. The percentage of those believing that unemployment would increase declined slightly, to 49% (from 53%), while 17% (από 15%) on average expressed the opposite opinion. The percentage of consumers that reported to be «in debt» in the third quarter of 2018 was 12% (from 11%), lower in comparison with the preceding quarter (16%), while the percentage of respondents who said they saved a little stood at 11% (from 10% in the preceding quarter and 9% last year). Finally, the percentage of those who declared that they were "just about managing to make ends meet on their income" reached 66% (from 67%) while the percentage of households reporting that they were "drawing on their savings" declined to 10% (from 11% in Q2 and 16% in the third quarter of 2017).

The Business Climate Indicator in Industry stood at 105.7 (from 102.7) points in the third quarter of 2018, higher than its corresponding level of 2017 (99 points). In the key activity indicators, the forecast for short-term output change declined marginally in the examined quarter (21 from 22 points on average), while the estimates for the level of orders and demand strengthened (to -7 from -20 points). The assessment of the stock of finished products points to a slight increase (to 7 from 4 points), while the trends in the export indicators were mixed. The export expectations over the following quarter marginally deteriorated, yet the assessment of foreign orders and demand improved. The quarterly balance of employment expectations decreased to 6 (from 8) points on



average. The production capacity utilisation rate stood at 70.2% (από 70.9%), while the months of guaranteed production of the enterprises once more averaged 4.2 (from 4.5).

The Business Climate Indicator in Retail Trade increased in the examined quarter, both quarter on quarter (from 104.7 points) and year on year (88.3 points), to 108.3 points. Among the key components of the indicator, the average balance of the current sales assessment increased to 22 (from 15) points. About 2% (from 30%) of the enterprises reported that their sales have declined, with 45% (from 44%) declaring the opposite result. The projected sales indicator increased by 7 from 23 points, while the assessment of inventories slightly increased (to 7 from 4 points). Regarding the remaining activity indicators, the change in the balance of expectations for orders to suppliers is marginally positive (15 from 10 points on average per quarter), while the short-term employment forecast increased to 17 (from 5) points. Finally, the balance of price expectations of 3 points remained unchanged, with 7% of the companies expressing once more expectations of a decline in prices and 92% (from 90%) predicting price stability. The sentiment strengthened in the third quarter in Food – Beverages - Tobacco and Department Stores and weakened in the others subsectors.

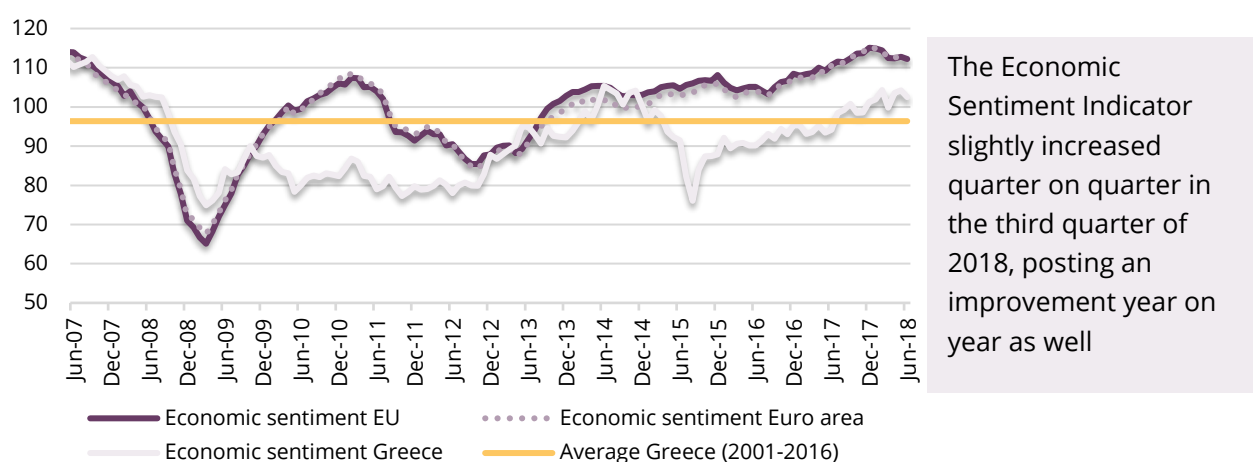
The business expectations in Construction deteriorated significantly in the third quarter of 2018, with the balance standing at 55 (from 60.5) points on average. The indicator stood much lower year on year (from 64.9 points). Among the key components of the indicator, the employment expectations in the sector lost ground, as the index reached -39 (from -36) points, while 9% (from 12%) of the companies were expecting job creation in the sector. The expectations of the businesses about their activity level became more pessimistic (at -66 from -59 points), while the assessment of their current level of activity improved (-30 from -47). The months of activity accounted for work in hand in the sector increased to 8.3 (από 6.7). The negative balance of price expectations widened to -34 (from -19) points, with 37% (from 30%) of the companies expecting a decrease in the short-term and 3% (from 11%) an increase. Finally, the percentage of companies reporting that they were not facing any obstacles to the proper functioning of their business reached 14% (from 17%), while among the remaining businesses, 27% selected as the major obstacle low demand, 42% insufficient funding and 17% factors such as the country's general economic situation, the capital controls, high taxes, lack of projects, and late payment by the state. At the subsector level, the deterioration in overall business confidence in the examined quarter in Private Construction offset by the growth of the indicator in Public Works.

In Services, the average Business Climate Indicator decreased quarter on quarter in the third quarter of 2018, to 97.6 (from 104.4) points, reaching a lower level than in the same period of last year (99.7 units). Among the key components, the assessment of current demand remained mostly stable, with the relative index estimated at 16 (from 15) points on average. The assessment of the current level of business activity remained unchanged (at 21 points on average), while the short-term demand expectations of the businesses in the sector deteriorated (5 from 29 on average). Regarding the remaining activity indicators, the balance of employment expectations of the respondents significantly decreased (to -2 from 21 points on average), while the balance of price expectations decreased on average to -5 (from 3) points. Finally, the percentage of respondents reporting a seamless business operation remained at 32%, with 29% declaring as the major barrier to their operation the lack of demand, 20% working capital shortage and 15% other factors, such as the country's general economic situation and the crisis, the capital controls, the difficulties of obtaining credit, high taxes, and late payments by the state. Among the examined subsectors of

Services, the indicators remained the same quarter on quarter in the third quarter in Hotels-Restaurants-Travel Agencies and Land Transport and deteriorated in Financial Intermediaries and IT Services.

Figure 2.4

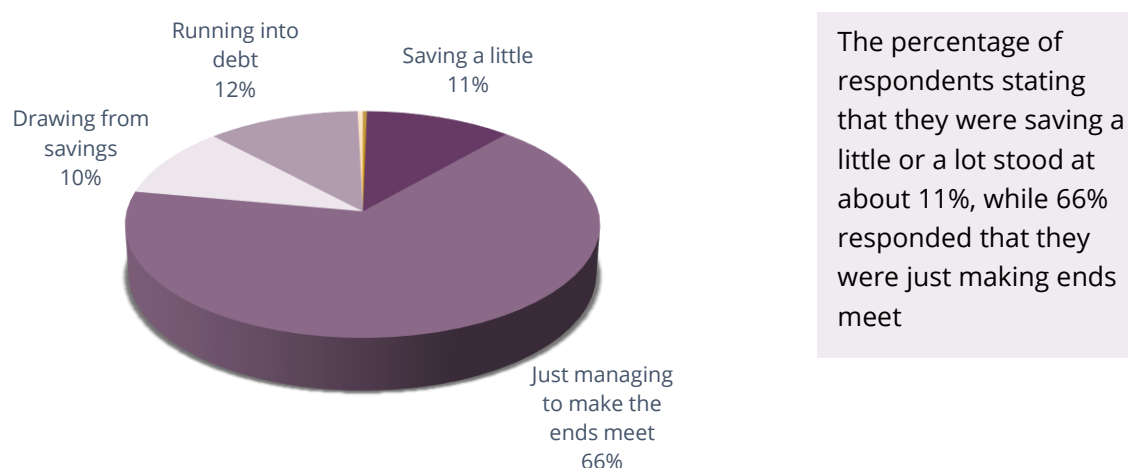
Economic Sentiment Indicators: EU, Euro area and Greece, (1990-2016=100, seasonally adjusted data)



Source: European Commission, DG ECFIN

Figure 2.5

Consumer survey data on the financial situation of households  
(average April – June 2018)



Source: IOBE

Table 2.6

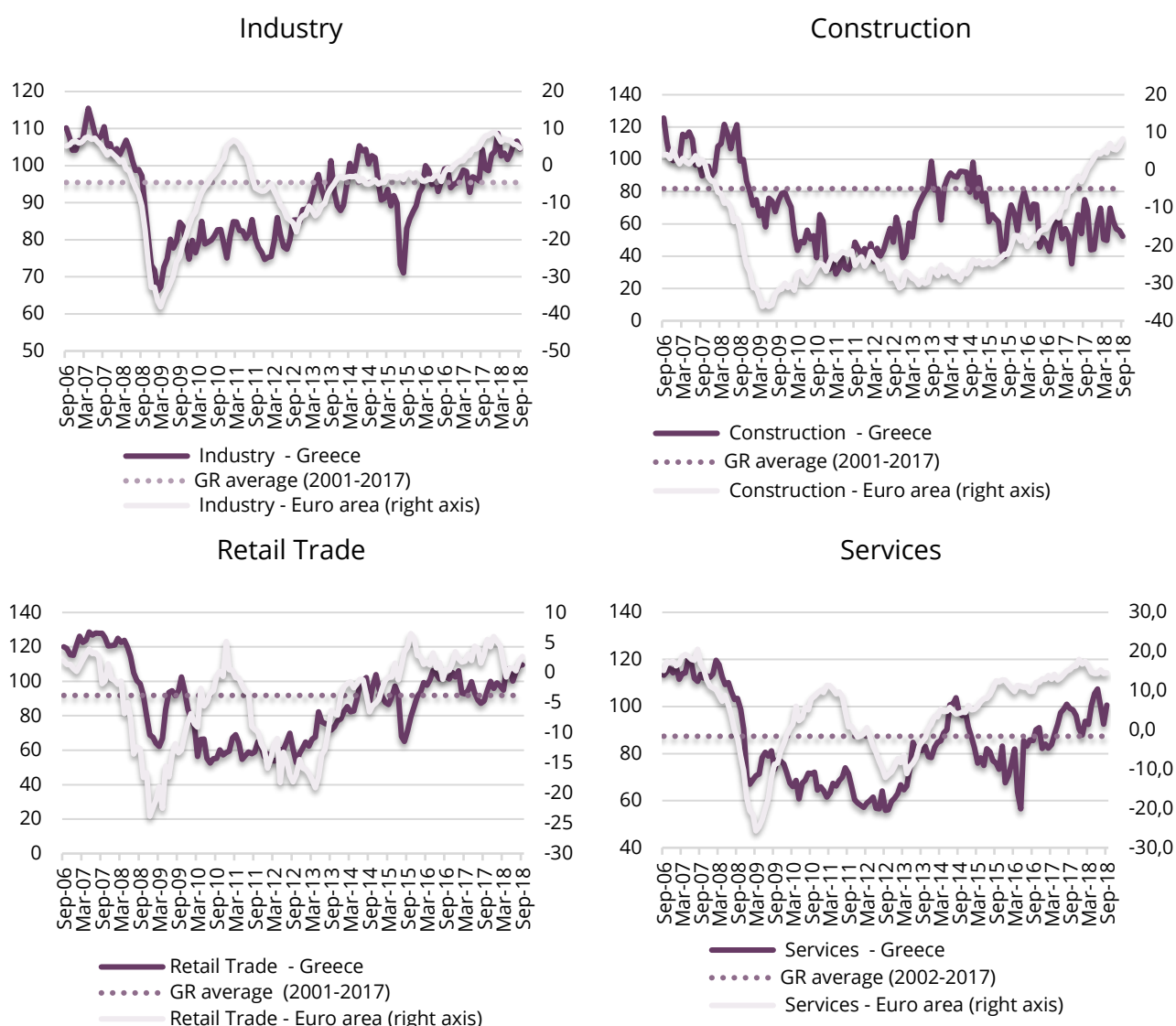
## Economic Sentiment Indicators

Time period	Economic Sentiment Indicator			Business Climate Index (Greece)				Consumer Confidence Index (Greece)
	EU	Euro area	Greece	Industry	Construction	Retail Trade	Services	
2002	96.5	96.0	103.8	106.7	125.3	96.6	88.6	-27.5
2003	95	95	103	103	126	106	91	-39
2004	103	101	107	104	90	109	101	-26
2005	101	100	100	98	69	100	100	-34
2006	109	108	107	107	100	115	111	-33
2007	111	110	110	108	102	125	114	-28
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

Sources: European Commission, DG ECFIN, IOBE

Figure 2.6

## Business Climate Index



Source: IOBE

The business sentiment in Greece deteriorated quarter on quarter in the third quarter of this year in Construction and Services, and strengthened in Industry and Retail Trade. In comparison with last year, the index increased in Construction and Services and declined in Industry and Retail Trade.

## B. Fiscal developments and outlook

- The primary cash balance target of the state budget continues to be met with excess in the first eight months of this year, mostly from under-utilisation of the Public Investment Programme and rise of the net revenue of the Ordinary Budget
- The Ordinary Budget revenue in excess of the target is found exclusively in the proceeds from (a) the VAT on imported goods, and (b) indirect taxes of past years
- From the so far implementation of the state budget, the achievement of its annual targets for the deficit and the primary surplus is considered likely, yet this result comes mainly from substantial cuts in public investment against the target and excess indirect taxation of the Greek economy

### Execution of the State Budget, January - August 2018

The execution of the State Budget (SB) in the first eight months of this year was, at first sight, very positive,<sup>7</sup> especially compared with the revised targets for this period.<sup>8</sup> In particular, the Ordinary Budget (OB) expenditure is lower by €2,164 million and the primary surplus is higher by €2,240 million compared to the target. However, there is no improvement in comparison with the respective period of 2017, as the SB deficit is almost the same. In contrast, the SB primary surplus is lower by about 11.0%. The containment of the SB deficit below the target was achieved mainly thanks to the containment of investment expenditure much below both the relevant target, and the 2017 level, which was already reduced in comparison to 2016. This under-execution of the PIP is not justified, given that, its revenues were higher by 20.6% in the first eight months of this year than in 2017 (Table 2.7), albeit remaining lower than the target.

In June the annual primary expenditure of the Ordinary Budget (OB) was revised upwards by €1,063 million. In the first eight months of the year, they were 1.4% lower than the revised target. Nevertheless, they were 3.5% higher than the respective expenditure of 2017.

The SB revenues, without tax returns and proceeds from rights and licences, increased in comparison with both 2017, and the revised target for the first eight months. The excess is exclusively the result of the revenues from indirect taxes and especially (a) the VAT on imported goods (b) previous years' indirect taxes. In total, the OB revenues (before taxes) were a bit higher than in 2017, as the increased tax revenues was offset by a reduction of receipts from rights and licences, given that this year the high revenues from the concession of regional airports will not be collected again.

<sup>7</sup> Monthly State Budget Execution Bulletins, January – August 2018, Ministry of Finance, September 2018.

<sup>8</sup> The revised targets are included in the Medium Term Fiscal Strategy (MTFS) 2019 – 2022, June 2018, (Law No. 4549/2018).

Table 2.7 State Budget Execution 2018 (million. €)

	January- August			% change		2015	2016	2017	Budget 2018	% change		
	2016	2017	2018	2017/16	2018/17					2016/15	2017/16	2018/17
I. SB REVENUES (1+2)	<b>32,047</b>	<b>31,432</b>	<b>31,869</b>	<b>-1.9</b>	<b>1.4</b>	<b>51,421</b>	<b>54,161</b>	<b>51,422</b>	<b>54,244</b>	<b>5.3</b>	<b>-5.1</b>	<b>5.5</b>
1. OB net revenues	29,980	30,242	30,434	0.9	0.6	46,589	49,982	48,973	50,509	7.3	-2.0	3.1
Revenues before tax refunds <sup>[1]</sup>	31,886	32,806	32,998	2.9	0.6	49,510	53,246	54,333	54,157	7.5	2.0	-0.3
Minus tax refunds	1,907	2,565	2,564	34.5	0.0	2,922	3,263	5,360	3,648	11.7	64.3	-31.9
2. PIP Revenues	2,067	1,190	1,435	-42.4	20.6	4,832	4,178	2,449	3,735	-13.5	-41.4	52.5
of which: EU funds	1,921	1,011	1,306	-47.4	29.2	3,900	3,861	1,964	3,555	-1.0	-49.1	81.0
II. SB Expenditure (3+4)	<b>33,537</b>	<b>32,703</b>	<b>33,089</b>	<b>-2.5</b>	<b>1.2</b>	<b>54,951</b>	<b>55,723</b>	<b>55,483</b>	<b>55,188</b>	<b>1.4</b>	<b>-0.4</b>	<b>-0.5</b>
3. OB expenses	31,365	31,121	31,612	-0.8	1.6	48,545	49,435	49,533	48,438	1.8	0.2	-2.2
Primary expenses	26,564	26,305	27,235	-1.0	3.5	42,744	43,847	43,325	43,238	2.6	-1.2	-0.2
Interest	4,801	4,815	4,377	0.3	-9.1	5,800	5,588	6,208	5,200	-3.7	11.1	-16.2
4. PIP Expenses	2,172	1,583	1,477	-27.1	-6.7	6,406	6,288	5,950	6,750	-1.8	-5.4	13.4
III. SB Balance (I-II)	<b>-1,490</b>	<b>-1,271</b>	<b>-1,220</b>			<b>-3,530</b>	<b>-1,562</b>	<b>-4,061</b>	<b>-944</b>			
% of GDP	0.9	-0.7	-0.7			-2.0	-0.9	-2.3	-0.5			
OB Balance	-1,385	-873	-1,178			-1,956	547	-560	2,071			
PIP Balance	-105	-394	-42			-1,574	-2,110	-3,501	-3,015			
IV. SB Primary Balance	<b>3,311</b>	<b>3,544</b>	<b>3,157</b>			<b>2,270</b>	<b>4,026</b>	<b>2,147</b>	<b>4,256</b>			
% of GDP	1.9	2.0	1.7			1.3	2.3	1.2	2.3			
GDP (current prices)	175,888	177,735	183,101	1.1	3.0	176,312	175,888	177,735	183,101	-0.2	1.1	3.0

Source: Explanatory Report Budget 2018, November 2017, and State Budget Execution Bulletins, December 2017 and August 2018, Ministry of Finance.

[1] Includes proceeds from the granting of licences and rights.

[2] Includes called guarantees, military procurement, EFSF disbursement fees and transfers to assume debt of General Government bodies.

[3] The called guarantees are recorded on a "net basis" for all years and months.

In general, from the results of the SB execution so far it seems that the annual targets for the SB deficit and primary surplus are likely to be achieved. However, this will be the result of a significant cut in Public Investments against the target and excessive taxation of the Greek economy. The currently high level of taxation is illustrated by the fact that the overdue, non-performing arrears of tax payers increased from the end of 2017 until August 2018 by €6.2 billion, while total tax arrears amounting to €102.6 billion.<sup>9</sup> As noted in our previous report,<sup>10</sup> with the high taxation the imbalances of the public sector (i.e. the fiscal deficit and debt) were gradually shifted to the private sector. The total debt of the private sector to the tax authorities, the social security funds, the Public Power Company and the banks are much higher than the country's GDP. There are thus still significant macroeconomic imbalances.

Due to these imbalances, the Greek economy remains fragile and vulnerable, as evident recently from the impact of the uncertainty surrounding the implementation of the fiscal measures agreed with the creditors in 2019 and the political instability in Italy on the yields of the Greek bonds. Consequently, the primary targets of economic policy should be the elimination of imbalances, including non-performing loans, and economic growth. The very high level of taxation is restraining, besides growth, both the fall of unemployment and the attraction of FDI.<sup>11</sup> Thus, to the extent that there is fiscal space, it should be used primarily for the reduction of taxation and the repayment of public debt.

Concerning the fiscal results of 2018, much will be determined during the last four months of the year, just as in 2017. During that period, significant revenues are expected to be collected, but there will also be a large pressure on raising public expenditures, such as for hospital grants, for the scheduled full repayment of outstanding arrears of the public sector, which reached €3,036 million by the end of August, for the acceleration of investment expenditures (78.1% still remains unexecuted), for many thousands of waiting applications for retirement, for retroactive payments to special wage categories etc. Note that €8,309 million are required for the execution of the PIP without any cuts and the repayment of the outstanding (by 31/08/2018) arrears of the public sector. Recently, thousands of new hires were announced in the public sector, which will affect operating expenditure next year.

### *SB primary deficit and surplus*

The SB deficit was kept at €1,220 million in the first eight months of the year, much lower than the revised target for a deficit of about €3.4 billion.<sup>12</sup> It is also lower by €51 million year on year. The primary SB surplus reached €3,157 million, higher than the revised target of €917 million. However, it was lower by €387 million than in 2017 (Table 2.7).

The containment of the deficit below the target came by 56.7% from the containment of the SB expenditure and by 43.3% from the excess of revenues in comparison with the targets. From the containment of expenditure, 75.2% is detected in PIP payments. It seems that for the fourth

<sup>9</sup> Source: Indicators - KPIs, Monitoring tax-customs administration, site of the Independent Authority for Public Revenue

<sup>10</sup> The Greek Economy 02/18, IOBE, July 2018.

<sup>11</sup> According to the competitiveness report of the World Economic Forum for 2018, which was released recently, Greece was ranked 118th in the classification as to the effects of taxes and subsidies on competition.

<sup>12</sup> The initial target of the 2018 Budget was set at -€2,826 million. With the MTFS it was revised to -€3,384.



consecutive year a very large part of the PIP will be executed in December, while there will also be major cuts in investment, with consequences for growth and employment.

### *Ordinary Budget Revenue*

The OB revenues (before tax refunds) increased by 0.6% in the examined period compared with 2017, to reach €33.0 billion. These revenues include receipts from the concession of rights and licences of €229 million, while in the corresponding period of last year €970 million were collected from the concession of regional airports (Table 2.8). When relevant adjustments are made for this category of revenues, the year-on-year rate of change of OB revenues rises to 2.9%.

Table 2.8

State Budget Revenue (million. €)

Revenue categories	January -August			% change	
	2016	2017	2018	2017/16	2018/17
1. SB Net Revenues (2+4)	32,047	31,432	31,869	-1.9	1.4
2. OB net revenues	29,980	30,242	30,434	0.9	0.6
Tax refunds	1,907	2,565	2,564	34.5	0.0
3. OB revenue	31,886	32,806	32,998	2.9	0.6
Direct taxes	11,773	10,900	10,777	-7.4	-1.1
--Income tax	7,511	7,312	7,228	-2.6	-1.1
--Property tax	1,180	848	842	-28.1	-0.7
--Direct taxes of previous years	1,278	1,445	1,435	13.1	-0.7
--Other direct taxes	1,805	1,294	1,272	-28.3	-1.7
Indirect taxes	16,245	17,094	17,841	5.2	4.4
--Transaction taxes	10,132	10,795	11,007	6.5	1.7
(of which VAT)	(9,824)	(10,436)	(10,609)	(6.2)	(1.7)
--Consumption taxes	5,303	5,306	5,591	0.1	5.4
--Indirect taxes of previous years	584	752	937	28.8	24.6
--Other indirect taxes	226	241	307	6.6	27.4
Non-tax revenues	3,868	4,812	4,379	24.4	-9.0
--Receipts from the EU	266	253	288	-4.9	13.8
--Non-ordinary revenue	675	595	574	-11.9	-3.5
(of which: ANFA, SMP)	(375)	(345)	(314)	(-8.0)	(-9.0)
--Permits and rights	58	970	229	1,572.4	-76.4
--Other	2,869	2,994	3,288	4.4	9.8
4. PIP revenues	2,067	1,190	1,435	-42.4	20.6

Source: State Budget Execution Bulletins, January – August 2017 & 2018, final estimates. Ministry of Finance

The revenues from direct taxation decreased by 1.1% against 2017, falling to €10,777 million in the first eight months of this year. The biggest drop (1.7%) is located at the other direct taxes, the collection of which fell short of the target. The receipts from income taxation were also reduced compared to 2017 (-1.1%) and less than the target by €337 million. The lag lies solely in revenue from legal entities (-€346 million), due to an extension given this year for submitting tax returns. By contrast, the revenues from the personal income tax rose 4.7%, which came exclusively from taxes withheld from employees and pensioners (8.3%). This development is connected with the lifting of the tax credit for withheld tax from 01/01/2018, which was in force since 1955.

In indirect taxation, receipts increased by 4.4% over the corresponding period of 2017 and reached €17.8 billion, exceeding their target by €579 million (Table 2.8). This positive development came mainly from two indirect tax categories: (a) VAT on imports and (b) indirect taxes of previous years.

In greater detail, the total VAT revenues increased by 1.7% year on year and reached €10.6 billion. However, the trend varies significantly among the constituent categories. The proceeds from VAT on domestic goods and services increased by 0.8% year on year, while from the VAT on imported goods they rose by 8.2%. This difference is partly due to the receipt of VAT amounting to €296 million in 2017 from the airport concession, while there are no similar proceeds in 2018. If adjustments are made to allow for this fact, then the year-on-year growth of revenues from domestic VAT grows from 0.8% to 4.1%. There are other significant differences across individual categories of VAT revenue from domestic sources. For example, revenues from the VAT on domestic tobacco products and fuels increased significantly, by 15.3% and 9.4% respectively, while the year-on-year growth of receipts from all other domestic goods and services<sup>13</sup> does not exceed 2.7%, i.e. less than the expected rise in nominal GDP (3.0%).

Note that the significant increase in VAT revenues from imports came from stronger car imports, which increased by 32% in the first eight months of the year. Besides, the revenues from the vehicle registration tax during the same period increased by 18.0%.

Concerning the excise duties, the revenues from the excise duties on fuel decreased by 2.3% year on year. This result is not compatible either with the increase of economic activity and especially tourism, or with the previously mentioned increase in car registrations. In part, however, it might result from the increase in fuel prices. By contrast, the revenues from excise duties on tobacco products increased by 13.9%, because of low revenues<sup>14</sup> in 2017 (base effect).

The revenue from indirect taxes of previous years increased significantly, by 24.6%, against 2017, reaching €937 million. This is the third consecutive year with a strong increase. Moreover, the revenues exceeded the target for these eight months by €159 million.

Finally, the non-tax revenues decreased by 9.0%, dropping to €4,379 million. Their drop was due to €970 million that were received in 2017 from the concession of airports, while the corresponding revenues this year did not exceed €229 million (Table 2.8).

From the above, it seems that the positive trend of the SB revenues (before tax refunds) in comparison with 2017 is the result of higher car imports, higher fuel prices, which raised the revenues from VAT on fuels, and higher collection of indirect taxes from previous years, which is not related to current economic developments. However, many revenue categories had a slight decrease in 2017. In general, the developments in revenues do not seem to reflect the growth of economic activity. According to the revised target of MTF 2019 – 2022, the SB revenues (before tax refunds) for 2018 will reach around €54.4 billion. Consequently, given the results for the first eight months, €21.4 billion or 40% of the annual revenues are expected to be received in the final four months of the year. The developments so far do not leave room for complacency, as the

<sup>13</sup> €296 million were subtracted from the corresponding revenue of 2017.

<sup>14</sup> Extensive stockpiling of cigarettes took place in December 2016, resulting lower production and tax revenue in 2017. Subsequently, since the beginning of 2018 the revenue from the tobacco excise duty is significantly elevated compared to 2017. See also the Greek Economy 02/18, IOBE, July 2018.

achievement of the revenues target depends largely on their course in the final four months of the year.

### *Ordinary Budget Expenditure*

The OB spending increased by 1.6% year on year to reach €31,612 million in the examined period, despite the fact that they remained below the revised target by €304 million. The expenditure restraint came exclusively from the OB primary expenditure (-€380 million), as the interest payments, although lower compared to 2017, exceeded the revised target by €76 million (Table 2.9).

Table 2.9

State Budget expenditure (million €)

Expenditure category	January- August			% change	
	2016	2017	2018	2017/16	2018/17
1. State Budget Expenditure	33,537	32,703	33,089	-2.5	1.2
2. Ordinary Budget Expenditure	31,365	31,121	31,612	-0.8	1.6
Interest	4,801	4,815	4,377	0.3	-9.1
Primary expenditure	26,564	26,305	27,235	-1.0	3.5
--Salaries & pensions	12,020	8,039	8,367	-33.1	4.1
Wages	7,634	7,807	8,092	2.3	3.7
Other allowances	168	150	200	-10.1	33.3
Pensions	4,218	81	74	-98.1	-8.6
--Social expenditure	7,939	11,818	11,645	48.9	-1.5
Grants to Social Security Funds	7,026	10,755	10,536	53.1	-2.0
Social protection	569	716	758	25.8	5.9
Grants to OAED	315	315	315	0.0	0.0
Other	29	32	35	10.3	9.4
--Operational and other	4,741	4,784	5,097	0.9	6.5
Transfers	788	853	979	8.2	14.8
Consumption	669	684	855	2.2	25.0
Conditional	1,465	1,636	1,347	11.7	-17.7
Other*	1,819	1,611	1,916	-11.4	18.9
Debt assumption	(553)	(192)	(0)	-65.3	-
--Earmarked expenditure	1,864	1,664	2,127	-10.7	27.8
3. PIP expenditures	2,172	1,583	1,477	-27.1	-6.7

Source: State Budget Execution Bulletins, January - August 2017 and 2018, Ministry of Finance, final estimates.

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

Among the particular categories of primary spending, salaries expenditure rose by 4.1%. This increase came solely from payments for salaries (3.7% increase) and other allowances (up by 33.3%). Note that payroll costs are rising for the second year in a row, at an accelerated pace. This rate will accelerate further when in the next few months retroactive remuneration will be paid upon court decisions. The pension expenditure was almost brought to zero, as from the beginning of 2017 the pensions of civil servants are paid by the social security fund EFKA (Table 2.8).

Social expenditure declined by 1.5% compared to 2017, as the grants to social security funds fell by 2.0%. Overall, the grants to EFKA reached €9,600 million, against €9,864 million in 2017. The second biggest grant of €460 million was received by the fund OPEKA (successor of OGA), in order to pay for the family allowances (€360 million). Social protection expenditures increased by 5.9%, because of an increase by 73.6% of the payments for the Social Solidarity Income (2018: €514 million, 2017: €296 million).

The operating and other expenditure increased by 6.5% compared to 2017 and reached €5.097 million. Among the constituent categories, consumption expenditures increased by 25.0% in the first eight months. The annual forecast for these expenditures was revised up by €675 million, as the retroactive payments will come out of this budget item at the end of the year. However, this does not explain the rise in the first eight months.<sup>15</sup> In addition, other expenses also increased greatly against 2017, by 18.9%. The boost mainly came from activation of guarantees (40.3%, or €263 million) and hospital grants (43.6% or €176 million). Finally, the decrease in ear-marked spending came solely from agriculture subsidies, which fell to €92 million this year, from €370 million in 2017.

Interest payments declined by 9.1% compared to 2017, reaching €4,377 million (Table 2.9). On an annual basis, they are predicted to reach €5,150 million. Note that Greece lost the opportunity of cheap lending, as the country was not included in the ECB quantitative easing programme, which began in March 2015, to be concluded at the end of the current year.

It is estimated that, just like in the past three years, there will be a significant pressure for raising the SB expenditures in the last quarter. For instance, retroactive remuneration should be paid upon court decisions, while there is a contractual obligation for full repayment of the outstanding arrears of the public sector, which reached €3.036 million by the end of August. As a result, it is not possible to make credible predictions for the final size of the SB expenditure.

### *Public Investment Programme*

The PIP was executed in the first eight months, as in the past two years, with a very big and unjustified delay, especially on the expenditure side. It is quite possible that there will be a big investment cut by the end of the year.

PIP revenues increased by 20.6% against 2017 and reached €1,435 million. They are expected to increase by 52.5% in 2018, from the extremely low levels of 2017 (€2,449 million). Receipts from EU funds increased by 29.2% against 2017 and reached €1,306 million. Despite this significant increase, the absorption of EU funds remains low. Besides, they were lower than the target for the first eight months by €166 million. In general, the receipts from EU funds have been exceptionally low in 2017 and 2018.

The PIP expenditure decreased by €1,477 million, and are less compared with both the target (by €923 million) and 2017 (by 6.7%). Note that the expenditure for the corresponding period of 2017 was already lower compared with 2016, which resulted in their cut last year by €800 million

<sup>15</sup> The State Budget Execution Bulletin does not contain an analysis of the consumption spending, so the reasons for the large increase are not known.

compared with the target (Table 2.7). This year's investment expenditure is reduced even compared to 2015 (€1,563 million), when the public sector experienced significant liquidity difficulties. In order for the investment payments to reach the budgeted annual amount of €6.75 billion, €5,273 million must be disbursed in the final four months of the year. The experience from the past three years indicates that almost certainly investments will be significantly cut for the fourth consecutive year.

The developments concerning the PIP are not satisfactory. The Greek economy is in need of investments, both public and private. It is also crucial that public infrastructure is created, in order to attract and facilitate private investment. Besides, the inflows from EU funds increase the liquidity in the economy.

### C. Financial developments

- Volatility and loss of banks' market value during the third quarter
- The new ambitious NPL reduction targets for 2020 -2021 remain a challenge
- Stronger return of deposits by households and businesses
- Continued gradual loosening of the capital controls
- Contraction of credit to the private sector, except for industry and tourism
- High cost of lending to businesses compared with the rest of the Euro area periphery

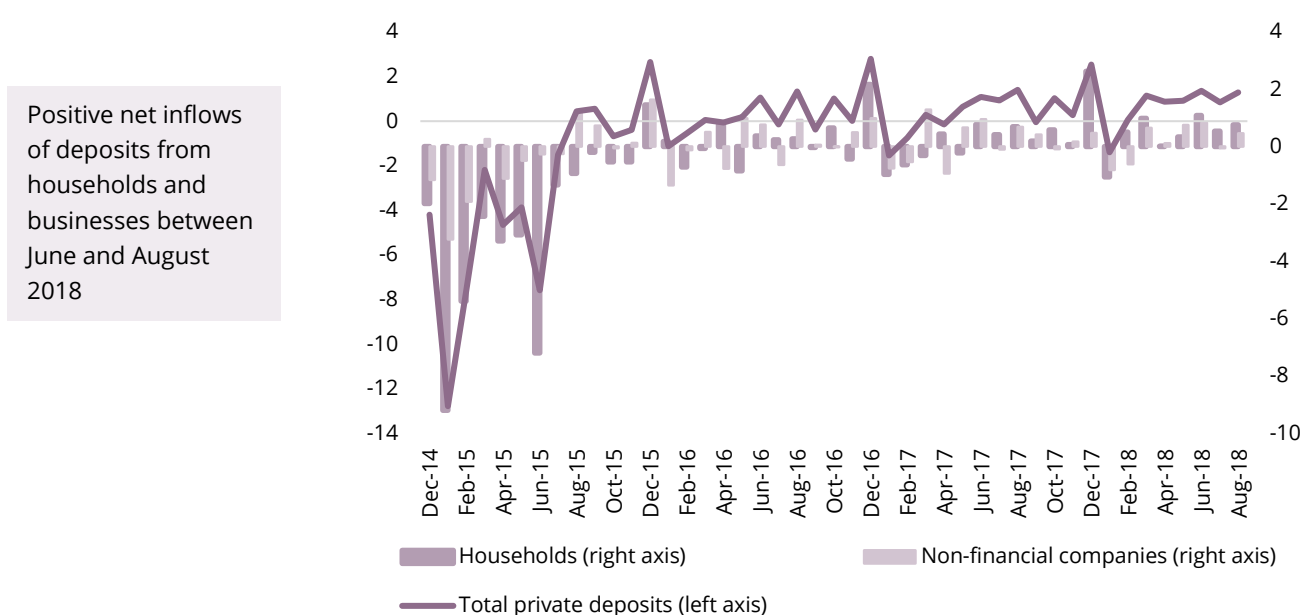
In the third quarter of 2018 the banks experienced strong volatility in their market value and the losses in their market capitalisation reached €5 billion or 40% of their equities. The factors that shaped the negative investment climate include qualitatively weak elements in the assets and equity of the banks, their low profitability, doubts about the accuracy of the financial accounts of one of the major Greek listed companies Folli Follie, and internationally the conditions of uncertainty in the emerging markets, with related talk about increasing difficulty of refinancing their banks from the capital markets. That said, there were positive developments in a number of structural bank indicators, such as increase of the return of private deposits, further reduction of the degree of dependency of the banks on emergency lending from the Euro system, positive outcome of the stress test, further relaxation of the capital controls and upgrades of the banks by the international credit rating agencies. Regarding the link of the banks with the real economy, the credit from the banks to the private sector contracted further, aided by 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.

The positive outcome of the stress test of the four systemic banks that was published in early May, and the uneventful conclusion of the adjustment programmes prompted the international credit rating agencies to upgrade slightly the credit rating of the banks (Moody's in late May, Fitch in mid-June, S&P in late June), which improved their prospects for raising capital from the markets. It is indicative that Moody's upgraded the ratings of the Greek banks in July for the first time in 11 years. That said, the deterioration of the global investment climate after the summer and the weak structural elements in the banks' balance sheet offset in part the benefits from the quantitative improvement of their fundamentals and led to big losses of the banks' market value, highlighting the urgency for achieving the qualitative targets, but also for improving the quality of their balance sheets.

On the liabilities side of the banks' balance sheet, the return of deposits of households and businesses strengthened between June and August 2018, reaching cumulatively €3,170 million and €1,915 million respectively since the beginning of the year, which points to a continued, albeit slow, recovery of confidence (Figure 2.7). The positive results of the stress test, the conclusion of the third economic adjustment programme, the upgrade of the prospects of the banking sector by the credit rating agencies, the gradual relaxation of the capital controls, the continued growth in employment, and more broadly, the modest recovery of the Greek economy were conducive to this development.

Figure 2.7

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



Source: Bank of Greece

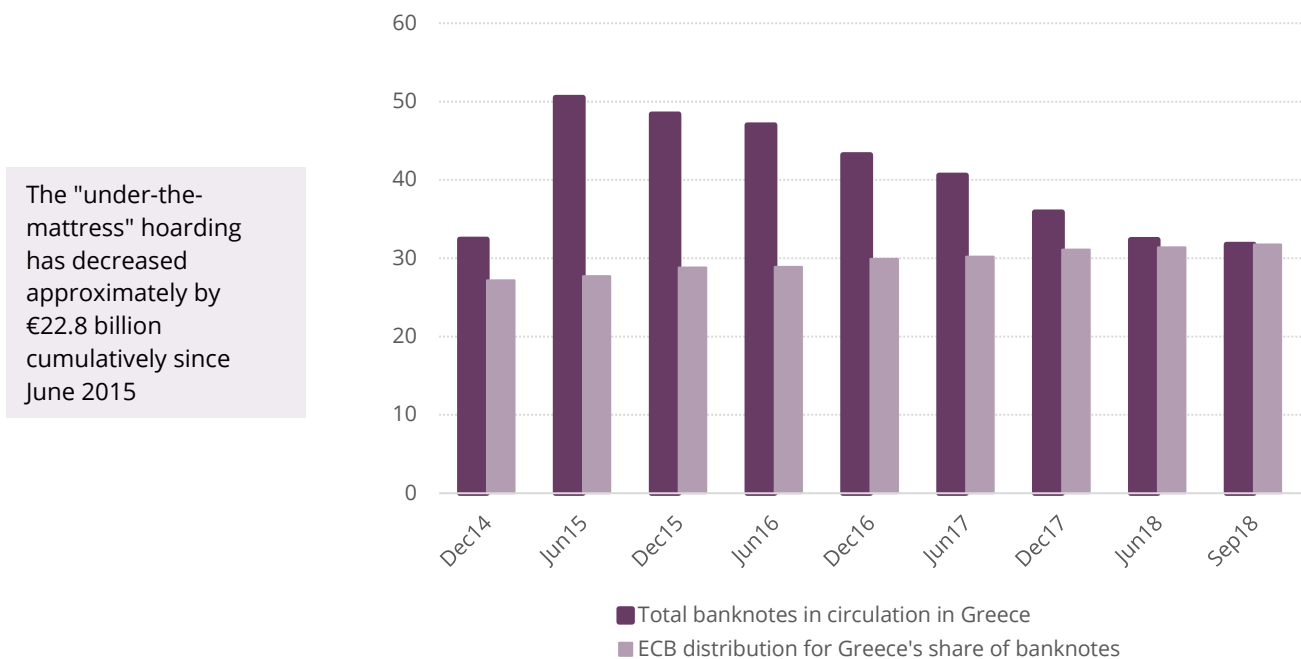
From August 2015 until August 2018, the private sector deposits increased by €17.6 billion, out of which €8.7 billion came from households and €9.0 billion came from non-financial corporations. However, the total amount of deposits remained significantly lower than in November 2014, by €26.8 billion, of which €25.2 billion comes from households and only €1.6 billion from businesses. Deposits from non-financial corporations actually increased since the end of 2014 by €0.9 billion. The average monthly annual deposits inflow reached €797 million for households and €411 million for non-financial corporations in the period between June and August 2018. The return of deposits during that period was significantly higher year on year, by €209 million and €172 million respectively, but also compared with the average monthly deposits' inflow between August 2015 and August 2018 for both the households and the non-financial corporations, by €235 million and €244 million respectively.

The inflow of banknotes in the system, which entails a weakening of the "under the mattress" hoarding, continued to be conducive to the return of private sector deposits. 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, as the supply of banknotes from the ECB to Greece

corresponded to €27.7 billion and €31.1 billion respectively (Figure 2.9) Therefore, the hoarding of cash has gradually subsided, as the banknotes in circulation beyond the ECB allocation declined from €22.8 billion in 2015 to about €1.8 billion in May 2018. The climate of confidence recovery in the banking system is encouraged by the ongoing gradual relaxation of the capital controls, with the latest regulatory change of September 2018 facilitating the transactions of legal entities abroad and fully eliminating the domestic cash withdrawal limits.

Figure 2.8

Banknotes in circulation (billion €)



Source: Bank of Greece

That said, the recent tumult in the Greek financial markets accentuate the uncertainty for the banks' mid-term prospects, and inhibits the faster recovery of the trust and the return of deposits. In the remaining months of 2018 and in 2019 private deposits are expected to strengthen, as long as trust is being gradually restored, and political and economic uncertainty does not increase, for example about the achievement of the agreed fiscal targets and reforms, especially concerning the banking system.

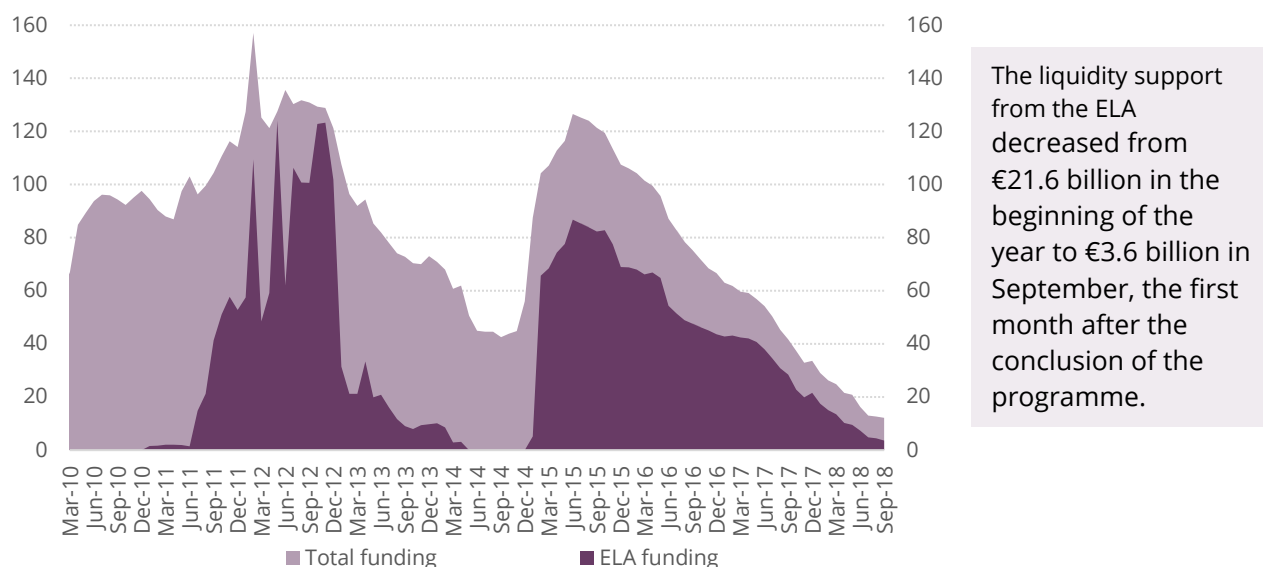
The second largest element of the liabilities of the banks concerns the financing from the Euro system. The dependence of the banks on the Emergency Liquidity Assistance (ELA) of the ECB continued to decline rapidly in the past few months, as the ELA funding fell to €3.6 billion in September 2018, from €28.5 billion a year earlier and €86.8 billion in June 2015 (Figure 2.). Correspondingly, the total funding from the Euro system has kept falling, with the outstanding balance standing in September 2018 at its lowest level in a decade, at €12.2 billion, from €41.7 billion in the same month of 2017 and €126.6 billion in June 2015. 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) and issues of covered bonds. The possibility of further growth and the cost of use of these alternative financing instruments depends



on the credit assessment of the banks by the international credit rating agencies, and especially on whether these titles will acquire an «investment grade».

Figure 2.9

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



Source: Bank of Greece

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 instruments used for achieving the targets for NPL reduction, and the exclusion of Greek sovereign bonds from ECB's quantitative easing programme are considered to be among the crucial factors that reduce the credit capacity of the banks.

Private sector funding, excluding loan write-offs, decreased by 1.5% in July and August 2018, a marginal improvement in comparison with the preceding quarter (-1.7%). Nevertheless, the credit contraction is more acute than in the preceding four quarters, when it was around 1.0% (Table 2.10). In July and August 2018, the annual credit contraction in the private sector came from its reduction by 2.0% to households, by 1.5% to sole proprietors and unincorporated partnerships and by 1.1% to non-financial corporations. The corresponding annual rates of change for the second quarter of 2018 were -2.2% for households, -1.3% for sole proprietors and -1.5% for non-financial corporations. The trends of bank credit differentiated strongly among the economy's sectors, with credit expansion in Tourism, Industry, Manufacturing and Agriculture, stagnation in Trade, and contraction in Energy, Shipping, Construction and Transport. In contrast to the prolonged contraction of credit in Greece, Box 2.1 (section 2.1) shows the evolution of bank financing of the private sector in different categories of Eurozone countries between 2012 and 2018, with a focus on the effect of ECB's quantitative easing programme in each of these country categories.

After a period of tightening of the banks' lending criteria in 2015 and 2016, and stabilisation in 2017 and in the first quarter of 2018, a research by the Bank of Greece showed that the bank lending criteria to enterprises became marginally less strict in the second quarter of 2018, for the first time since 2002, when the trend was first recorded. This concerns loans to big corporations, while the criteria for SMEs have remained the same. The criteria are anticipated to become marginally stricter in the third quarter of 2018, especially when it comes to long-term borrowing. As for the demand for credit, there was some signs of growth in the second quarter of 2018, especially by SMEs, a trend which is anticipated to remain only marginally positive in 2018.

The Non-Performing Exposures (NPEs) receded in the second quarter of 2018 by 4.1% or €3.8 billion, faster from the 2.1% rate recorded in the preceding quarter, yet slower than in the corresponding quarter of last year (4.8%). The NPEs totalled €88.6 billion or 47.6% of the total exposure in June, about €18.6 billion or 17.3% 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 65% from March 2016 until the end of 2019, reaching €65.0 billion. In accordance with the intermediate targets of the operational plans, the banks have successfully implemented 43% of the total correction. Nevertheless, the NPE contraction rate should accelerate in order to achieve the targets for the current year and 2019, but also the currently discussed ambitious targets for 2020-2021. Note that the target likely to be agreed by the banks and the SSM for 2020-2021 is a total decrease of NPEs to about €35 billion or below 20% by the end of 2021.

Table 2.10

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

Quarter/Year	3/17	4/17	1/18	2/18	July18	August 18
Total private sector	-1.0	-0.9	-0.9	-1.7	-1.5	-1.5
Households & NPIs	-2.3	-2.3	-2.3	-2.2	-2.0	-2.0
Sole proprietors and unincorporated partnerships	-0.1	-0.1	-0.4	-1.3	-1.5	-1.5
Non-financial corporations	-0.2	0.1	0.1	-1.5	-1.0	-0.9
Agriculture	-6.4	-5.2	-3.3	-2.9	-0.7	6.3
Industry	-4.2	-3.2	-1.7	-1.6	0.9	1.0
Trade	1.8	2.3	1.8	0.2	-0.3	-0.2
Tourism	1.5	0.4	1.1	1.8	2.9	3.5
Shipping	0.6	-1.2	-3.4	-3.3	-3.5	-4.6
Construction	-2.0	-1.6	-1.5	-1.8	-2.5	-2.4
Electricity-gas-water supply	2.7	0.1	-1.7	-10.7	-12.2	-11.8
Transport and logistics	39.0	29.3	20.2	-6.6	-1.9	-1.7
Interest rates on new loans (period average. %)						
Consumer credit	9.10	8.79	8.42	8.80	9.73	9.98
Mortgage credit	2.74	2.93	2.88	2.93	3.05	2.97
Loans to non-financial corporations	4.43	4.53	4.32	3.83	4.00	4.00

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. Until now, the reduction of the NPLs was mainly based on loan write-offs (€13.6 billion in total since the beginning of 2016), with €1.6 billion written-off from April to June 2018 (against €1.7 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 quarter of 2018, the sale of NPL portfolios increased to €2.0 billion, 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 positive trends include revenues from liquidations (€0.6 billion) and receipts (€0.6 billion) connected with the gradual implementation of electronic auctions and the out-of-court settlement mechanism. The increase of the default rate to 2.1% in the second quarter of 2018 from 1.9% in the previous one and 1.7% at the end of 2017, and the fact that it remains higher than the cure rate, which has remained at 1.8% for the third consecutive quarter, is alarming. The reduction of the NPLs comes mainly from the consumer and business portfolios, contrary to mortgages that remained stable. In corporate lending, the NPE rate was higher in June 2018 among sole proprietors and very small enterprises (68.8%), and SMEs (62.3%), while big enterprises followed at a distance (28.3%).

In order to achieve the NPL reduction targets and to ease the pressure on net capital and assets of the banks, the receipts from collection and liquidations must increase and the cure rate must be continually above the default rate. The improvement and spread of the use of the electronic platform of the out-of-court mechanism, as well as the smooth running of the electronic auctions, are expected to contribute to the faster reduction of the NPLs, in a way that eases the restriction caused by the deleveraging on a new credit expansion.

In the medium term, the projected economic recovery, the post-programme surveillance framework and the medium-term public debt measures, aided by the positive results of the recent stress test, are expected to have a positive effect on the trust in the banking system. At the same time, significant challenges for the banking system such as the volume of NPEs, the capital quality, the low profitability, and the capital market volatility will not go away in the medium term, and thus a systematic and clear strategy is required in order for the banking system to earn the trust of international investors. The rate of return of deposits, the effective treatment of non-performing loans, and the access to the cross-border banking market are factors that will determine the credit policy. Large enterprises, and in particular those listed on stock markets in Greece and abroad will rely more on alternative forms of financing, such as the issuance of bonds.

The interest rates on new deposits remained unchanged at 0.29% between July and August 2018, at the same level as in the second half of 2017. The interest rates on new loans increased to 4.7% in July and August 2018, from 4.4% in the first half of 2018 and 4.8% in the final quarter of 2017. The rise came mainly from the interest rates to individuals, especially those in consumer credit (Table 2.10).

The cost of bank financing to the private sector declined to 4% in July and August 2018, from 4.1% in the first half of 2018, 4.5% in 2017, and 4.9% in 2016, yet it has remained significantly higher than in the other Eurozone countries. Indicatively, according to the ECB composite indicator of borrowing costs (Figure 2.8), the cost for non-financial corporations was around 4% in August 2018, compared to 1.7% on average in the Euro area, 1.6% in Germany, and 2.5% in the periphery

countries of the Euro area that completed a programme (Portugal, Ireland, Cyprus, Spain). The spread of the cost of borrowing for the Greek corporations fell to 238 and 157 basis points compared to the average for the Eurozone and its periphery respectively, higher than its lowest level in eight years that was recorded in June 2018 (198 and 110 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 much higher than the average of the countries in the periphery of the Eurozone that have completed an assistance programme.

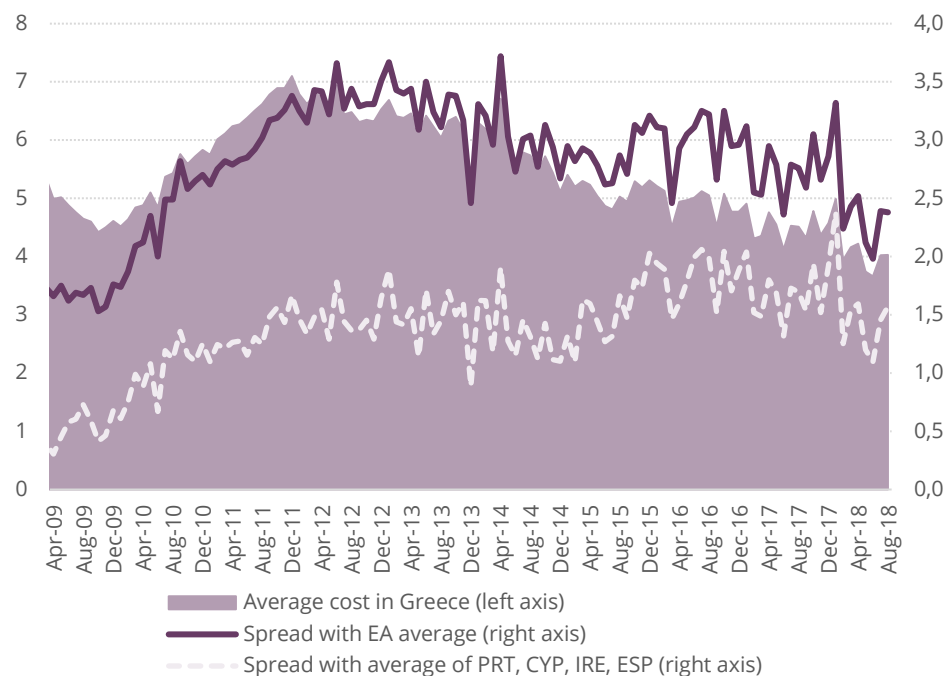
As regards the cost of new borrowing from the markets by the Hellenic Republic, the yield of the 10-year bond increased to 4.2% in August and September 2018, from 3.9% in June 2018. Up to a certain degree, this is due to the fact that, after successfully raising €3.0 billion from the markets by issuing a seven-year bond with a yield at 3.5% in February 2018, the international investment climate has deteriorated. This development was the result of at least three factors. The implementation of the first set of protectionist trade policy measures by the US and its trading partners put the growth momentum of international trade and the outlook for global growth at risk. Secondly, the gradual turn of the US to a tighter monetary policy and the increase in US yields prop up the international interest rate trends. Thirdly, the weak economic situation in emerging markets such as Turkey and Argentina, with strong inflationary pressures, increase the price of risk in periphery economies, such as the Greek one. In contrast with the global environment, the uncertainty domestically eased somewhat with the agreement on the implementation of medium-term measures for Greek public debt, the provision of funds for building a cash buffer, and the finalisation of the post-programme relationship with the European partners and creditors.

The easing of the uncertainty in the Greek economy was confirmed by the recent upgrades of Greek bonds from rating agencies like S&P by one grade in June, and Fitch by two grades in August. Note, however, that the rating of the Greek bonds remains between three (Fitch) and six (Moody's) notches away from the investment grade, i.e. it remains in the speculative grade. The low credit rating is partly related to the time needed by the markets in order to gain trust in the prospect that the country will pursue reforms even after the end of the adjustment programmes. Indicatively, the bonds of Cyprus regained the investment grade by S&P in September 2018, after 6.5 years overall, and 2.5 years after the end of the assistance programme. For the time being, compared to the other Eurozone countries, the cost of borrowing from the markets by the Hellenic Republic remains significantly higher (Figure 2.9). In September, it stood at 380 basis points higher than the German 10-year bond (from 380 b.p. in the second quarter and 350 b.p. in the first quarter of 2018), and by 260 basis points higher than the average of the countries in the Eurozone periphery that until recently participated in support programmes (from 260 b.p. in the second quarter and 250 b.p. in the first quarter of 2018).

Figure 2.8

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

Despite the significant decline since 2012, the borrowing costs of companies remained 157 basis points higher in August, compared with the average of the Eurozone periphery

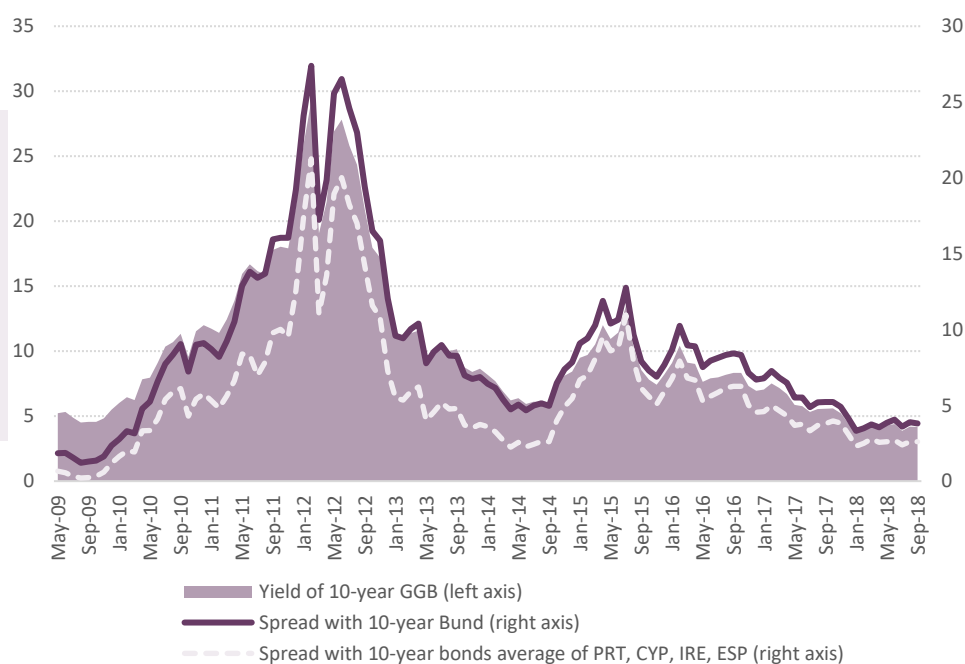


Source: ECB

Figure 2.9

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

The spread of the 10-year Greek bonds against the German bund stood at 380 b.p. in September, after falling to its lowest level in eight years in early 2018 at 330 b.p.



Source: ECB



## 3.PERFORMANCE AND OUTLOOK

### 3.1 Macroeconomic Developments

- Decline of the growth rate of the Greek economy in the second quarter of 2018, for the first time since the beginning of the recovery: 1.8%, instead of 2.5% in the preceding quarter and 1.5% in the same quarter of last year
- GDP expansion by 2.1% overall in the first half of 2018, 1.2 percentage points faster than a year ago
- Rise of GDP mainly from the external balance, due to expansion of exports (+8.5%) and marginal expansion of imports (+0.6%)
- Slight increase in private consumption (+0.4%), decline in investment (-5.0%)
- The reduction of investment and imports came to a considerable degree from the "base effect" of high imports of ships in Q1 2017

#### Recent macroeconomic developments in Greece

The Greek economy grew by 1.8% during the second quarter, 0.3 percentage points faster than in the corresponding quarter of 2017. However, the GDP growth rate was lower in comparison with the previous quarter, for the first time since the beginning of the recovery of the Greek economy, by 0.7 percentage points. In the first half of 2018, GDP was 2.1% higher year on year. The rise of domestic output came from improvement in the external balance of Greece, from continuous significant expansion of exports and a slight increase in imports. It was caused by a significant increase in exports, despite the increase in imports as well. The contribution of household consumption, which was mildly stronger, came next, while the weakest boost came from investment.



In detail as to the trends in individual components of GDP in the first half of this year, domestic consumption marginally increased by 0.3%, at a similar rate as a year ago (0.4%). Its increase came from growth in the second quarter by 0.8%, as it declined in the first quarter. Concerning the components of total consumption, the increase was driven by private consumption, with a rise by 0.4%, albeit smaller than last year. Public consumption was lower by 0.9% compared to the first half of last year, when the fall was notably stronger (2.0%).

Investment expenditure declined in the first half by 5.0% compared with the corresponding period of 2017, when it had increased strongly by 13.3%. The decline came exclusively from lower gross fixed capital formation by 7.6%, while depreciation expenses increased by 8.3% or €174.6 billion, reaching €2.29 billion. Investment in fixed capital dropped this year in both quarters, at a weakening rate. The expansion of stock accumulation is the main reason of the mild increase of investment in the second quarter (2.1%), despite the fall in fixed capital.

Almost all the decline of fixed capital formation came from extensive fall in Transport - Military Equipment, by 53.5%. This decline is mainly the result of the «base effect» from the strong increase in the corresponding period of last year, by 78.4% or €1.37 billion. In turn, this change was due to a similar trend in investment in ships in the same period of 2017 (81.8% or €1.06 billion increase of imports). The much smaller formation of fixed capital in this kind of means of transportation (-73.3% fall in the imports of ships) was the key driver of the drop in the category of Transport - Military Equipment and thus in overall fixed capital investment. This effect is expected to occur, with notably lower intensity, in the final quarter of this year as well.

Among the other categories of fixed capital, which all strengthened in the first half of the current year, the strongest growth in relative terms was recorded in ICT equipment (21.0% or €1.0 billion) while in absolute terms fixed capital increased most in machinery and defence systems (20.3% or €444 million), against a contraction by 11.4% and a marginal increase by 0.5% respectively in the same quarter of the previous year. Investment in Other Constructions came next with 9.2%, counterbalancing their retreat a year ago (-11.8%), while similar growth was recorded in Housing (8.2%), after 11 years of continuous drop in this period of the year. The lowest percentage and absolute growth was recorded in investment in agricultural products, by 4.9% or only €2 million, in contrast with their marginal drop in the first half of last year, by 0.5%.

In the external sector of the economy, the strong export expansion during the first quarter carried over to the next quarter. As a result, exports increased year on year by 8.5% in the first half of this year. Their growth was stronger than last year, when it reached 7.4%. Both key export components contributed to this increase, with the positive impact from the exports of goods slightly stronger than the impact from the exports of services (8.9% or €1.4 billion, against 8.0% or €1.0 billion). 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 10.2%, while the exports of goods had increased by 5.9%.

On the other side of the external sector, imports, the trend changed between the first two quarters from negative to positive. This is related to the change in the trend of imports of goods, as the imports of services have increased steadily and strongly since the beginning of the year. The change came from a slight weakening of the growth in ship imports in the second quarter, which, as mentioned before, is the main reason in the contraction of fixed capital formation. Overall in the first half of 2018, imports increased by 0.6% year on year, slowing down strongly in comparison

with the corresponding period of last year (8.0%). The imports of services increased for the third consecutive year, about as strongly as a year earlier (14.0% against 13.4%). The trend change of the imports of goods in the second quarter did not prevent their decline overall in the first half of 2018 by 2.3%, against growth a year before by 7.1%. The much stronger increase in exports resulted in a significant restriction of the trade balance deficit, by 63.7% or €2.28 billion, to only €1.3 billion or 1.4% of GDP.

On the supply side, the domestic gross value added increased in the first half of this year by 2.3%, stronger than in the corresponding period of 2017 (0.9%). Output increased in most of the major sectors of the Greek economy (8 out of 10). The strongest increase took place in Construction, by 10.1%, offsetting its decline of last year (-8.8%). The output growth in Professional – Scientific – Technical Activities and Arts-Entertainment-Recreation came next with 7.8% and 7.6% respectively, posting stronger growth than in the same period of 2017 (1.8% and 3.5%). Weaker growth was recorded in two of the bigger sectors of the economy, Wholesale – Retail Trade - Transport – Storage - Hotels – Restaurants and Industry, 3.2% and 3.0%, which had also presented growth a year earlier, milder in the first case (1.2%) and stronger in the second (7.2%). Agriculture-Forestry-Fishing grew at a rate of 4.2%, while activity of Public Administration – Defence – Compulsory Social Security increased by 2.0%, compared with a contraction by 1.7% and 1.5% the year before. The weakest, only marginal, growth was recorded, just like last year, in Real Estate (0.2%).

By contrast, activity in Financial - Insurance Activities contracted by 9.7%, continuing and strengthening their decline from last year (-5.4%). The decline in Information-Communication, the other sector in recession in early 2018, was much weaker, by 1.6%, similar to that recorded a year ago.

On October 17<sup>th</sup>, ELSTAT notified Eurostat of its second estimate of GDP for 2017, revising as well the GDP for the years 2015 and 2016. The major changes compared to previous GDP estimates for those years concern a number of GDP components for 2017. The change in fixed capital formation, in particular, was significantly moderated in all three years. In greater detail, the last year GDP growth rate was revised upwards, to 1.5% from 1.3%. The small upgrade came from a significantly larger than initially estimated increase in household consumption, from 0.1% to 0.9% and a milder drop of public consumption (-0.4%, against -1.1% initially), while the expansion of imports was marginally smaller (by -0.1 p.p. to 7.1%). The weaker growth of investment, by 10.0% instead of 15.7%, prevented a stronger increase of GDP last year. The increase in investment was found to be smaller in 2016 as well, by 1.3 p.p., to 7.4%, while in 2015 they had declined less, by 6.1% and not by 9.0% as in the previous estimates. Note that the announcement of the revised quarterly GDP data for those years will take place with the announcement of the first GDP estimate for Q3 2018 in the upcoming November.

The start of the tourist season in the second quarter, as well as the significant increase of employment in Education, which is difficult to explain given the period it took place, were the main drivers of the decline of the unemployment rate in the second quarter both quarter on quarter and year on year. In particular, the unemployment rate dropped below 20% for the first time since the third quarter of 2011, to 19.0%, 2.1 p.p. lower than in the corresponding quarter of 2017. In total during the first half, unemployment was marginally higher than 20% (20.1%), also 2.1 p.p. lower than a year earlier. The decline in unemployment came mainly from a rise in employment

by 1.8% or 66,800 (59.6% of the reduction of unemployment) and secondarily from a decline of the labour force (by about 45,300).

Most jobs were created in sectors that had not previously shown strong uptrend in their employment, while their output did not strengthen significantly either. The strongest year-on-year employment growth was recorded in Health Services – Social Protection, by 21,800 (9.7%). As mentioned in the previous report of IOBE, part of this increase stemmed from the hiring of 4,200 people in public hospitals gradually since March 2017 through two special employment programmes of 12-month duration. The first programme, with 3,100 beneficiaries, was extended in January 2018 for a year. Agriculture – Forestry – Fishing came next, with 15,100 more jobs (3.3%), followed by Professional – Scientific – Technical – Administrative Activities (9,600 or 4.7%) and Information – Communication (9,300 or 10.9%). Sectors with significant contribution to employment last year, such as Wholesale-Retail Trade, Tourism and Manufacturing had a much milder increase this year (8,200 against 19,800 last year, 3,000 from 11,900, and 1,100 against 10,500).

The sluggish household consumption demand was reflected in the price trend, which turned from deflation in the first quarter of 2018 (-0.1%) to inflation in the next (0.5%). This change is also related to the increase in global petroleum prices by 18%. Overall in the first half of this year, the CPI stood 0.2% higher than in the corresponding period last year, when the inflation rate totalled 1.3%. The halt of the price growth came mainly from the change of the trend in Food – Non-Alcoholic Beverages (0.2% in Q2, from -1.0% in Q1 2018), the acceleration of inflation in Transport (3.0% from 2.0%), as a result of the higher petroleum prices, the price increase in Communications (3.3%, from -0.1%) and the weaker price fall in Housing, also a consequence of higher petroleum (heating oil) prices. By contrast, the increase of prices of Alcoholic Beverages – Tobacco in Q1, by 6.4%, probably due to the hoarding of tobacco products in late 2016, before the excise duty hike from 01/01/2017, which had a restraining effect on the rise in prices at the beginning of last year, eased sharply during the second quarter (2.1%). Consequently, the inflation pressures it caused in the beginning of 2018 also weakened.

In conclusion, the trends in the GDP components in the second quarter of 2018 and in the first half 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 the first half of 2015, by 0.6%. After a slight increase of private consumption in the second quarter, resulting in a marginally higher level than last year in the first half overall, 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, namely the intense variation of investment in means of transportation and ships, in particular, in early 2017. All the remaining categories of fixed capital increased steadily from January to June 2018, a trend that will probably continue during the current half, which along with the expected weakening or reversal of the trend in the means of transportation will reverse the trend in total fixed capital formation to growth.

Just like in the first quarter, the stronger international demand for goods and services compensated for the negative contribution of domestic demand to GDP during the first half (€2.47 billion against -€560 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 driver of the GDP increase in the first half of 2018, contributing 2.45 percentage point of GDP to growth. The contribution of the difference in stocks was marginally positive at 0.2 p.p. As the strong

negative trend in this category of fixed capital is expected to fade and possibly turn into growth in the coming quarters, the positive impact of the external sector on GDP will probably be moderated. 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 that took place in the second quarter, it may offset the anticipated weakening of the stimulus from net exports on GDP.

In any case, the significant positive impact of the external sector on GDP in the first half of 2018, due to an increase in exports rather than a decrease in imports, marks the gradual transition to a new growth model for the Greek economy, which relies more on openness and less on domestic demand. It is now considered likely that this effect will continue during the second half of the year, albeit with less intensity. Its weakening will be compensated, at least partially, by more investment. However, the determining factor for propping up the growth rate in the second half will come from the dynamic of household consumption. Despite the significant rise of employment this year, the increase of private consumption has been sluggish so far, reflecting the direct taxation burden. The macroeconomic forecast is presented in greater detail next.

Table 3.1

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

Quarter	GDP		Final Consumption		Investment		Exports		Imports	
	million €	Annual rate of change	million €	Annual rate of change	million €	Annual rate of change	million €	Annual rate of change	million €	Annual rate of change
2006	242,770	5.6%	207,996	3.6%	59,903	23.6%	50,972	5.1%	77,739	13.2%
2007	250,459	3.2%	216,977	4.3%	64,948	8.4%	56,384	10.6%	88,891	14.3%
2008	249,881	-0.2%	221,541	2.1%	58,983	-9.2%	58,484	3.7%	89,838	1.1%
2009	239,103	-4.3%	219,961	-0.7%	43,175	-26.8%	47,775	-18.3%	71,691	-20.2%
2010	226,036	-5.5%	207,093	-5.9%	38,648	-10.5%	49,963	4.6%	69,224	-3.4%
2011	205,314	-9.2%	188,126	-9.2%	30,223	-21.8%	49,998	0.1%	63,468	-8.3%
2012	190,284	-7.3%	173,951	-7.5%	22,977	-24.0%	50,579	1.2%	57,515	-9.4%
2013	184,261	-3.2%	167,795	-3.5%	20,713	-9.9%	51,384	1.6%	55,571	-3.4%
2014	185,688	0.8%	168,302	0.3%	22,074	6.6%	55,351	7.7%	59,855	7.7%
2015*	185,042	-0.3%	168,026	-0.2%	20,217	-8.4%	56,936	2.9%	60,097	0.4%
2016*	184,576	-0.3%	167,425	-0.4%	21,693	7.3%	55,857	-1.9%	60,825	1.2%
Q1 '17	46,316	0.3%	41,870	0.3%	7,106	29.3%	14,273	5.2%	16,521	11.2%
Q2 '17	46,707	1.5%	41,835	0.4%	6,049	-1.1%	14,802	9.7%	16,133	4.8%
Q3 '17	46,942	1.5%	41,819	-0.9%	5,607	10.9%	15,504	7.6%	16,234	9.3%
Q4 '17	47,037	2.0%	41,719	-0.3%	6,166	22.7%	15,144	5.3%	16,507	5.0%
2017*	187,001	1.3%	167,243	-0.1%	24,928	14.9%	59,723	6.9%	65,395	7.5%
Q1 '18	47,453	2.5%	41,881	0.0%	6,315	-11.1%	15,470	8.4%	16,038	-2.9%
Q2 '18	47,559	1.8%	42,103	0.6%	6,177	2.1%	16,073	8.6%	16,804	4.2%

\* Provisional data

Source: Quarterly National Accounts, September 2018, ELSTAT

## Medium-term Outlook

- The forecast for growth of the Greek economy in 2018 at around 2.0% remains unchanged. Slight acceleration in 2019 to about 2.5%
- The high growth of exports will carry over to the current half of the year, constituting the main driver for the expansion of economic activity this year (+8.0%). Their positive effect will be moderated next year, due to protectionist policies and the conclusion of the QE programme by the ECB
- Stronger investment activity in the second half, yet much milder than initially anticipated (+3%). Acceleration of investment in 2019, if sources of turmoil and uncertainty in the economic environment and the financial system are addressed
- Sluggish consumption demand by the private sector, under the pressure of tax measures and the rise in contributions (+0.8%). Recovery in late 2018 and in the following year from stronger households expectations after the completion of the programme and the evident non-implementation of pre-legislated fiscal measures for 2019

The recent conclusion of the third adjustment programme, without a follow-up programme or loan agreement, is one of the major political and economic milestones achieved in recent years. It marks primarily the achievement of certain quantitative fiscal objectives (e.g. high primary surpluses), which are a significant indication of the sustainability of public finances in Greece, although, for the examination of the stability of a fiscal adjustment process, importance should also be given to qualitative – structural characteristics. This also entails the adoption of reforms and structural changes in various policy areas, such as the structure and the functioning of the State, its relations with households and firms, and its role in production activity, the social security system, the labour market, and the operation and supervision of certain product and services markets. The implementation and the outcome of these changes usually depend not only on legislation, of course, but also on the conditions and the possibilities for making use of them in every field of activity of the State, the businesses and the households.

The Eurogroup decisions from the 21<sup>st</sup> of June about the medium-term measures facilitating debt servicing, as well as the contribution of the Eurozone partners to the cash buffer of the Hellenic Republic with €9.5 billion, mitigate the uncertainty about the ability of the State to finance its needs in the coming years after the completion of the third programme. Note that these funds are part of the capital reserve totalling €24.1 billion, created mainly with Central Government loans to General Government bodies, through issuing repos of €13.6 billion. The stock created is estimated to be sufficient to refinance the debt for almost 22 months after the end of the programme. However, the existence of this financial instrument for the public sector does not ensure access to finance, under sustainable conditions, for the private sector of the Greek economy. The availability and the cost of capital for the banks, private enterprises and households will depend on a series of factors, most important being: 1) the continuity of economic policy, with the implementation of the fiscal interventions and reforms agreed with the creditors for the post-programme period, which will keep confidence at least at the level achieved at the end of the programme, 2) the continuous reduction of the non-performing loans in the banks' portfolios, according to the set targets, 3) the effects from the conclusion of the ECB quantitative easing program (Q-E) at the end of 2018 on the liquidity and the cost of capital in the Euro area.

Without a doubt, the first of the above mentioned targets will be crucial for the developments in many political, economic and social fields. The smooth transition from the framework of programmes with tight supervision, reviews of their implementation, policy commitments, prior actions for their conclusion and the link of the reviews with funding from the official sector, necessary for debt servicing, to an environment with milder supervision and sparser reviews of the agreed structural changes in the post-programme period, without direct dependence of public sector funding on this, given that there is a cash buffer, is probably the issue with the biggest stakes in the current period. The steady commitment to the fiscal targets set for the coming years in the Medium Term Fiscal Strategy 2019 - 2022 and the unswerving implementation of the reforms scheduled for this period under the final review of the third programme are the main challenges for maintaining and enhancing the credibility of the Greek state and the Greek economy in general. The public sector funding capacity will be indirectly affected by the progress in those matters in the next two years, through fluctuations in the bond yields and the credit rating assessments. Yet, the effects on access to capital and growth of the private sector will be direct, determining inter alia its access to international capital markets and the domestic banking system, and the sentiment on the Athens Stock Exchange.

Significant changes are taking place or are expected to occur outside the domestic environment. Most of them are likely to be detrimental. The major current international economic developments include the intensification of the US protectionist trade policy, the countermeasures by the European Union, China and other countries, and the strengthening of the Euro-scepticism, as reflected on the political developments in Italy and in the United Kingdom, which is entering the Brexit implementation phase. The conclusion of the QE programme by the ECB, after almost four years, is also a major challenge for economic policy across Europe and worldwide, as it involves the gradual fading of its benefits, but also the prevention of possible undesirable developments, such as overheating of the EU economy.

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

- Smooth transition to the post-programme period and the new surveillance process
- Continued fiscal consolidation and reform implementation, carrying through the relevant policy commitments
- Maintain and improve the access to the capital markets by the Hellenic Republic and the private sector
- Mild impact on EU from the conclusion of the QE programme and escalation of the policies of trade protectionism
- Weakening and end of the petroleum price growth in the current half of the year

In greater detail, after the conclusion of the third programme, the smooth transition to the post-programme period, with no deviations from the pursuit of the medium-term fiscal targets and the implementation of planned reforms that might lead to the loss of confidence in the Greek state



and the domestic economy, is a major issue for economic policy, as mentioned earlier. Potential revisions that do not affect the above and use any "fiscal space" are legitimate, for example in the direction of reducing the high direct and indirect taxation, and social security contributions, which provided almost 3/5 of the fiscal consolidation between 2010 and 2017 (9.4 of 16.1 percentage points of GDP). These kind of interventions are included in the alternative measures (outside the base scenario) in the draft of the State budget for 2019, such as reduction of the social security contributions for the self-employed, and farmers to 1/3 of their current level (estimated impact €229 million), subsidy of the contributions for young employees (€103 million), and reduction of the property tax ENFIA by 10% on average (-€263 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 current debate in the public discourse for cancelation or suspension of the implementation of certain fiscal measures that are pre-legislated for 2019 and have a clear structural targeting, such as the pension cuts legislated with the reform of the social security system, sharpen the concern expressed mainly abroad about the sustainability of the significant fiscal performance of previous years and the viability of the social security system, as it is not clear what parameters have changed and the measure is no longer necessary. That said, note that according to the draft State budget, in the scenario without the pension cuts, almost all counteracting measures envisaged in the MTFS 2019-2022, except for the redesign of the family and child benefits, will not be implemented. This scenario is considered very likely, as the European Commission did not ask for clarifications on the Greek budget. The interventions that will not be implemented under this scenario are related to various policy fields, such as social protection, the Public Investment Programme, employment stimulus, and expansion of healthcare, with a total budget of €1.73 billion. The largest such interventions in terms of estimated expenditure include the rent subsidy (€600 million), active employment policies (€260 million) and subsidy of the participation of insured persons in payments for prescription drugs (€240 million). Thus, the fiscal impact on public expenditure in case that the pensions are not cut will be moderated by the cancelation of counteracting interventions and is predicted in the draft budget to total €340 million. Nevertheless, the consequences on the long-term viability of the social security system cannot be assessed without taking into account the dynamic of other parameters, such as demographics, which may have a high impact.

Apart from the adjustment of pensions and the compensating interventions on the expenditure side, other fiscal measures for 2019 are not envisaged in the draft state budget for the new year, on either the revenue or the expenditure side. The alternative measures for the coming year, some of which were presented earlier, include tax deductions of €491 million and additional expenditure of €275 million. Furthermore, no additional measures were taken for the current or the following year, despite speculations for acceleration of the income tax allowance reduction by one year (to 2019), in the final review of the third programme. It is possible that a "social dividend" will be distributed at the end of 2018, albeit lower than in 2016 and 2017. This development is considered possible, as in the draft budget the primary fiscal surplus for 2018, estimated using the methodology of the post-programme enhanced surveillance, it is projected to exceed the target of 3.5% of GDP by 0.24 p.p. or €445 million. Consequently, there will be no additional pressures on household disposable income due to new fiscal interventions in the second half of this year, which is quite likely to carry over to 2019, as it is possible that the pension cuts will not be implemented,



fully or in part. In fact, if the alternative measures are implemented in full, there would be a boost of income and consumption, without side effects on investment or the openness of the economy.

Other recent or expected significant developments affecting household incomes: a) return of retroactive cuts to the armed forces personnel (with estimated cost of around €800 million for this year), b) decision of the labour dispute intermediation service OMED for raising the minimum wage and recognition of allowances in Food Services - Tourism c) decision of the Ministry of Labour for extension of the collective bargaining agreements in September in four sectors (banking, shipping agencies and shipping companies, travel offices and agencies they are members of the International Maritime Union), a practice that will probably be implemented in other sectors as well, and d) adjustment of the minimum wage, as the relevant process is already underway and is expected to be completed in early 2019. The first three developments are expected to strengthen the income of people that are already employed, while the size and impact of the last measure cannot be assessed yet. Nevertheless, the decisions taken by OMED and the extension of the collective bargaining agreements are likely to have a negative impact on employment and thus labour income in the affected sectors, as they will result in higher labour cost.

The ambiguity regarding the 2019 fiscal measures is considered to be one of the causes that have inhibited the retreat of the government bond yields since August 2018. This is probably related to the fact that Moody's did not improve further their assessment of the solvency of the Greek economy in their report at the end of September. They underlined the positive prospects, provided that the Greek government will continue to implement the agreed reforms. Undoubtedly, another development that has hurt the appeal of Greek securities, not only of the public, but also of the private sector, and mainly of the domestic financial market, is the Folli Follie Group case.

Regardless of the impact on expectations, domestically and internationally, caused by the fiscal policy uncertainty, the measures that are implemented since the beginning of 2018 (increase of the current and new indirect taxes, increase of direct taxation for employees – retired people, higher contributions of self-employed persons), will continue to put pressure on the real disposable income of the households and the sustainability and investment of private enterprises. This effect transpired in the sluggish increase of private consumption by 0.4%, despite the increase of employment by 1.8%. It is indicative that in the corresponding period of 2017, when the growth rate was lower than in the current year (0.9% against 2.1%) and the strengthening of employment was similar (1.9%), household consumption had increased by 0.8%. The negative effects of the fiscal interventions are expected to continue in the current half of the year as well.

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 its recovery, by attracting investment and facilitating exports. In order for this to succeed, apart from the credibility of the economic policy, it is imperative that trust in the banking system is restored as well. The last stress test, whose results were announced in May and from which no need arose for recapitalising the banks, is considered to have contributed to the easing of the concern about the adequacy of their capital, which had escalated during the stress test. Besides, after the stress test, the credit rating of the four largest banking institutions was upgraded by Standard & Poor's and was confirmed by Fitch.

These results, in conjunction with the mid-term public debt measures that followed the conclusion of the third adjustment programme, led to the mild recovery of the trust in the domestic banking system, as reflected in the gradual acceleration of the return of deposits. According to the latest data on deposits, since May, the first month after the announcement of the results of the stress test, until August, the last month for which there are available data, the deposits that come from the private sector (non-financial corporations and households) increased by 4.0% or €4.9 billion, reaching €128.5 billion. The rise came mainly from the expansion of the deposits of households by €2.9 billion or 2.8%, yet the relative change in business deposits was stronger, by 10.4% or €2 billion, a clear indication of the recovery of the trust in the banking system. After this change, the deposits were 11.2% higher (€12.9 billion) compared to July 2015 (the first month of the capital controls) and at their highest level since February 2015. The recent lifting of all restrictions on capital transfers within Greece and the further relaxation of the restrictions on transfers outside the country, with the increase of the amount transferable abroad, in euros or in foreign currency, from €3.000 to €10.000, per person and per trip abroad, and the ability to withdraw cash from banks abroad up to €5.000 in Euros or in foreign currency, per month, per depositor and per bank, are expected to influence the inflow of deposits in the rest of 2018 and in early 2019. These and some other changes in the capital controls provide the bank customers with greater discretion to manage their deposits.

The inflow of deposits observed so far is not sufficient to change significantly the credit policy of the banks. According to the latest data released by the Bank of Greece, while at the end of 2017 and in the first two months of 2018, credit to non-financial corporations increased slightly, since March credit returned to contraction, which strengthened in April and May (-2.0%), while at the beginning of August it was around -1.0%. Concerning credit to households, it remained on a downtrend, with a marginal slowdown of the contraction from the start of the year until August, from 2.4% to 2.0%. According to the banking institutions, the downtrend in the credit to firms is due to low demand. On the business side, many corporations keep facing problems because of past bank loans, which keeps them in the category of legal entities that have defaulted on their obligations in the past (in the Tiresias system), regardless if their loans are still in the portfolio of the banks or have been sold.

If the expansion of deposits continues with the current or a faster pace, the trend of credit supply is expected to gradually change in 2019 from negative to slightly positive. Yet, certain conditions need to be met, such as further reduction of the non-performing exposures (NPEs) and easier access of the banks to the global financial markets. The electronic platform for out-of-court settlement of debts and the electronic auctions are expected to have a positive impact on the former objective. The NPEs remained on a downtrend until June, at a rate of 4.1% in the second quarter, faster than in the second quarter (2.1%), yet slower than in the final quarter of 2017 (4.8%). After their new retreat, the NPEs reached €88.6 billion or 47.6% of the total loan exposures by the end of June, €18.6 billion or 17.3% lower than their level in March 2016. With this NPE level, the relevant target has been exceeded (€90.2 billion), mainly due to lower than expected net inflow of new NPEs and higher than expected level of write-offs and collections. In addition, the sale of loans increased in the second quarter, reaching €2.0 billion, while liquidations also increased (to €0.6 billion) as a result of the electronic auctions. The write-offs reached €1.6 billion, while the collections totalled €0.6 billion.

Despite their continuous decline, the NPEs are still much higher than the target set at €65.2 billion for the end of 2019. Moreover, their management affects the assets, the net capital and the profitability of the banks, lowering their results to lower than anticipated levels. These effects put great pressure on the bank stock prices during the previous and the current quarters. In order to reduce these pressures, as stated in previous reports by IOBE on the Greek economy (section 2.2 C), greater attention should be paid to the quality characteristics of the NPE reduction. In particular, collections and liquidations should strengthen with the use of electronic out-of-court settlement and electronic auctions, while the write-offs and sell-offs at low prices, which put pressure on net capital and the assets of the banks, should be reduced. Currently, the sale of three loan packages by Eurobank and Alpha Bank, totalling €4.7 billion, is ongoing. Progress in NPE reduction without negative effects on capital adequacy and the financial results of the banks is a prerequisite for changing the credit trend, together with the continuing and strengthening return of deposits. Consequently, credit is expected to continue to contract in the short-term.

As noted in previous reports, the scarcity of bank credit together with the easing of the caution on the prospects of the Greek economy, especially after the conclusion of the third adjustment programme and the mid-term public debt measures, will lead many enterprises, primarily those listed on the stock markets, to utilise financing tools available through the capital markets. Besides, many firms used them successfully last year and in the beginning of this year (e.g. OTE and TRASTOR). That said, the ongoing case of Folli Follie Group has dampened the trust of investors in the Greek capital market and in Greek enterprises. The tumult in the domestic capital market has contributed to the postponement of corporate bond issues, both in Greece and abroad, which were rumoured to take place after the summer.

In order for trust to recover, it is vital that this matter is investigated and resolved as soon as possible. Provided that this happens, it would not be long before the firms are able to use the financial tools available both in Greece and abroad to finance themselves in beneficial terms. However, the raising of funds through these tools is expected to be limited, for the time being at least. Despite the adverse developments, the enterprises that raised funds in this way implement their investments plans without delays.

The difficulties in finding financing are less pronounced for many of the export companies, as the recent significant increase in export activity boosted their liquidity and the availability of capital, facilitating their operation and investments. These effects will likely continue in the current year, as according to the recent forecasts on the world economy, the growth rate in the Euro area, the major destination of Greek exports, will not be significantly lower than last year, albeit it will be lower than initially anticipated. However, it is now possible that international trade conditions for firms not only in Greece but also in the EU and beyond will not be as beneficial in 2019 as in previous years. This is mainly due to the adoption of protectionist measures in the US and counter-measures by countries such as the EU, China and Canada, and the renegotiation of multilateral trade agreements, such as NAFTA. The consequences of those policies cannot be assessed yet. A first approach comes from the recent revision of the IMF forecasts on the growth rate of global trade for 2018 and 2019, by 0.6 and 0.5 p.p. respectively, to 4.2% and 4.0%. However this revision incorporates the negative effects of a possible failure of the Brexit negotiations as well. The latest data on global trade, for the first seven months of the year, do not indicate a significant change in the growth rate from last year (4.1%, from 4.4%). The marginal slowdown came from a similar trend

in the volume of global exports (3.7% against 4.2% last year), while imports grew at the same rate as last year, by 4.6%.

Regardless of the international effects, manifested or expected, of US protectionist trade policy, given the small share of Greek exports of steel and aluminium products for which restrictions were imposed (€130 million in 2017 or 0.4% of the exports of goods), the direct impact is anticipated to be limited. The indirect impact, however, is expected to be stronger, through effects on the exports of EU and third countries that in turn will diminish the demand for Greek products.

The demand for Greek exports from the Euro area is also expected to decline in 2019, in comparison with 2016 – 2018, due to the end of the ECB QE programme at the end of the current year. This means that the central bank will not increase further the net purchases of securities in 2019 in order to provide liquidity to the Eurozone public and private sectors. Nevertheless, the ECB will continue to purchase bonds to keep its total exposure from the end of the current year unchanged. Despite the fact that the Greek sovereign bonds were not included in the QE, a development that would have provided access of the Greek banks to cheap liquidity and the possibility to provide more capital to companies and households in the country, the Greek economy benefited indirectly, thanks to the stimulus on the other Eurozone countries, which constitute the major destination of Greek exports. Indicatively, from 2015 to 2017, the Eurozone countries accounted for 37.8% of the Greek exports. The exports to the Euro area increased by 25.7%, much faster than total exports (5.8%).

The latest data from ELSTAT and the Bank of Greece on the exports of goods and services concern the first eight and seven months of 2018 respectively. The balance of goods was marginally positive, while the balance of services presents a significant improvement, mainly during the summer months, mainly due to the growth for one more year of the tourist flows. In greater detail, the exports of goods increased in the first eight months of 2018 by 17.6% or €3.29 billion, slightly faster than in the corresponding period of 2017 (15.1%), and from the first four months of this year (13.2%). This increase came almost equally from exports excluding ships and fuels and from exports of fuels, which increased by €1.54 billion and €1.6 billion respectively (12.0% and 27.7%). Export growth accelerated in the former category since last year (€835.8 million) and remained similar in the latter category (€1.62 billion). The exports of ships, which have a very small share in total export flows, declined by 63.0% or €49.1 million. Despite the substantial increase of the exports of goods, the similarly strong increase of imports resulted in a marginal decline of their deficit, by 1.8% or about €265 million. Given their marginal decline in the first quarter (-0.2%), the rise came from an increase in the second quarter. In particular, imports increased by 9.0% or €3.02 billion, mainly due to growth of imports of goods other than fuels and ships by 17.4%. The largest contribution to the growth of imports came from fuels, by 60.3% or €3.34 billion, followed by goods other than fuels and ships, with an increase of 3.5% or €900.2 million. In contrast, the imports of ships declined by 51.3% or €1.22 billion.

Regarding the trade flows in services, their balance improved, 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 in the first seven months reached 11.8% or €1.74 billion, accelerating in the latest quarter with available data to 14.8%. Nevertheless, so far the growth rate has remained lower compared with the corresponding period of 2017 (13.6%). Their increase came primarily from stronger travel receipts, by 16.0% or €1.13 billion, and secondarily from the rise of exports of transport services (14.2% or €718.6 million). The remaining receipts,

from other services, fell by 3.8% (-€101.5 million). The expansion of the imports of services reached 14.9% (€927.7 billion), surpassing slightly the last year increase (14.2%). The strongest rise in absolute terms was recorded in the transport category, by €531.1 million or 18.6%, followed by stronger domestic demand for other services (11.4% or €257.5 million), and for travel services (12.5% or €139.1 million). It seems from the above that the rise in exports benefits most the liquidity of 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 provide greater impetus to investment activity this year than in 2017. Indicative examples include the 14 regional airports conceded to Fraport Greece, the Asteras Vouliagmenis complex investment, which was approved in early 2018, the new trains brought in Greece by TRAINOSE, the first phase of the Athens International Airport expansion that began in August, and the investment in Hellinikon, where the licensing is expected to be completed by November. Regarding the progress of the implementation of the privatisation programme in the current year, the acquisition of 66% of the common shares of DESFA for €535 million was completed in July, raising about €350 million more than the target. During the same month, TRAINOSE was declared the preferred investor for EESSTY SA (ROSCO) and two investors were deemed to qualify to the second phase of the Hellenic Petroleum tender. In addition, AIA submitted a new offer for a 20-year extension of the concession contract for the Athens airport in September, totalling €1.115 billion, which is larger than the revenue envisaged in the 2018 budget (€500 million). Earlier this year, 5% of the common shares of the Hellenic Telecommunications Organisation (OTE) were acquired by Deutsche Telekom, raising €34 million more than the target, while investors were pre-selected for the second phase of the Egnatia Road, Marina Chios and Marina Alimos tenders and the transfer of 67% of the Thessaloniki Port Authority to South Europe Gateway Thessaloniki Limited was completed. Therefore, so far six tenders have been completed, totalling more than €2.18 billion. Despite the fact that the number of tenders scheduled for completion this year (14) exceeds the number of completed tenders, tenders with preselected bidders and those for which expression of interest has been submitted, the revenues raised up to now are considered high. If more privatisations that are in their second phase, such as Hellenic Petroleum, Egnatia Odos, and small ports – marinas, are completed in the second half of the year, the proceeds target envisaged in last year's budget (€2.74 billion) might be accomplished. Investment in these privatisations, that will spur economic activity, is expected to take place from late 2019 – early 2020, as it takes time to approve and license the relevant investment plans.

While the investment boost from privatisation is going to be stronger this year than in previous years, contrary to initial expectations, the contribution of the Public Investment Programme (PIP) will be sluggish this year as well. In the first eight months of 2018, the PIP grants did not exceed €1.48 billion, €105 million less than in the corresponding period of last year. In addition, expenditure was lower by €923 million or 38.5% compared with the target, representing only 21.9% of the expenditure target for 2018 (€6.75 billion). One of the reasons for the under-execution of PIP came from the fact that the revenues were lower than expected for this period by €166 million or 10.3%, albeit higher by 20.6% or by €245 million compared to last year (€1.19 billion). The shortage came from low absorption of EU funds, which fell 11.3% shorter from the target. However, the shortage of PIP revenues corresponds to only 18.0% of the expenditure shortfall and thus it does not constitute the main reason for the underperformance of the PIP. Given the significant



under-execution of the PIP during two thirds of 2018, the grant target set for the year overall (€6.75 billion) is not expected to be met. PIP expenditures are expected to reach their 2017 level by the end of 2018 (€5.95 billion), which was the lowest since the year 2000. However, as they will be even more frontloaded than last year, they will contribute even less to investment activity and employment. Having said that, the few grants that will be awarded this year will constitute a low basis of comparison for the implementation of PIP in 2019. In the draft of the State Budget for 2019, the forecast for its expenditure in the basic scenario is €550 million higher than the corresponding expenditure for 2018, at €7.3 billion, while in the alternative fiscal scenario it is higher by €250 million. These forecasts, combined with the possibility of more accelerated implementation of the PIP next year (given this year's delays), lay the ground for a slightly stronger contribution of PIP to investment next year.

The payment of arrears by the public sector boosted business liquidity. 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 and €500 million from the previous payment of arrears 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 this year for this purpose total €2.25 billion. Between March and August grants of €1.42 billion were given to public sector entities in this regard. Nevertheless, overdue payments of public obligations in this period did not exceed €582.9 million. Thus, a large part of the available funds has not been utilised yet. These funds are enough to pay more than half of the arrears and tax refunds outstanding by the end of August, amounting to €3.04 billion.

As for the trends in key figures of the world economy that affect the prospects of all national economies, the price of Brent oil has kept rising, with short interruptions. In early October, it came in the vicinity of \$85, reaching its highest level since December 2014. Subsequently, it fell to \$81. Note that the rise continues despite the fact that the members of OPEC, along with other oil producers, such as Russia, agreed to expand daily production in late June, without announcing specific targets, which temporarily restrained the price of oil, until mid-August. As stated in previous IOBE reports, in addition to the strong growth both in the most developed economies and in regions with emerging economies (e.g. Asia, the Commonwealth of Independent State, and the Middle East), the prolonged rise of oil prices in 2018 also came to some extent from specific events. These events include the widespread decline of production in Venezuela in the last few years, Iran's responses to the US decision to withdraw from the nuclear agreement and to impose sanctions and the new escalation of the armed conflict in Libya. The already high level recorded in 2017 will attenuate the rise compared to last year towards the end of the year.

A reversing of the upward trend on oil price, at least until the end of the year, is not expected. Short interruptions may occur. The 2018 uptrend is reflected in the recent relevant IMF forecast, according to which the average price of oil in 2018 will be \$7 higher than expected in the previous report and about \$16.4 or 31% higher than in 2017. In the light of these developments, the prediction for the price of Brent oil in 2018 is marginally revised upwards, to \$75 from \$74, about 37% higher than in 2017. In 2019, provided that the oil-producing countries will not reduce substantially their production, the expected slight weakening of the growth of the world economy, as a result of the protectionist policies and the tighter monetary policy by the ECB, will weaken the upward pressure on oil prices, resulting in slight decline.

The offsetting impact of the appreciation of the euro against the dollar on the impact of the rise of petroleum prices on the cost competitiveness of industries in Greece and the Eurozone has faded since late January, since the appreciation stopped at 1.25. Until mid-April, the exchange rate fluctuated in the region of 1.23 – 1.24 and then it fell to 1.17 until the end of May. Since then, it has remained largely unchanged, with the exemption of August, when it temporarily fell to 1.13. Since then, the exchange rate has been consistently below its 2017 level and thus it has not compensated for the higher petroleum price. The fall in the exchange rate is the result of the fiscal measures in the US, which impacted the expectations of the business and investment community, but also of the gradual tightening of the monetary policy by the Fed, which pushed up the yields on US bonds notable higher than yields on the bonds of the Eurozone's strongest economies. The ECB decision to keep the interest rates unchanged at least until the summer of 2019, despite the end of the QE programme in December, has contributed to maintaining low interest rates across the Euro area. These developments have led to capital transfers to the US.

By contrast, the concerns over the impact of the US protectionist trade policy measures on the international competitiveness of the US products are growing, especially following the announcement of countermeasures by the European Union, Canada, China and Mexico, with a deterring impact on capital outflows from the Euro area. Nevertheless, the EU-Japan bilateral trade agreement from July 2018 (together they represent 22% of world trade), which lifts most trade tariffs between them, can compensate for the pressures on European exports caused by the US protectionist measures. That said, the Euro area has to deal with major upcoming challenges, concerning the effects of the Euroscepticism, which now is setting policies in Italy, one of its largest economies, as well as with Brexit, the refugee flows, the high rate of NPLs etc. Taking this into account, it is quite probable that the euro-dollar exchange rate will fluctuate around its current level in the second half of 2018, thus slightly lower year on year. Therefore, it will no longer buffer the impact of higher oil prices on the cost of production of goods and services in the Euro area in the second half of this year.

As to the latest developments in domestic economic activity and in short-term economic indicators, on the supply side, after stabilisation or the start of mild uptrends in early 2018, there are signs of strengthening. Consumption demand seems to be growing, temporarily at least. In greater detail, according to the latest data, while industrial production remained stable year on year in the first quarter of 2018, it increased slightly in the second quarter, by 1.6%. However, this increase is milder compared with the same period last year (4.3%). The increase of industrial activity came mainly from the trend change in Mining (7.7% in May-August, against -3.2% earlier in the year). The contraction of production in Electricity eased from 5.7% in the first quarter to 1.7% in the second. Output in Manufacturing continued to grow at a similar rate, by 2.3% in the second quarter against 2.1% in early 2018, while the decline is stable in Water Supply, by around 2.5%. The latest available data on construction activity concerns July. Between May and July, its growth from the first quarter strengthened in all its dimensions. Building permits increased by 8.1% more (from 5.1% in the first quarter), while the expansion was stronger in terms of surface area (19.5% against 10.6%) and volume (24.7% from 3.1%). In Tourism, the growth of receipts accelerated between May and July, reaching 17.0%, from 13.9% in the first quarter. The boost came from higher number of visitors by 21%, against 12.8% growth in the first quarter.



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 2.5% year on year in the May-July quarter, stronger than in the first quarter (1.1%). The domestic Consumer Price Index inflations intensified since June. In the third quarter, it stood at 1.0%, while it had not exceeded 0.2% in the first half of 2018. The inflation acceleration came mainly from the larger price increase in Communications, by 4.0%, against 1.7% earlier this year, and from trend change in Food – Non-alcoholic Beverages (1.3%, from -0.4%) and Housing (0.3%, against -1.2%). Except for the last change, which reflects the exogenous to consumer behaviour rise in petroleum prices, the rest are not the result of such factors (e.g. an increase in indirect taxes). For this reason, they are considered to be related with stronger household demand.

Considering the above trends in economic indicators and the anticipated developments (mainly those linked to the completion of the third economic adjustment programme, the developments in the banking sector, and the likely suspension of the pre-legislated for next year pensions cuts) for the forecasting of the GDP components and other macroeconomic indicators, the recovery of household consumption from the second quarter is anticipated to carry over to the current half of the year and perhaps strengthen. As predicted in previous reports by IOBE on the Greek economy this year, it will be mainly boosted by further decline of unemployment, due to the expansion of employment and income in export branches of services, the public sector and in construction activities. A positive impact is also expected to come from stronger household expectations after the conclusion of the adjustment programme, but also because of the discussions on suspension of pre-legislated fiscal measures for next year. The fiscal measures adopted from the beginning of the current year and especially certain direct tax changes, such as the lifting of the 1.5% discount on advance tax payment for wages and pensions and the hike in social security contributions of sole proprietors, will prevent stronger growth of private consumption. The expected small price increase will exert pressures on the purchasing power of wages and transfers, albeit weaker than last year. As a result of the above effects and considering the recent GDP revision for 2017, private consumption is anticipated to increase slightly in 2018 overall, by about 0.6%.

The momentum of household consumption in 2019 will largely depend on the likely suspension, in full or in part, of the pre-legislated pension cuts and on the final decisions regarding suggested alternative measures. The positive effects from the fast growth in international trade on employment and income domestically will weaken due to its slowdown. That said, Tourism will continue to create new jobs, while employment is also expected to rise in the public sector and in Construction. The outcome of the procedure for readjustment of the minimum wage will be a crucial factor for the trend in disposable income and employment. Taking this into account, the first forecast for private consumption in 2019 is for growth at a rate a bit higher than 1.0% (1.4%).

Regarding public consumption, as the fiscal consolidation in 2018 was focused mainly on higher revenue from direct and indirect taxes, and social security contributions, rather than spending cuts, public consumption was expected to slightly increase. However, it declined in the first half, for the third consecutive year in the corresponding period, despite the fact that the State Budget revenues exceeded the target, while the revenues of the General Government were higher than a year ago. Therefore, there are no revenue shortages against the targets that could substantiate public expenditure cuts. The targets for primary expenditure, set at higher levels than in 2017, seem to be met as well. Taking into consideration the current trends in public consumption and the fact that its level has been similar or higher in the last two quarters, compared with the two

previous ones in the same year, it is now considered likely that public consumption will continue to weaken, at a similar rate as in the first half of the year. Consequently, in contrast to earlier IOBE forecasts, public expenditure is estimated to decline in the current year, a trend that is strengthened by the recent upward revision of the estimate for last year, by about 1.0%.

The fiscal interventions set in the MTF 2019-2022, amounting to €3.0 billion, focused primarily on expenditure (pension cuts) and secondarily on revenues (increase in contributions for the self-employed). Compensatory measures of €2.0 billion are planned, as mentioned above, yet they do not involve public consumption. The alternative package of fiscal measures of the draft state budget, apart from the suspension of the pension cuts and other measures mentioned earlier, includes the recruitment of 7,500 employees, which if implemented will expand public consumption. In any case, given that the regular staff of the public sector has remained stable since September 2015 and given the gradual decline of the ratio of retirements over hires from 4 to 1 in 2017 to 1 to 1 in 2019, employment in the public sector is expected to increase. This development will have a major role in setting the trend of public expenditure in 2019.

The easing of the caution about the Greek economy and the improvement of the investment climate from the outcome of the bank stress test, the conclusion of the third programme, the mid-term measures for public debt and the creation of a cash buffer, were moderated by the recent tumult in the stock market, created by the case of Folli Follie, the worse than anticipated financial results of the banks, and the uncertainty about the fiscal policy in 2019. As mentioned above, the confusion that this has created in the investors has wider impact that extends beyond the financial market, affecting the attractiveness of issues of corporate bonds of Greek enterprises and the return of deposits to the banks. Therefore, efforts should be immediately extended to stall to deterioration of the environment, before the decline of confidence consolidates. If uncertainty subsides, the implementation of investment plans that had been postponed until the conclusion of the programme, the finalisation of the debt measures and the post-programme framework of relations with the international partners, will begin. The current circumstances are not considered favourable for raising capital by issuing securities on the financial markets, a funding tactic successfully followed by a number of large companies last year.

The return of private sector deposits after the announcement of the outcome of the last stress test, although an indication of recovery of confidence in the banking system, is not sufficient for a change in the trend of credit supply and a boost of investment. The pursuit of the objectives of limiting NPEs will have a negative effect on this development not only this year, but in 2019 as well. If the return of deposits continues and strengthens, a development tightly linked with the easing of the concern mentioned above, while the targets for rapid decline of NPEs are achieved, without affecting the assets and the net capital of the banks, it is likely that a mild expansion of credit to non-financial corporations will start next year.

As repeatedly mentioned in previous quarterly reports of IOBE, the further boost of export demand in the current year, mainly from the EU, will boost investment activity in export-oriented branches of Manufacturing, Tourism, and Transport. This effect is one of the main drivers of the growth of fixed capital formation, recorded in all its categories in the first half of 2018, except for transport equipment. The sharp drop in investment in this sector came from a transient, negative 'base effect' of high investments in ships in the corresponding period of 2017. This outcome is quite likely

to be reversed in the coming quarters, as the issue of new licences for professional use vehicles continued to increase in the first two months of the third quarter. However, the expected slowdown in international trade next year, mainly due to protectionist measures, will probably restrain investment in exports.

Investment recovery is expected this year, after many years of decline, in Construction as well. It comes 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, has declined steadily since the beginning of 2018. The latest data on building activity show that growth continued until the beginning of the third quarter. The changes in property assessed values in June caused a temporary slump in segments of the real estate market, until their effects were assessed, yet this also defused the uncertainty that existed pending their announcement. As there are no plans for raising the property tax burden in 2019, while there is also a slight possibility of a small decrease in the property tax ENFIA, on average, according to the alternative set of proposed fiscal interventions, there is no barrier to further growth of building works.

Although the PIP expenditure last year was lower than in 2000, based on the pace of implementation this year until August, a stronger boost of investment is not expected, while the expenditure for the year total might actually decline, as in 2017. However, the low level of grants this year will form a low basis of comparison for the 2019 PIP, which is predicted in the draft state budget to have higher expenditure by €250 - €550 million than this year. Combined with the possibility of more accelerated implementation in light of the delays of this year, the PIP might have stronger contribution to investment next year.

Based on the expected trends and perspectives in factors affecting investment, and considering its small increase in the first half of the year, investment is projected to increase overall in 2018 by around 4.0%, much weaker than originally anticipated, despite the recent downgrade of their rise last year. Investment activity will likely strengthen in 2019, with a double-digit growth rate, at around 12%-14%.

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, slightly weaker in the former and stronger in the latter economies, and in developing and emerging economies with a growing share in the Greek exports of goods (e.g. North Africa), will continue to contribute to their strong increase in the second half of 2018. This will probably happen on a slightly smaller scale, as the growth in the EU has shown signs of "fatigue" in the current half of the year. The assessment of the impact of the US protectionist trade policy measures and countermeasures on the exports of Greece remains difficult. Besides, there were no significant changes in the world trade figures until July. It is now considered possible that these changes will become more pronounced in 2019, while the full intensity of their consequences will depend on the range of reactions and their effects on renegotiating multilateral trade agreements (such as NAFTA). As the value of Greek exports of goods for which import restrictions were imposed takes up a small share of the total value of Greek exports of goods, the impact is expected to be mostly indirect, from the impact on EU countries, which absorb more than half of the Greek exports of goods.

Regarding the exports of services, the stronger growth of international tourist flows that is reflected in the available data for the early summer, and of the corresponding receipts, are considered reliable clues of an even greater contribution of the tourism sector to domestic

economic activity this year. It is now likely that the growth rate of revenues from the provision of tourist services to foreigners will be stronger than in 2017 overall (10.5%, at €14.6 billion). It is premature at this stage to make predictions for the flow of international tourists next year. Besides, this year's tourist season has still not finished. The lower euro-dollar exchange rate, compared to the first four months of 2018 is not boosting the competitiveness of the Eurozone exports, as it is hovering at about the same level as a year before. The rate is not anticipated to change significantly at least until the early months of 2019, as the short-term positive effects of the US fiscal policy and the tighter monetary policy by the Fed, but also of the intensifying Euroscepticism, are largely offset by the concerns over trade policy and the intense uncertainty for escalation of the trade tensions in the future. Considering the developments in international trade and in related indicators in Greece and abroad, exports are anticipated to increase by about 8.0% on average in the current year. Next year, exports will continue to expand, albeit at a weaker rate, by about 5.0 – 5.5%.

Table 3.2

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

	2016	2017	2018	2019
<i>Annual percentage changes</i>				
Gross Domestic Product*	-0.2	1.4	1.9	2.3
Private Consumption	0.0	0.1	0.5	0.9
Public Consumption	-1.5	1.1	1.2	0.4
Gross Fixed Capital Formation	1.6	9.6	10.3	12.1
Exports of Goods and Services	-1.8	6.8	5.7	4.6
Imports of Goods and Services	0.3	7.2	5.5	4.4
Employment	0.5	2.1	1.7	1.8
Compensation of Employees per capita	-0.9	0.1	0.8	1.3
Real Unit Labour Cost	0.8	0.2	-0.3	-0.5
Harmonised Index of Consumer Prices*	0.0	1.1	0.5	1.2
<i>Contribution to real GDP growth</i>				
Final Domestic Demand	-0.2	0.9	1.9	2.3
Net Exports	-0.7	-0.2	0.0	0.0
Inventories	0.6	0.6	0.0	0.0
<i>As a percentage of GDP</i>				
General Government Balance	0.6	0.8	0.4	0.2
Current Account Balance	-0.7	-0.9	-0.4	-0.5
General Government Gross Debt	180.8	178.6	177.8	170.3
<i>In percentage terms</i>				
Unemployment (% of labour force)	23.6	21.5	20.1	18.4

\* Based on the Labour Force Survey methodology

Source: European Economic Forecast, spring 2018, European Commission, May 2018

As predicted in the previous report by IOBE on the Greek economy, the trend in imports changed from negative in the first quarter of the year to positive in the second. As the decline in the first quarter came mainly from the negative «base effect» on the imports of ships a year earlier, which continued to have a milder effect in the following quarter, their growth is expected to strengthen

overall in the current half of the year. The increase will mainly come from fixed capital formation rather than stronger domestic consumption. The new easing of capital controls favours the increase of the demand for imports. The high price of oil and the decline in the euro-dollar exchange rate will inhibit stronger growth of imports. Taking into consideration that the overall increase in investment will be notably weaker than initially anticipated, the forecast for growth of imports is revised down to 3.5%. Together with the much larger increase of exports, the trade balance will improve significantly. The stronger domestic demand next year, 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 than this year.

Summing up the forecasts for the trends in the key components of GDP for 2018, household consumption is anticipated to increase slightly, mostly from further growth of employment and household disposable income in export-oriented services, the public sector and construction. A positive impact is expected stronger expectations of households after the end of the adjustment programme, but also from the likely suspension of the pension cuts next year. The fiscal measures introduced from the start of 2018 will prevent a stronger rise of private consumption. The positive effects of global trade growth on employment and income will weaken next year, yet Tourism will continue to create new jobs, while employment will likely increase in the public sector and Construction as well.

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	1.9	2.5	2.1	2.4	2.0	2.4	2.0	2.3
Private Consumption	1.0	1.2	0.5	1.2	0.6	1.4	:	:	0.1	1.1
Public Consumption	0.2	0.2	1.2	0.2	-1.0	1.5	:	:	0.7	1.3
Gross Fixed Capital Formation	0.8	11.1	10.3	11.5	0.2	10.5	:	:	9.1	9.4
Exports	7.5	4.6	5.7	4.6	8.0	5.3	:	:	5.9	4.7
Imports	3.4	3.8	5.5	3.8	3.5	6.3	:	:	4.1	4.5
Harmonised Index of Consumer Prices (%)	0.6	0.8	0.5	0.8	0.8	1.3	0.7	1.2	0.6	1.1
Unemployment (%)*	19.9	18.2	20.1	18.4	19.3	17.9	19.9	18.1	20.4	19.4
General Government Balance (% GDP)	0.3	1.1	0.8	0.4	:	:	0.5	0.0	0.5	0.4
Current Account Balance (% GDP)	:	:	-0.9	-0.4	:	:	-0.8	-0.4	-0.1	-0.1

\* Based on the Labour Force Survey methodology

Sources: (2017) Explanatory note of the 2019 Budget, Ministry of Finance, November 2017 - European Economic Forecast, autumn 2017, European Commission, November 2017 - The Greek Economy 03/18, IOBE, October 2018 - World Economic Outlook, IMF, October 2018 - Fiscal Monitor, IMF, October 2018 - OECD Economic Outlook No. 103, May 2018

Although the fiscal adjustment for 2018 was planned to continue through mainly through higher revenues, allowing for a mild increase in public sector consumption, this category of public spending declined in the first half of the year, despite the fact that the SB revenues exceeded the set target. Taking into consideration this trend of public consumption and the fact that its level is

about the same or higher during the final quarters of this year, compared with the two previous ones, it is now considered likely that it will continue to decline until the end of 2018.

None of the planned fiscal interventions for 2019 concern public consumption. In the draft state budget for 2019, the alternative package of fiscal measures includes, besides the suspension of the pension cuts, the recruitments of 7.500 employees, a measure that if implemented will increase public consumption. In any case, given that the regular staff of the public sector has remained stable since September 2015, there is space for increasing employment based on the relevant rules about recruitment over withdrawal ratios.

Concerning investment prospects, the easing of the caution about the Greek economy and the improvement of the investment climate following the conclusion of the third programme and the outcome of the bank stress test, were moderated by the recent tumult in the stock market. Therefore, efforts should be immediately extended to stall to deterioration of the economic climate. The current circumstances are not considered favourable for raising capital by issuing securities on the financial markets, a funding tactic successfully followed by a number of large companies last year. The return of private sector deposits is not sufficient for the time being for funding a credit expansion by the banking system. The efforts to limit NPEs will continue to inhibit this development. If the return of deposits continues and strengthens, while the targets for rapid decline of NPEs are achieved, it is likely that a mild expansion of credit to non-financial corporations will start next year. The further boost of export demand in the current year will boost investment activity in export-oriented branches of Manufacturing, Tourism, and Transport. However, the protectionist trade measures will probably weaken this effect in the coming year. After many years of strong decline, investment is anticipated to begin to recover in the current and the following year in Construction, mainly from residential construction projects and the implementation of investment projects from completed privatisations and concessions. PIP expenditures will maintain the same low level as last year.

In the external sector of the Greek economy, the continued strong growth in the EU and the US will contribute to the further increase of Greek exports in the coming year. It is now considered likely that the effects from the US protectionist measures and their countermeasures on Greek exports will become more pronounced in 2019. As the value of Greek exports to the US of goods for which import restrictions were imposed takes up a small share of the total value of Greek exports of goods, the impact is expected to be mostly indirect, from the impact on EU countries. The stronger growth of international tourist flows and of the corresponding receipts in the early summer signify an even greater contribution of the tourism sector to domestic economic activity this year. The lower euro-dollar exchange rate, compared to the first four months of 2018, is not boosting competitiveness, as it is hovering at about the same level as a year before.

The trend in imports that changed to positive in the second quarter will strengthen in the current half of the year, mainly due to fixed capital formation rather than stronger domestic consumption. However, the overall increase in investment and thus its impact on imports will be notably weaker than initially anticipated. The stronger domestic demand next year, due to significant increase in both investment and consumption, will affect the demand for imports.



Considering the above factors that affect the trends in the components of GDP, our forecast is that output will increase by 2.0% in 2018 and by about 2.4% in 2019.

The anticipated further boost of export demand, perhaps weaker for products and stronger for services than in the first half of this year, will continue to maintain and create new jobs in the current year in export-oriented sectors and mainly in Tourism and Transport, which will be the main driver of the further decline of unemployment. However, as mentioned earlier, the protectionist trade policies and the conclusion of the ECB QE programme will weaken the rise of exports, and thus their contribution to the creation of new jobs, in the following year. The stronger expectations of the households after the conclusion of the programme and the further relaxation of the capital controls will probably affect their consumption demand, boosting employment in related sectors (e.g. Wholesale-Retail Trade, Food Services). Consumption demand next year is not expected to suffer pressure from new fiscal measures, as the pre-legislated pension cuts are likely to be suspended, while if the remaining measures of the draft state budget, proposed as alternative to those envisaged in the MTFS 2019-2022, are implemented, the disposable income will increase slightly in comparison to 2018.

Employment in Construction is estimated to have increased since the beginning of this year, due to the growth of building activity in residential construction projects, as well as with the implementation of investment projects following the conclusion of privatisation and concession deals. The recovery of activity and employment in the construction sector is now considered likely to continue in 2019. In addition, employment will also increase in the public sector in the current year and in 2019, both with fixed-term and open-ended contracts. This development will be boosted by programmes of the Manpower Employment Organisation OAED, and mainly those for providing community service, and by the created space for hiring regular staff, following the employment stability during the last three years, in accordance with the rules for withdrawals and layoffs. The proposed alternative fiscal measures in the draft state budget for 2019 includes the hiring of 7.500 people. Taking into account these and other factors that affect or will affect employment in the coming year, the forecast for the unemployment rate in 2018 is revised to 19.3%, while for 2019 a weaker reduction is expected, to slightly less than 18.0%.

Concluding with the consumer price forecasts, the inflationary pressure from the rise in the global oil price is anticipated to carry over to the first months of 2019, at least. It may then weaken slightly, due to the gradual slowdown in global trade and growth. As the exchange rate of the euro against the dollar has fluctuated since last August at levels slightly lower than last year, it no longer moderates the consequences of the higher oil prices, which is expected to continue throughout most of the first half of 2019, due to the high euro exchange rate a year earlier. In contrast, the boost of inflation from the changes in indirect taxes implemented from the beginning of 2018 is and will remain marginal (0.1 p.p.), much lower than in 2017. Since hikes of current taxes or/and new ones are not envisaged in MTFS 2019-2022 and in the draft of the State Budget for 2019, they will be no such effect on the price level next year. The lifting of the VAT discount in the six islands that received the largest refugee flows, which was postponed until the end of this year, might have a slightly positive impact on prices. There is no reference on this in the draft of the state budget.

Contrary to the previous years, domestic demand, which has shown signs of recovery, will have a positive impact on prices, in contrast to the past few years. This development is reflected in the fact that the rate of price changes excluding energy goods and with stable taxes was positive in the first eight months of 2018, for the first time since 2011. The aforementioned strengthening of the



household expectations in 2018, together with the fact that no further pressures from fiscal measures on disposable income are expected for next year, will likely maintain or even increase their consumption, boosting inflation. Taking into account the aforementioned trends and forecasts, the average rate of change of the CPI in the current year is expected to be around 0.8%. The first projection for 2019 is that inflation will slightly increase to around 1.3%.

## 3.2 Developments and prospects in key areas of the economy

- Marginal increase of industrial production in the first four months of 2018 compared to the same period of last year (+0.8% instead of +5.6%)
- Decline of activity in Construction in the first half of 2018 (-2.6%), after a boost a year ago (3.9%)
- Weaker growth of Retail Trade volume (1.7% instead of 2.4%)
- Year-on-year, turnover declined in five of the thirteen sub-sectors of Services. In contrast, expectations strengthened

### Industry

During the first eight months of 2018, industrial production increased marginally, by 0.8% year on year, from 5.6% growth in the same period of last year. The slowdown of the growth in the general index came from the fact that in many sectors of Greek industries that recorded a mild increase last year, activity declined to a slight or stronger extent in the current year.

The prices of industrial products increased by 4.3% in the first eight months of 2018 against stronger rise in the same period of 2017 (6.1%). Despite the slowdown of the growth rate, note that this is the second consecutive year when the prices of industrial products increased, after four years of decline (2013-2016). The increase comes primarily from exported products (7.9%, from 10.6% a year earlier) and less from products directed to the domestic market (3.2% from 4.7%). Turnover expanded in the first eight months at a slightly weaker rate than in the corresponding period of 2017 (10.6% against 13.6%).

In the Euro area, industrial production strengthened by 2.3% in the first seven months of this year, compared to 2.2% growth in the year before.

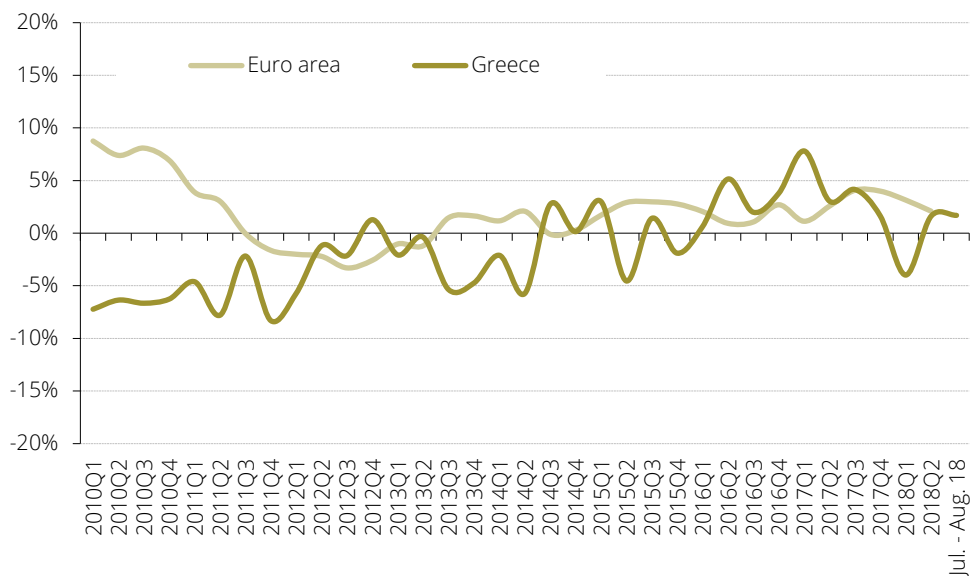
At the sector level, output in Mining-Quarrying expanded much milder than last year (2.2% against 9.8%), while in Manufacturing the growth rate halved compared with a year before, to 2.2% from 4.0%. In contrast, contraction was recorded in Electricity generation this year, against growth in the corresponding period of 2017 (-3.7% from 12.6%), while output in Water Supply contracted at a similar rate (-2.5% against -2.6%).

In greater detail regarding Mining, output in Other Mining decreased slightly stronger than last year (-3.8% from -2.4%). By contrast, production increased strongly in Extraction of Crude Petroleum (45.1% from -19.1%), followed at a distance by Mining of Metal Ores (4.5% against -3.3%) and Coal-Lignite (2.0% against 25.7% a year earlier).

In Manufacturing, output increased in 16 of its 24 branches. Among the branches with special significance for the Greek economy, production increased in Basic Pharmaceuticals by 18.1%, faster than a year earlier (14.2%), in Food Products output was about the same as in the previous year (0.1% from 1.3%) and in Basic Metals growth slowed down (1.8%, against 27.4%).

Figure 3.1

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



Marginal increase of industrial production in the first eight months of this year, after a significant increase last year (0.8% from 5.6%)

Sources: ELSTAT, Eurostat

Among the remaining branches of Manufacturing, the largest contraction in the first eight months of 2018 was recorded in Tobacco Products, where output declined twice as fast as in the same period of last year (-36.4%, from -17.3%). Machinery and Equipment came next (-11.3% from 2.4%), followed by Motor Vehicles (-7.6% from 71.1%) and Other Manufacturing (-6.4% from -22.3%).

Other branches with growing output include Furniture (18.6% from -4.2%), Computers-Electronics (8.0% from 11.8%), Beverages (6.7% from -8.3%) and Machinery-Equipment (5.5% from 1.4%). Lower output growth was recorded in Paper Products (3.6%, from 0.5%), Refined Petroleum Products (3.0% from 6.3%), Non-Metallic Minerals (1.8 from -0.6%) and Wood Products (1.7%, from 0.5%).

Output increased in most 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 Non-durable Consumer Goods strengthened by 2.7%, against a decline by 0.7% a year earlier. Capital Goods came next (2.3%, from 8.7%), followed by Durable Consumer Goods (2.2%, from 1.5%), and Intermediate Goods (0.9% from 7.1%). In contrast, the production of Energy Goods declined (-0.7 from 9.3%).

## Construction

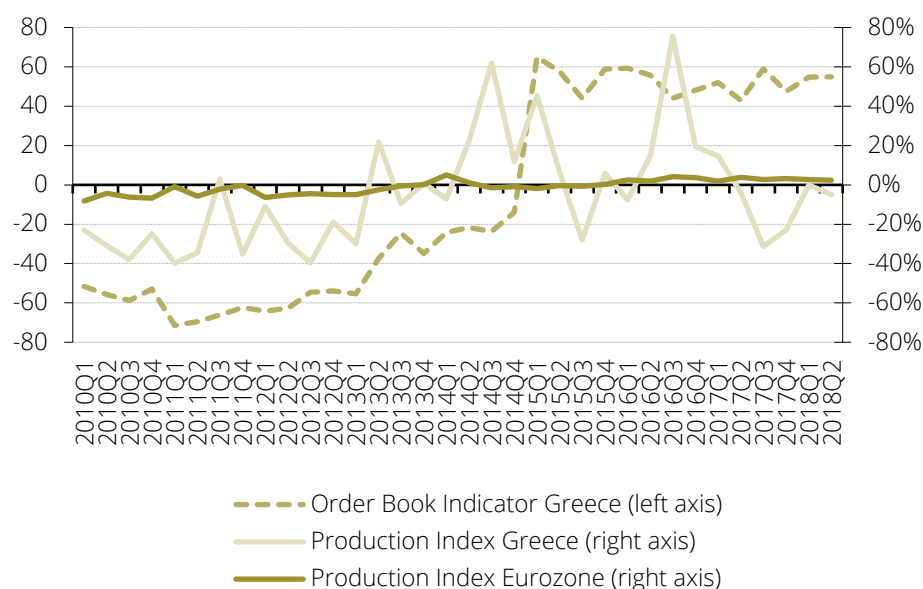
The production index in Construction decreased by 2.6% in the first half, against a rise of 3.9% in the corresponding period of last year. The index averaged 40 points, lower by 60 points than the base year (2010).

Despite the overall stability in the sector, strong and diverging trends prevailed among its constituent activities: the production index in Building Construction strengthened by 24.3%, against a contraction by 3.9% in the first half of 2017. By contrast, the production index in Civil Engineering declined by 22.2%, against 10.5% growth a year earlier.

The monthly data on building activity over the same period point to growth, albeit at a weaker rate than in the same period of last year, in terms of number of permits (7.8% against 15.1%) volume (13.3% against 23.7%) and surface (15.7% against 25.5%) of new buildings.

Figure 3.2

Production Index in Construction and Building Activity Index



Source: ELSTAT

Production in construction in the Euro area strengthened in the second quarter of 2018 (2.6%, against 2.9% the year before).

## Retail Trade

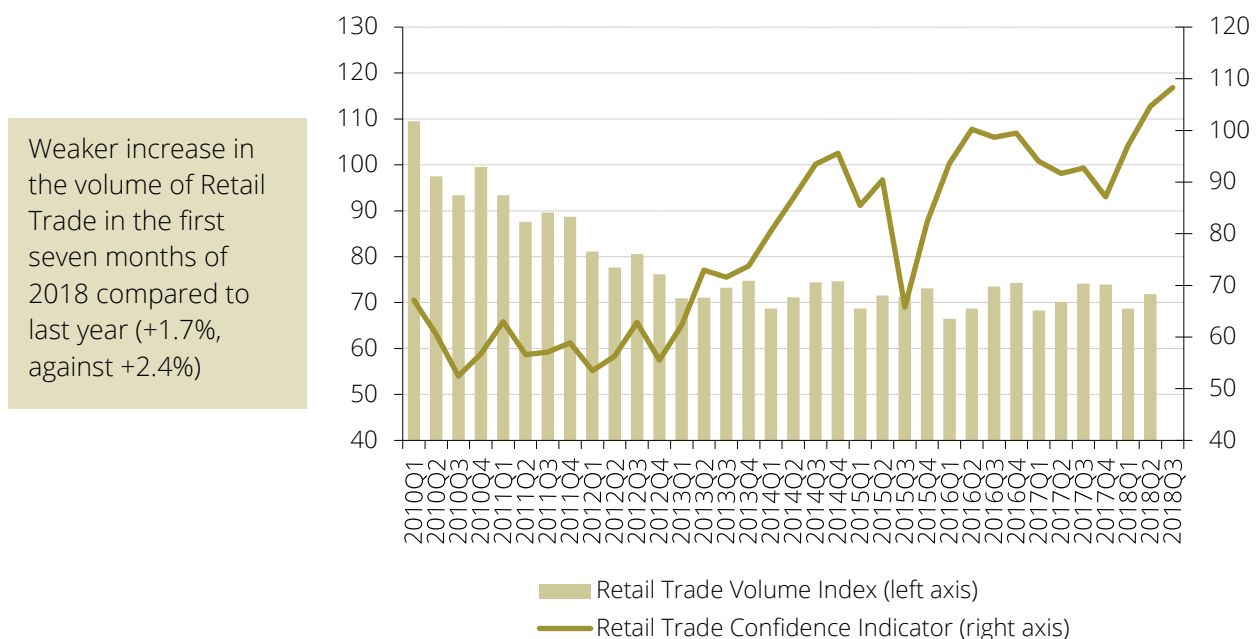
The volume index in retail trade strengthened in the first seven months of 2018 by 1.7%, at a lower rate than in the same period of 2017 (2.4%).

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 6.9%, against weaker growth by 5.4% in the same period of 2017. Supermarkets came next, with 3.9%, against growth by 2.7% in 2017. Sales in Pharmaceuticals-Cosmetics increased by 3.7%, against weaker growth in the same period of 2017 by 1.7%, followed by Department Stores (2.0% against 1.0%). Marginal increase was recorded in Books-Stationery (0.8% against 10.1%) and in Clothing-Footwear (0.4% against 4.4%). In contrast, the contraction rate in Food – Beverages – Tobacco doubled year on year (-6.2% from -3.0% a year earlier). Small losses were recorded (0.3% from -1.9%) in Fuel - Lubricants.

The expectations in Retail Trade strengthened significantly year on year in the first nine months of 2018, according to the leading indicators of the Business Surveys conducted by IOBE. The index for Retail Trade overall increased by 9.1 points year on year, compared with a decline by 6.8 points in the corresponding period of 2017.

Figure 3.3

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



Source: IOBE

At the branch level, expectations weakened year on year in Clothing – Footwear, by 7.6 points, while last year they had increased by 17.0 points. The weakening of expectations in Food-Beverages has notably eased this year, as the index fell by only 2.0 points, in contrast to the large fall last year (-31.3 points). By contrast, expectations significantly improved in Vehicles-Spare Parts (14.8 points, against 8.0 points last year), Household Appliances (14.7 points against -3.8 points last year) and Department Stores (9.2 against -11.2 points).

In Vehicles, in particular, the index reached 128.5 points in the third quarter of 2018, recording an increase of 16.3% in comparison with the corresponding quarter of 2017, when it had increased by 7.4%. However, the index weakened quarter on quarter, as the rate of increase of passenger

car sales was lower than in the first half. Volatility characterised sales, with a high concentration of sales in August, followed by a fall in September, as car registrations were brought forward in light of the implementation from 1/9/2018 of the new regulation for pollutant and consumption measurements (Worldwide Harmonised Light Vehicle Test Procedure - WLTP).

Table 3.4

Volume Index in Retail Trade, annual changes

Category of Retail Trade Stores	Volume Index (2010=100)				
	Jan. – Jul. 2016	Jan. – Jul. 2017	Jan. – Jul. 2018	Change 2017/2016	Change 2018/2017
Overall Index	68.6	70.3	71.5	2.4%	1.7%
Overall Index (excluding automotive fuels and lubricants)	70.9	72.7	74.1	2.5%	1.9%
<b>Store Categories</b>					
Supermarkets	77.7	79.8	82.9	2.7%	3.9%
Department Stores	84.3	85.1	86.8	1.0%	2.0%
Automotive Fuels	63.2	62.0	61.8	-1.9%	-0.3%
Food – Drink – Tobacco	63.3	61.4	57.6	-3.0%	-6.2%
Pharmaceuticals – Cosmetics	65.0	66.1	68.5	1.7%	3.7%
Clothing – Footwear	75.6	78.9	79.3	4.4%	0.4%
Furniture – Electric Equipment – H. Appliances	58.4	61.6	65.8	5.4%	6.9%
Books – Stationary	90.0	99.0	99.8	10.1%	0.8%

Source: ELSTAT

Table 3.5

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

	Jan. – Sept. 2016	Jan. – Sept. 2017	Jan. – Sept. 2018	% change 2017/2016	% change 2018/2017	Change 2017/2016	Change 2018/2017
Food-Drinks-Tobacco	116.5	85.2	83.2	-26.9%	-2.3%	-31.3	-2.0
Textiles - Clothing – Footwear	87.1	104.1	96.5	19.5%	-7.3%	17.0	-7.6
Household Appliances	85	81.2	95.9	-4.5%	18.1%	-3.8	14.7
Vehicles-Spare Parts	98.1	106.1	120.9	8.2%	13.9%	8.0	14.8
Department Stores	97.8	86.6	95.8	-11.5%	10.6%	-11.2	9.2
<b>Total Retail Trade</b>	<b>97.5</b>	<b>90.7</b>	<b>99.8</b>	<b>-7.0%</b>	<b>10.0%</b>	<b>-6.8</b>	<b>9.1</b>

Source: IOBE

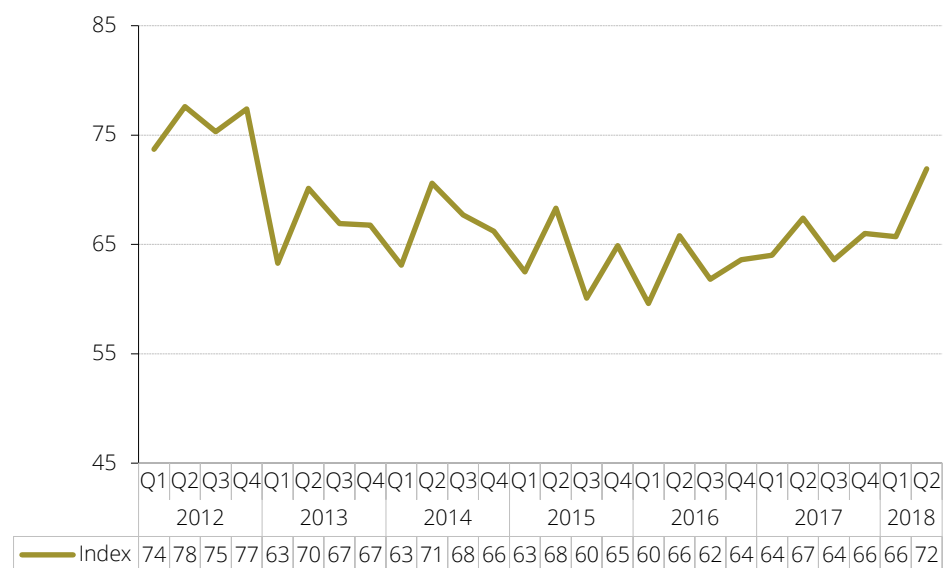
## Wholesale Trade

Turnover in wholesale trade increased by 4.7% in the first half of 2018, against a similar growth in 2017. However, in the second quarter of this year, the rise of the index accelerated, to 6.7% (from 2.4% a year earlier). As a result, the index averaged 69 points, less by 31% in comparison with 2010.

Figure 3.4

Turnover Index in Wholesale Trade

Turnover in Wholesale Trade increased at the same rate as last year in the first half (4.7%). Its growth was stronger in the second quarter (6.7%)



Source: ELSTAT

## Services

Turnover declined year on year in five of the thirteen branches of Services in the first half of 2018.

The strongest activity contraction was recorded in Publishing Activities, by 15.5%, about as much as in 2017 (-16.5%). Architectural – Engineering Activities came next (-13.9%, against -10.5%), followed by Cleaning Activities (-5.9% against -4.6%). Weaker contraction was recorded in Information Service Activities (-1.7% against -9.2% in 2018), while Security - Investigation Activities contracted by 1.4%, compared with a marginal increase of 0.4% in 2017. Lastly, activity in Telecommunications declined marginally, offsetting the rise from the same period of 2017 (-0.4% from 0.4%).

Table 3.6

Turnover Indices (2010=100)

Services branch	% Change 2017 /2016	% Change 2018 /2017
Other professional, scientific and technical activities	-15.5%	-16.5%
Employment activities	-13.9%	-10.5%
Legal and accounting activities	-5.9%	-4.6%
Advertising and market research	-1.7%	-9.2%
Computer programming, consultancy and related activities	-1.5%	0.4%
Office administrative, office support and other business support activities	-0.4%	0.4%
Postal and courier activities	3.9%	-1.2%
Security and investigation activities	6.2%	1.9%
Telecommunications	7.8%	8.1%
Information service activities	8.9%	18.7%
Services to buildings and landscape activities	9.1%	4.1%
Architectural and engineering activities; technical testing and analysis	11.4%	-1.1%
Publishing activities	23.3%	4.9%

Source: ELSTAT

Among the branches where turnover increased year on year, the largest growth was recorded in Employment Activities (23.3%, against 4.9% last year), Office Administrative, Office Support - Other Business Support Activities (11.4%, against -1.1%) and Legal - Accounting - Management Consultancy Activities (9.1%, from 4.1%). Revenues in Computer Programming increased at a similar rate as in 2017 (7.8%, against 8.1%), followed by Postal - Courier Activities (6.2% against 1.9%) and Advertising - Market research activities (3.9 against -1.2%).

According to the leading indicators of the Business Surveys conducted by IOBE for the first nine months of 2018, the sentiment improved year on year in most of the branches of Services. The overall indicator for Services rose by 5.5 points, following an increase by 11.7 points in the previous year. At the branch level, the indicator increased by 2.9 points in Other Business Activities (10.3 points increase last year), 2.4 points in Financial Intermediaries (against 27.9 points increase last year) and 1.6 points in Hotels - Restaurants (from 22.5 points increase a year earlier).



Table 3.7

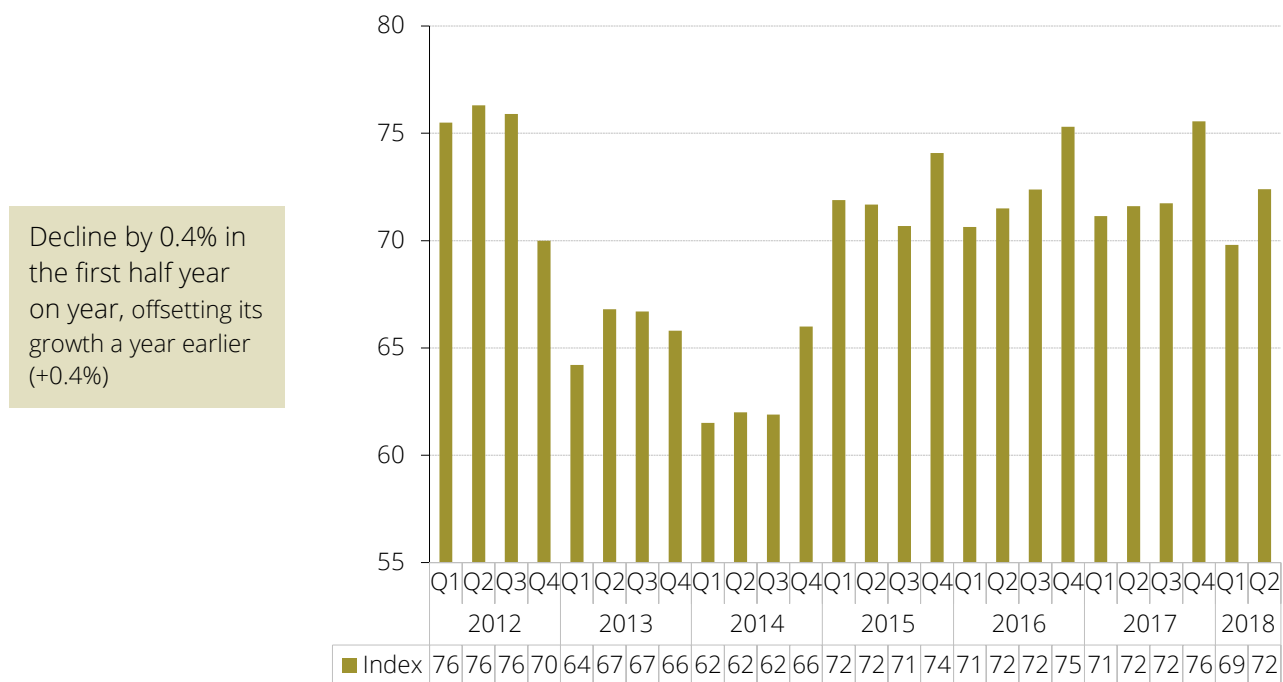
Sector Indices of Business Sentiment in Services (1996-2006=100)

	H1 2016	H1 2017	H1 2018	%Δ '17-'16	%Δ '18-'17	Change 2017/2016	Change 2018/2017
Hotels – Restaurants – Travel Agencies	87.3	109.8	111.4	25.8%	1.46%	22.5	1.6
Other Business Services	53	63.3	66.2	19.4%	4.58%	10.3	2.9
Financial Intermediation	59.9	87.8	90.2	46.6%	2.73%	27.9	2.4
Information Services	74.8	72.2	69.3	-3.5%	-4.02%	-2.6	-2.9
Total Services	74.2	85.9	91.4	15.8%	6.40%	11.7	5.5

Source: IOBE

Figure 3.5

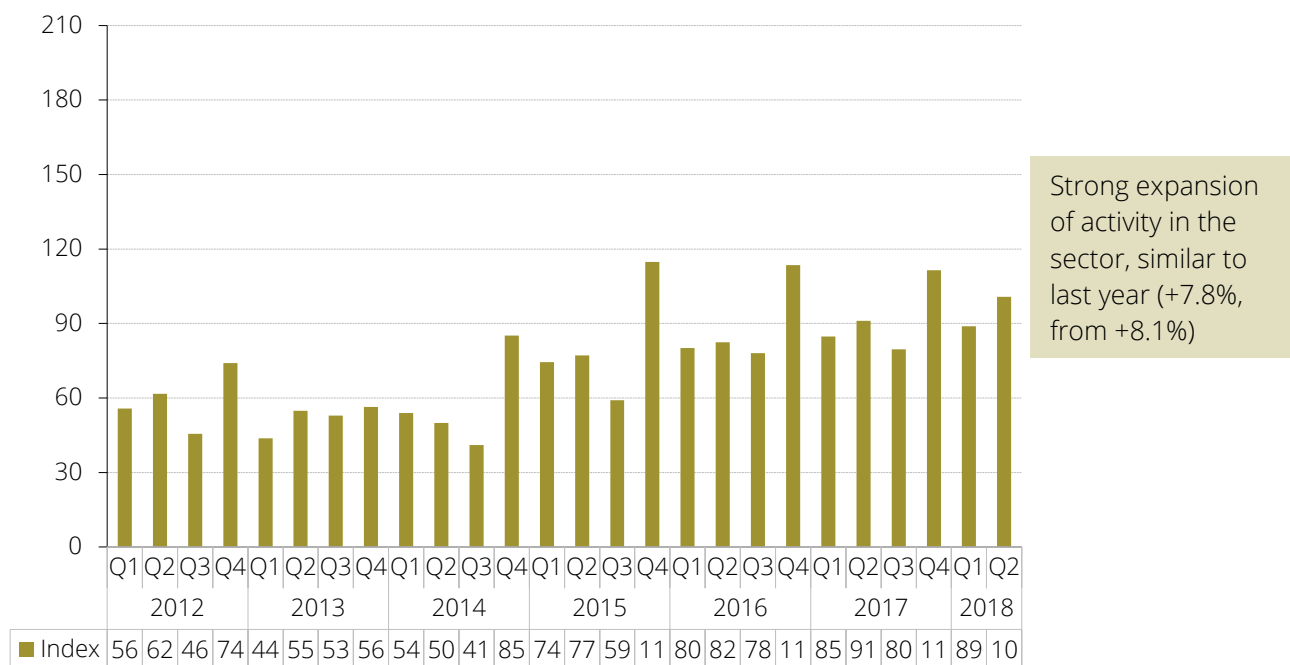
Turnover Index in Telecommunications (branch 61)



Source: ELSTAT

Figure 3.6

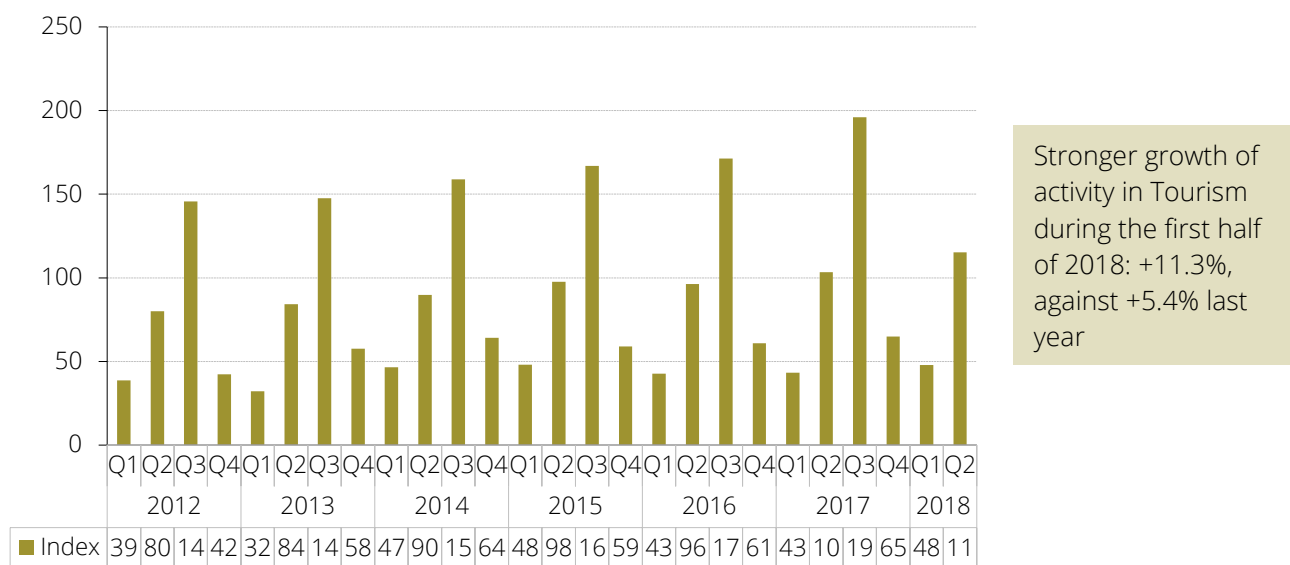
Turnover Index in Information Services (branch 62)



Source: ELSTAT

Figure 3.7

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



Source: ELSTAT

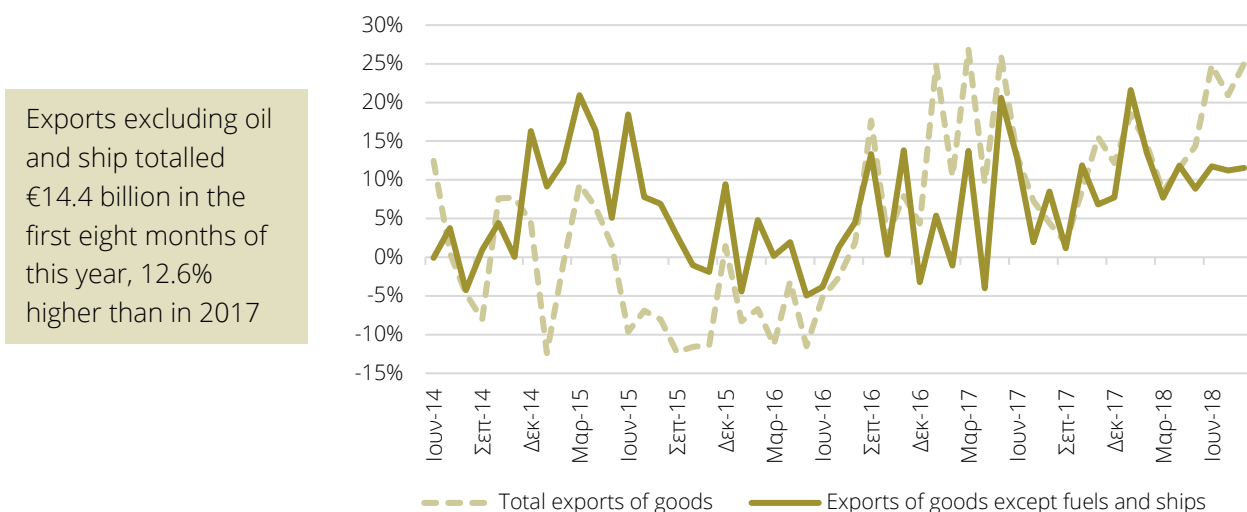
### 3.3 Export performance of the Greek economy

- Exports continued to grow in the first eight months of this year, at a high rate (17.6%)
- Demand strengthened primarily from EU countries (+12.8% or +€1.1 billion), due to strong and steady growth
- The trade deficit fell by 2.4% year on year
- The exports of goods are expected to grow at a double-digit rate this year, despite the protectionist trade policies, due to stronger demand from the EU, high oil prices and slight depreciation of the EUR/USD exchange rate

The exports of goods stood at €21.9 billion in the first eight months of 2018, from €18.7 billion in 2017, recording an increase of 17.6%, according to data from ELSTAT. If petroleum and ship exports are not taken into account, the remaining exports increased by 12.6%, to reach €14.4 billion, from €12.8 billion in the preceding year (Figure 3.11). Imports increased less in the first eight months of 2018, by 8.8%, to reach €35.6 billion, from €32.7 billion a year earlier. As a result of the above trends in the main components of the external balance, the trade deficit decreased by €339.0 million, to €13.9 billion, from €14.3 billion (-2.4%). Subsequently, the value of the exports of goods of the Greek economy accounted for 60.9% of its imports, from less than 56.4% in the first eight months of 2017.

Figure 3.8

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



Source: ELSTAT Processing: IOBE

In greater detail, the exports of Agricultural Products increased by 10.3% in the first eight months of this year, to reach €3.9 billion, from €3.6 billion a year earlier, while the exports of Fuel increased by 28.3%, to €7.5 to €5.8 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 51.3% a year earlier. The growth in Agricultural Products came mainly from a 34.2% increase in the exports of Oils and Fats of Animal or Plant Origin, to €481.7 million, from €358.9 million a year earlier. As a result, their share in total exports strengthened from 1.9% in 2017 to 2.2% in the current year. The exports of

Food – Live Animals, which account for approximately 76.4% of the exports of Agricultural Products, increased by 9.8%, from € 2.8 billion to €3.0 billion. The foreign demand for Beverages – Tobacco, which represented 11.5% of the exports of Agricultural Products, totalled €461.2 million in the first eight months of 2018, lower by 4.9% year on year (from €485.2 million).

The exports of Industrial Products increased by 13.8% in the first eight months of 2018, with their value reaching €9.0 billion, from €7.9 billion a year earlier. This rise is explained mainly by the strengthening of foreign demand for Manufactured Goods Classified Chiefly by Raw Material, by 15.9%, with their value reaching €3.4 billion. The exports of Chemical and Related Products also rose, by 12.6%, to €2.2 billion in 2018, from €1.9 million a year earlier, while the exports of Miscellaneous Manufactured Articles increased by 8.0%, to €1.4 million in the current year, from €1.3 million a year earlier. The export performance strengthened in Machinery and Transport Equipment as well, by 16.1%, to €1.9 billion, from €1.7 billion.

Finally, the exports of Raw Materials increased by 11.0%, to €817.7 from €736.6 million, while the exports of Commodities and Transactions Not Classified by Category expanded by 7.5%, from €348.3 million in the first eight months of 2017, to €374.4 million in the same period of this year.

Regarding the export trends by geographical area, the exports to the Euro area countries expanded by 13.5%, to reach €8.0 billion in 2018, from €7.0 billion in the first eight months of 2017, absorbing as a result almost 36.9% of the Greek exports of goods in the current year. There was a similar increase in the EU, by 12.5% or €1.2 billion, with the exports to the region totalling €11.3 billion, from €10.0 billion a year earlier. Among the Eurozone countries with the largest share of Greek exports, growth was stronger in Italy, at 6.2%, from €2.0 billion in 2017 to €2.2 billion in the current year, and in Cyprus, by 1.7%, from €1.13 billion in 2017 to €1.15 billion. The exports to Germany also increased significantly, by 4.5%, from €1.3 billion in the previous year to €1.4 billion in the current year. The only contraction of exports in the first eight months of 2018 in the Eurozone was recorded in Lithuania, yet it did not exceed 2.2% or 0.8 million, as they reached €35.1 million. In contrast, the highest percentage increase was recorded in Slovenia, by 67.3% or €89.3 million.

Among the remaining countries of the European Union, where total exports grew by 10.1% or €299.8 million, to reach €3.3 billion, Bulgaria continues to be the main export destination, with an increase in outflows by 7.5% or €63.1 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 5.5% or €40.6 million to €778.5 million and by 11.9% or €65.9 million to €621.6 million respectively. The largest percentage growth, by 27.2%, was recorded in Hungary, where Greek exports increased by €24.4 million, from €89.7 million in 2017 to €114.1 million in the current year.

The Greek exports to the remaining European countries increased by 23.9% in the first eight months of 2018, to €3.6 billion, from €2.9 billion in the same period of last year. In Turkey, one of the major export destinations, exports expanded significantly, by 38.5%, from €1.1 billion to €1.6 billion. The increase of exports to the neighbouring country was the greatest in absolute terms recorded for any destination in the current year (€433.5 million).

The exports to the North American countries increased by 11.6%, from €958.4 million to €1.0 billion in the current year, mainly due to the increase in exports to the US by 15.7%, from €745.1 million

last year, to €862.0 million in the current year. By contrast, exports retreated by 0.6% or €0.6 million to Canada and by 4.3% or 4.8 million to Mexico.

Table 3.8

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

PRODUCT	VALUE		%	% SHARE	
	2018*	2017*	CHANGE	18*/17*	
AGRICULTURAL PRODUCTS	3.995,3	3.623,4	10,3%	18,4%	19,6%
Food and Live Animals	3.052,4	2.779,3	9,8%	14,1%	15,1%
Drinks and Tobacco	461,2	485,2	-4,9%	2,1%	2,6%
Oils and Fats of animal or plant origin	481,7	358,9	34,2%	2,2%	1,9%
RAW MATERIALS	817,7	736,6	11,0%	3,8%	4,0%
Non-edible Raw Materials excluding Fuels	817,7	736,6	11,0%	3,8%	4,0%
FUELS	7.494,1	5.839,7	28,3%	34,6%	31,7%
Minerals, Fuels, Lubricants etc.	7.494,1	5.839,7	28,3%	34,6%	31,7%
INDUSTRIAL PRODUCTS	8.995,4	7.902,0	13,8%	41,5%	42,8%
Chemicals and Related Products	2.231,0	1.980,9	12,6%	10,3%	10,7%
Industrial Products Sorted by Raw Material	3.450,8	2.976,8	15,9%	15,9%	16,1%
Transport Equipment	1.918,7	1.652,2	16,1%	8,9%	9,0%
Various Manufactured Goods	1.394,9	1.292,0	8,0%	6,4%	7,0%
OTHER	374,4	348,3	7,5%	1,7%	1,9%
Goods and Transactions not sorted by Category	374,4	348,3	7,5%	1,7%	1,9%
TOTAL EXPORTS	21.676,9	18.449,9	17,6%	100,0%	100,0%

\* Provisional data

Sources: ELSTAT, PSE-KEEM

The exports to the Middle East and North Africa increased by 21.9%, to €3.4 billion from €2.8 billion, mainly due to an increase in the exports to Egypt (56.2%), where they reached €754.4 million in the first eight months of the year, from €483.0 million a year earlier. The higher export activity to the specific geographical region was moderated by a decrease to Morocco (-13.0%, from €78.4 million to €68.2 million). By contrast, the exports to Saudi Arabia, another major export destination in the Middle East, decreased by 4.4%, to €409.6 million. The exports to the United Arab Emirates increased by 9.0% to €179.2 million.

The flow of exports of Greek products to Oceania increased by 6.3% in the first eight months of 2018, with their value reaching €112.4 million, against €105.8 million a year earlier. The exports to Australia expanded by 5.6%, from €95.7 million in 2017, to €101.1 million in the current year. In New Zealand, exports also increased, by 12.7%.

The exports to the markets of Central and Latin America increased significantly in the first eight months of this year, by 76.9%, to €234.8 million, from €137.6 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 364.9%, where their value expanded to €81.2 million, from €17.5 million in 2017.

The demand for Greek goods strengthened significantly in the Asian countries, where exports increased by 37.2%, to €1.5 billion, from €1.0 billion in the first eight months of 2017. This development came mainly from the strengthening of exports to the Philippines (1595.4%, to €62.4 million, from €3.7 million in 2017), and China (101.0%, to €552.1 million from €274.6 million in

2017). By contrast, a significant decline of Greek exports was recorded in South Korea, by 47.7%, from €144.0 million in 2017, to €75.4 million a year later, and Japan (from €54.7 million in 2017 to €45.5 million in the current year).

Table 3.9

Exports by destination, January – August\* (million €)

ECONOMIC UNION – GEOGRAPHIC REGION	EXPORTS		% CHANGE	% SHARE	
	2018	2017	18/17	2018	2017
World	21.670,4	18.449,9	17,6%	100,0%	100,0%
OECD	11.661,8	10.094,4	15,5%	53,8%	54,7%
EU	11.262,3	10.013,3	12,5%	52,0%	54,3%
Euro Area	7.996,1	7.046,9	13,5%	36,9%	38,2%
G7	6.034,1	5.571,9	8,3%	27,8%	30,2%
North America	1.069,9	958,4	11,6%	4,9%	5,2%
BRICS	950,0	515,2	84,4%	4,4%	2,8%
Middle East & North Africa	3.433,4	2.816,3	21,9%	15,8%	15,3%
Rest of Africa	1.408,3	917,1	53,6%	6,5%	5,0%
Oceania	112,4	105,8	6,3%	0,5%	0,6%
Latin America	234,8	137,6	70,6%	1,1%	0,7%
Rest of Asia	1.456,5	1.061,7	37,2%	6,7%	5,8%
OPEC	1.088,7	984,8	10,6%	5,0%	5,3%

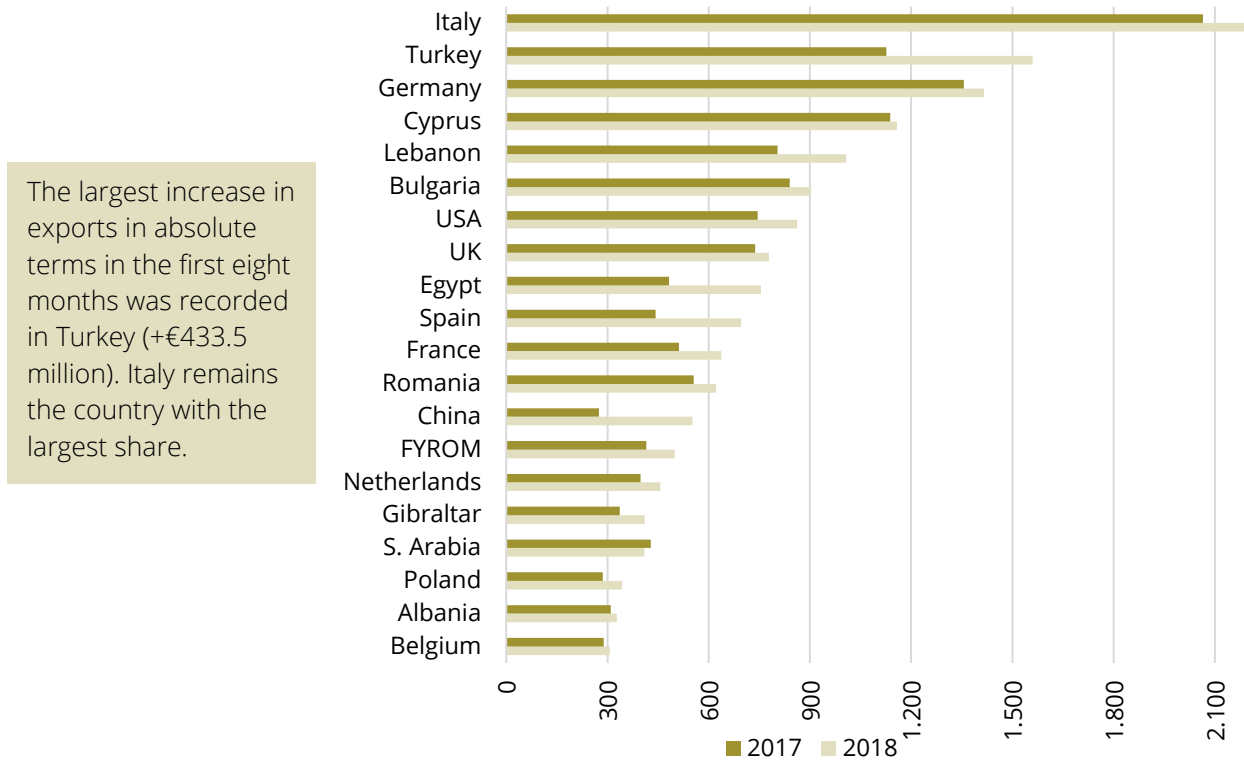
\* Provisional data

Source: ELSTAT, Processing KEEM.

In conclusion, exports continued to grow strongly in the first eight months of this year, at a rate of 17.6%, maintaining and strengthening their momentum from the first half of the year, when they increased by 13%. The rise is partly due to the significant increase in the price of oil in dollars by 38.1% in the specified time period, yet even after excluding oil and ships, exports were 12.6% higher than in the previous year. It is still premature to assess the consequences of the US protectionist measures and their counter-measures, as they were put in place recently. However, it is possible to map the Greek exports to the US market into categories where tariffs were imposed, in order to understand their importance for Greek exports, as well as the potential export losses. This is the aim of the analysis in Box 3.1 that follows. The inhibiting results of protectionist measures are expected to become more pronounced in 2019, both in Greece and abroad. Therefore, exports are anticipated to continue to expand until the end of 2018, assisted by the uptrend in oil prices, with their increase overall in 2018 slightly exceeding 20%. In the coming year, the demand for Greek products is expected to weaken because of the end of the QE programme as well.

Figure 3.5

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



Source: PSE-KEEM Processing: IOBE



**Box 3.2**

## Trade policy measures in the US and implications for Greek exports of steel and aluminium

On 1 June 2018, after a temporary exemption from the measures that were announced on 8 March 2018, the US government announced the imposition of duties on the imports of aluminium and steel from Canada, Mexico and the European Union. In particular, 25% tariffs were imposed on imported steel and 10% on imported aluminium. In addition, in August, the US Department of Commerce came to the preliminary conclusion that welded large-diameter pipes (above 406.4 mm), which are commonly used for the construction of oil and gas pipelines and are imported into the US from Canada, China, Greece, India, South Korea and Turkey, are sold at prices below those considered fair, by 3.45% to 132.63%, in order to gain market share in the US market. In other words, it was concluded that they are subsidised and that dumping practices are being followed. Specifically, the dumping amounts to 24.38% of imported pipes from Canada, 132.63% from China, 22.51% from Greece, 50.55% from India, between 14.97% and 22.21% from South Korea and between 3.45% and 5.29% from Turkey. The imports of pipes of this category from the six countries surpassed \$720 million in 2017, according to the US Department of Commerce. The purpose of the analysis which follows is to map the export activity of Greece in products on which duties were imposed, in order to highlight their importance for Greek exports and to detect potential export losses.

Based on Eurostat data, the Greek exports of steel products to the US for which duties were imposed accounted for 4.1% of total exports to that destination in 2017. They were lower by 34.0% compared to 2016 and by 77.6% compared to 2015. The Greek exports involve two categories in which duties were imposed - Carbon and alloy pipe and tube products and Flat carbon and alloy products. Between 2015 and 2017 the exports of the first category accounted for 3.8% of the total exports to the US, yet they declined strongly, from €206.078 million in 2015, to €43.175 million in 2017. The second category had much smaller share, at 0.3% of the total exports, yet its exports expanded by 162.5% compared to 2015.

The exports of aluminium products on which duties were imposed accounted for 5.5% of the total exports to the US in 2017, decreasing by 3.8% from 2016 and 5.1% from 2015. The decline was due primarily to a fall by 10.1% in the aluminium category with most exports - Aluminium plates, sheets and strip, of a thickness exceeding 0.2 mm. It accounted for 4.7% of total exports. In two other major categories, Aluminium foil of a thickness not exceeding 0.2 mm and Aluminium bars, rods and profiles, exports increased by 82.1%, (from €2.17 billion in 2015 to €3.96 million last year) and 56.4% (from €1.875 million in 2015 to €2.905 million in 2017) respectively. The sum of steel and aluminium exports accounted for an average of 14.9% of Greek exports to the US during the examined period, yet they weakened sharply through its duration, from 21.9% in 2015 to 9.6% last year.

In addition, according to data from the US Department of Commerce, the Greek exports of large-diameter steel pipes to the US were worth \$18.8 million in 2014, \$197.1 million in 2015 and \$69.9 million in 2016. There are no data for 2017, yet according to reports from US and Greek market participants the momentum of Greek exports is strong, as they appear to have exceeded the

threshold of 3% of the total market for this pipe type, which is the limit that triggers the antidumping control.

**Table 3.10** Greek exports of steel and aluminium in the US, 2015-2017 (€ million)

Products	2015	2016	2017	Average share in the exports to the US 2015-2017
Flat carbon and alloy products	1.237	2.048	3.249	0.2%
Carbon and alloy long products	0.100	0.033	0	0.0%
Carbon and alloy pipe and tube products	206.078	68.228	43.175	9.2%
Carbon and alloy semi-finished products	0	0	0	0.0%
Stainless steel products	0.007	0	0	0.0%
<b>Total steel products</b>	<b>207.422</b>	<b>70.309</b>	<b>46.423</b>	<b>9.4%</b>
Unwrought aluminium	0	0	0	0.0%
Aluminium bars, rods and profiles	1.857	2.824	2.905	0.2%
Aluminium wire	0	0	0	0.0%
Aluminium plates, sheets and strip, of a thickness exceeding 0.2 mm	58.949	56.957	53.009	4.9%
Aluminium foil of a thickness not exceeding 0.2 mm	2.174	2.262	3.960	0.2%
Aluminium tubes and pipes	0.004	0	0	0.0%
Aluminium tubes and pipes fittings	0.011	0.023	0	0.0%
Castings and forgings	2.063	2.135	1.894	0.2%
<b>Total aluminium products</b>	<b>65.058</b>	<b>64.200</b>	<b>61.768</b>	<b>5.5%</b>
<b>Total Greek exports of steel and aluminium products</b>	<b>272.480</b>	<b>134.509</b>	<b>108.191</b>	<b>14.9%</b>
<b>Total exports of Greek products to the US</b>	<b>1.246</b>	<b>1.095</b>	<b>1.122</b>	<b>100%</b>

In summary, the Greek exports of steel and aluminium products to the US for which duties were imposed this year form a significant part of the export demand from this destination. Their share declined significantly in recent years. However, the direct exports of these products to the US do not form the total trade flows to this country. Meanwhile, these Greek products are used by businesses in other economic regions too (mainly in Europe). Usually following treatment, they are incorporated in products of these enterprises, which carry out exports, many of which to the US. Therefore, in order to evaluate the overall effect of US tariffs on Greek exports, the indirect effect, from non-US companies that use these products, should also be taken into account. This is clearly a more complex analysis, which goes beyond the scope of this report.

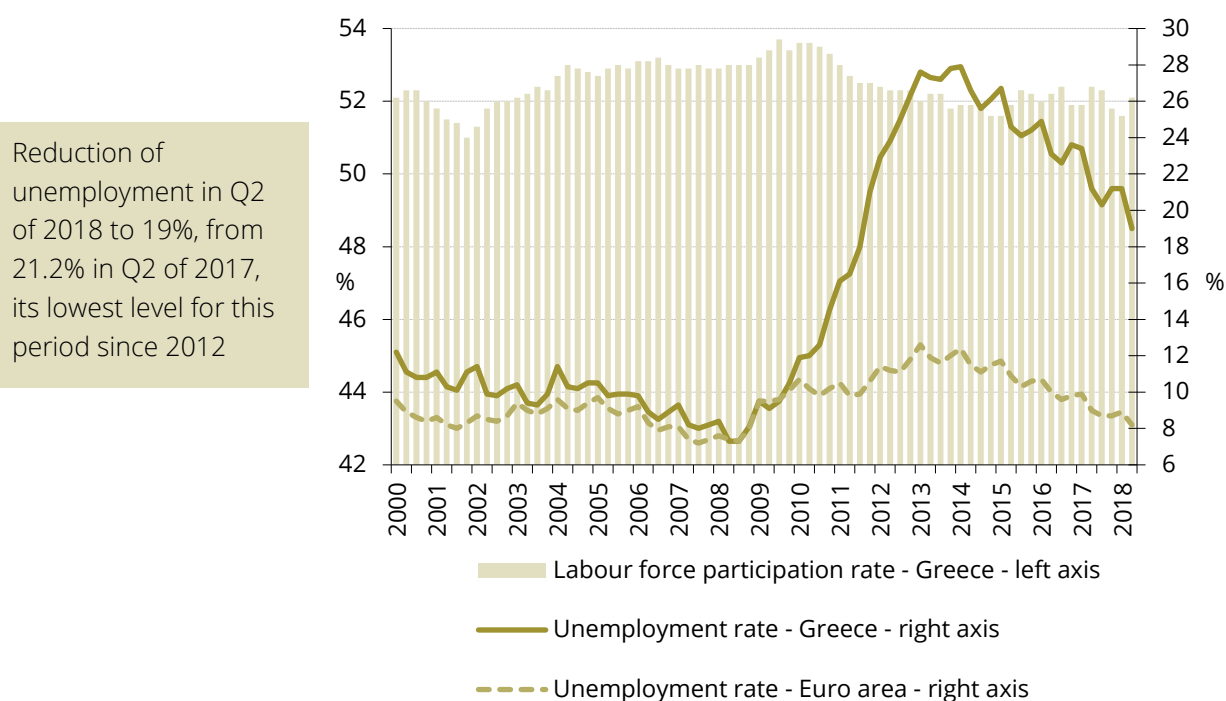
### 3.4 Employment – Unemployment

- Reduction of unemployment to 19% in the second quarter of 2018, from 21.1 in the same period of 2017, its lowest level for this period since 2012
- Reduction of unemployment by 62.4% from employment growth and by 37.6% from reduction of the labor force
- Employment boost in Human Health - Social Protection (+19,500 people), in the Primary sector (+15,500 people) and Education (+12,500 people)
- The seasonally adjusted wage cost index increased by 2,7%, growing for the third consecutive quarter

Unemployment continued to decline in the second quarter of 2018. According to data from the Labour Force Survey of ELSTAT, the (non-seasonally adjusted) unemployment rate declined to 19%, 2.1 percentage points lower than in the same period of 2017 (21.1%). This is the lowest unemployment rate for this period of the year since 2012. The number of unemployed declined year on year by 110,600 people in the second quarter, totalling 906,000 from 1,016,600 people. The number of employed rose by 69,000 people (from 3,791,400 to 3,860,400), and so a significant part of the drop (41,600 or 37.6%) came from a reduction in the labour force. In July, the non-seasonally adjusted unemployment rate declined to 18.4%, from 20.1% in July 2017 (-1.7%), while for the entire half the rate fell from 22.3 in 2017 to 20.1% in 2018.

Figure 3.6

Labour force participation and unemployment rates



Sources: ELSTAT – Labour Force Survey, Eurostat

In the Eurozone countries, unemployment has been falling year on year since Q1 of 2014. In the second quarter of this year, it stood at 8.2%, from 9% in the same quarter of last year. The lowest unemployment rate was recorded once more in Germany (3.5% from 3.8% a year earlier) and in Malta (3.8% from 4.6% last year). The Netherlands followed with unemployment at 3.9% in the second quarter 2018 from 5% a year earlier. In Spain, which had the highest unemployment rate after Greece, unemployment averaged 15.3% in the second quarter of this year, from 17.2%, followed by Italy, where unemployment marginally declined to 10.7% from 10.9%. In the other two big European economy, France and the UK, unemployment also decreased (to 8.7% from 9.1%, and to 3.9% from 4.3% respectively).

The trends in unemployment by sex in Greece have not changed. Unemployment has remained higher among women than men, as the unemployment rate in the second quarter of 2018 stood at 23.7% (from 25.5% in Q2 2017), and 15.3% (from 17.7%) respectively. In the Eurozone, the difference in the unemployment rate among men and women is much lower than in Greece. In the second quarter of 2018, it did not exceed 0.6 percentage points. Unemployment stood at 7.9% among men (from 8.7% in Q2 2017) and 8.5% among women (from 9.3% a year earlier).

Regarding the age structure, unemployment decreased year on year in all age groups in the second quarter of this year. The highest unemployment occurred among young people aged 15-19 and 20-24, where despite the decline unemployment stood at very high rates, at 48.9% (from 55.5%) and 37.5% (from 42.1%) respectively. Unemployment was much higher than the country average among people aged 25-29, at 27%, 3.1 percentage points lower than in Q2 of 2017 (30.1%). Concerning the remaining age groups, the unemployment rate was lower than the country average. It declined to 18.2% (from 20.3%) among people aged 30-44, 15.7% (from 17.1%) among people aged 45-64, and 10.1% (from 11.3%) among people aged more than 65 years old.

The percentage of long-term unemployed declined for the second consecutive quarter, to 72.1% from 74%. The number of long-term unemployed decreased year on year for the 15<sup>th</sup> consecutive quarter steadily, to reach 653,400 from 752,000 people a year earlier (-98,600 people or -13.1%).

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 9.4%, reduced by half a percentage points in comparison with Q2 of 2017. The tertiary education graduates came next, where the unemployment rate stood at 15.8%, from 14.1%. Among the other categories, the percentage is higher than the national average. Unemployment stood at 19.8% (from 22.4%) among people with higher technical vocational education diploma, at 20.8% (from 23.2%) among persons with upper secondary or equivalent education, and at 21.7% (from 23.9%) among persons that have completed obligatory education. Among people with elementary or no education, the unemployment rate increased from 41.9% to 42.2% and from 42.9% to 44.6% respectively, increasing steadily since the Q2 of 2017.

Unemployment decreased in all regions of the country, except for the South Aegean region. The highest drop was recorded in East Macedonia - Thrace, by 4.3 percentage points, from 19.4% to 15.1%, while the highest unemployment rate was recorded in Western Macedonia, at 27.1% from 29.3% a year earlier (-2.2 percentage points). The smallest drop in unemployment rate was recorded in the North Aegean, to 21.7% from 21.9%, while the lowest unemployment rate in Q2 2018 was recorded in Crete, at 11.5% from 15.6% a year earlier (-4.1 percentage points). In Western

Greece and in Attica, the unemployment rate was higher than the national average, at 23% (from 26.2%) and 19.9% (from 21.5%) respectively. In Thessaly, Central Greece and Peloponnese, the unemployment rate was lower than the national average, at 18.9% (from 20.1%), 18.7% (from 20.7%) and 14.2% (from 15.9%) respectively.

At the level of basic economic sectors, the strongest growth in employment was recorded in the primary sector (3.4%), where employment rose for the third consecutive quarter, to 472,500 from 457,000 employees a year earlier. In the secondary sector, employment expanded less, by 0.9%, and reached 586,500 employees in Q2 2018, from 581,000 in Q2 2017. In the tertiary sector, the largest sector of the Greek economy, employment increased by 1.7% year on year, as the number of employees reached 2,801,400 from 2,753,300.

Employment increased in 13 of the 21 branches of economic activity, including significant for the Greek economy activities. The biggest rise in the number of employees in the second quarter of 2018 was recorded in Human Health - Social Work Activities, where employment increased by 19,500 people (from 225,300 to 244,800). Education came next, where employment increased by 12,500 people (from 295,200 to 307,700). Employment increased from 206,300 to 217,000 people (+10,700) in Professional-Scientific-Technical Activities, and from 87,900 to 98,200 (+10,300) in Information - Communication. In Wholesale-Retail Trade, the most populous branch of economic activity in Greece, employment grew slightly, by 6,200, from 683,900 to 690,100, while in Construction it expanded to 151,300, from 149,100 in the same period of 2017 (2,200). By contrast, the number of employees declined most in Financial-Insurance Activities, by 8,400 people (from 94,600 to 86,200), in Activities of households as employers, from 37,600 to 30,800, and in Transport - Storage, from 189,100 to 183,400 people (-5,700). In Manufacturing, after 13 consecutive half-years of growth, employment declined marginally year on year in the second quarter, by 500 people, from 360,200 to 359,700, while in Tourism the number of employees increased by 7,700, from 375,200 to 382,900. Finally, in Public Administration - Defence, employment decreased marginally to 330,300 from 331,900 people (-1,600).

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

- Human Health - Social Work Activities (19,500 or 8.7%). Part of this increase came from two special employment programmes for long-term unemployed of the Manpower Employment Organisation (OAED) in the Health sector, launched in 2017, with 4,200 beneficiaries. The first of these programmes was extended by 12 months in the beginning of 2018.
- Primary sector (15,500 people or 3.4%)
- Education (12,500 or 4.2%)
- Professional-Scientific-Technical Activities (10,700 or 5.2%),

and despite the fall in employment in Financial-Insurance Activities, Activities of households as employers and Transportation - Storage by 8,400, 6,800 and 5,700 people respectively.

The analysis of changes in the branch composition of employment, rather than its absolute and percentage changes, provides insights on the evolution of employment at sectoral level in a broader horizon, during the period of Economic Adjustment Programmes, when major reforms

took place in the labour market. This analysis can also help with the assessment of the changes in the growth model of the Greek economy, i.e. whether and to what extent resources were transferred from sectors of internationally non-tradable goods and services to sectors and activities with production that can be traded internationally (Box 3.3).

### Box 3.3

Developments in the sectoral structure of employment during the period of adjustment programmes

Apart from fiscal measures, structural changes, some of which related to the labour market were also implemented during the Economic Adjustment Programmes. The aim of all of the reforms was the economy's transition to a new growth model, where it would depend to a lesser extent on domestic demand. For this purpose, resources ought to be transferred from sectors of internationally non-tradable goods and services to sectors with output that is internationally tradable. The labour market reforms were legislated mainly between 2010 and 2012. They were related to issues such as the force of collective bargaining agreements, the setting of the minimum wage, working time options, collective dismissals, etc. Given the above extensive changes in the labour market, their impact on the sectoral structure of employment is examined next. The aim is to examine whether the growth model of the Greek economy has changed, by looking into the shifts in human resources.

Based on data of ELSTAT for 2008-2017, i.e. for the period from the year prior to the start of the economic recession until last year, employment decreased in all basic sectors (Primary, Industry, Construction, and Services - Table 3.11). Given the strong domestic recession that resulted in a lower GDP last year by 24.4% than in 2008, such an employment trend should not come as a surprise. Nevertheless, the trends in the sectoral structure of employment become even more important for the investigation of the labour market. During that period, among the single-digit sectors under the NACE Rev. 2 classifications, the activities with the biggest rise in their share in total employment were Accommodation - Food Service Activities, whose share rose by 2.3 percentage points (from 7% to 9.3%) and Human Health - Social Work Activities, with an increase from 5.1% to 6.2% (Table 3.12). Agriculture-Forestry-Fishing and Education, whose shares increased by 0.9 percentage points each (from 11.1% to 12% and from 7% to 7.9% respectively) came next, followed by Administrative - Support Service Activities and Public Administration - Defence, with an increase by 0.7 p.p. (1.7% from 2.4%) and 0.6 p.p. (from 8.2% to 8.8%) respectively.

By contrast, Construction posted the largest decline in its share in domestic employment, by 4.6 percentage points, as it stood last year at less than half its level of 2008, at 4.0%. Manufacturing came next, with 2.3 percentage points decline, from 11.8% ten years ago to 9.5% last year, and the Activities of households as employers, by 0.8 p.p. (from 1.7% to 0.9%). A limited decline of the share, by 0.1%, was observed in Mining - Quarries, Financial - Insurance Activities, Real Estate and Wholesale-Retail Trade, Repair of Motor Vehicles - Motorcycles.

From the above trends in sectoral shares, it is evident that the process of transition of the Greek economy to a more open growth model has not been completed. The sector with the largest boost of its share in domestic employment, Tourism, undoubtedly belongs to the sectors with

internationally tradable activity. However, from the other five sectors with growing contribution to domestic employment, only Agriculture – Forestry – Fishing has internationally tradable output. In addition, the sectors with the greatest share contraction are Manufacturing, Mining – Quarrying and Financial – Insurance services, which are among the activities with the strongest export performance globally.

The shares of export-oriented sectors in employment in the Euro area (Table 3.13) provide further information about the progress of the Greek economy in changing its growth pattern. The average employment share of Manufacturing reached 15.9% in 2008-2017, much higher than in Greece (10%). The contribution of Transportation - Storage and Financial - Insurance Activities to employment in Greece was marginally lower than in the Eurozone: 4.8% and 5.0% in the former sector, 2.7% and 3.0%, in the latter sector. However, as shown earlier, there is a downward trend in the latter sector and thus a divergence from the Eurozone.

In contrast, notably higher in Greece than the Eurozone average was the contribution to employment in 2008 – 2017 in the primary sector (12.5%, against 3.4%) and in Accommodation - Food Service Activities (7.9%, against 4.9%). Of course, these are sectors with contribution to output and employment that is traditionally higher in Greece than the Eurozone average, while they also experienced a strong boost in their share in the examined period.

**Table 3.11** Employment per sector in Greece, 2008-2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change 2008-2017
Agriculture, forestry and fishing	513.8	532.9	544.2	500.7	480.5	481.1	479.9	465.7	454.5	453.4	-60.4
Mining and quarrying	17.0	14.3	13.3	11.2	11.1	9.6	11.3	10.4	13.5	12.0	-5.0
Manufacturing	545.0	518.8	468.3	409.7	351.4	324.7	316.5	334.5	347.7	358.2	-186.8
Electricity, gas, steam and air conditioning supply	34.6	28.5	26.0	24.2	26.0	27.7	27.5	26.3	28.4	31.4	-3.2
Water supply; sewerage. Waste management and remediation activities	30.6	30.5	32.7	26.4	21.8	22.3	22.8	23.1	23.4	27.4	-3.2
Construction	397.3	370.7	319.6	245.8	200.9	162.4	151.6	145.2	147.1	149.3	-248.0
Wholesale and retail trade; repair of motor vehicles and motorcycles	840.1	827.6	799.3	752.3	663.7	630.5	625.6	660.8	657.9	679.2	-160.9
Transportation and storage	215.3	217.0	208.2	196.4	178.2	173.0	171.5	168.4	184.9	188.2	-27.1
Accommodation and food service activities	322.2	321.0	308.5	295.7	272.1	259.2	297.1	325.6	341.2	350.7	28.6
Information and communication	77.6	87.6	87.1	75.5	71.8	76.2	76.3	72.9	80.7	87.0	9.3
Financial and insurance activities	121.4	114.6	115.8	113.7	111.1	107.1	93.0	88.3	94.3	92.8	-28.6
Real estate activities	8.8	8.5	6.2	5.7	5.8	3.0	3.9	6.0	5.6	3.9	-5.0
Professional, scientific and technical activities	237.1	234.9	217.5	214.0	217.9	197.4	196.1	208.6	201.7	204.8	-32.3
Administrative and support service activities	77.8	75.1	75.4	77.4	67.5	62.0	83.7	85.5	88.4	90.2	12.4
Public administration and defence; compulsory social security	379.5	377.1	369.9	354.9	326.7	325.1	311.1	312.7	331.3	330.6	-48.9
Education	324.1	328.8	321.8	304.4	290.3	274.8	290.2	294.0	295.1	295.8	-28.3
Human health and social work activities	236.0	234.4	245.9	238.2	223.6	212.8	209.2	214.2	218.4	231.6	-4.4
Arts, entertainment and recreation	59.3	54.0	49.1	47.5	40.3	42.9	47.0	45.2	49.6	52.5	-6.8
Other service activities	95.1	88.6	88.7	85.4	76.4	69.8	72.3	74.4	67.4	77.3	-17.8
Activities of households as employers	76.6	89.9	90.9	73.6	56.1	50.4	48.5	46.9	40.1	35.0	-41.6
Activities of extraterritorial organisations and bodies	1.7	1.6	1.6	2.2	1.9	1.3	1.4	2.2	2.5	1.7	0.0
	<b>4,610.5</b>	<b>4,556.0</b>	<b>4,389.8</b>	<b>4,054.4</b>	<b>3,694.9</b>	<b>3,513.1</b>	<b>3,536.3</b>	<b>3,610.8</b>	<b>3,673.5</b>	<b>3,752.7</b>	<b>-857.8</b>

Source: ELSTAT

The comparison of the sectoral contribution to employment in Greece and the Euro area shows that the country is in a transition process of production and employment restructuring. As part of



this process, there seems to be a transfer of human resource to export-oriented branches as well. However, these are sectors where Greece already has a comparative advantage (primary sector, Tourism). This evolution is a non-negligible, useful first step for changing the growth model. However, more steps are needed, especially in areas where there was a lag in terms of employment and activity level compared to the EU average, which in some cases has expanded in the past few years, with the most striking example that of Manufacturing.

The efforts and the related policy interventions to change the growth model must turn shortly to these sectors.

**Table 3.12:** Composition of total employment per sector in Greece, 2008-2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change 2008-2017
Agriculture, forestry and fishing	11.1%	11.7%	12.4%	12.3%	13.0%	13.7%	13.6%	12.9%	12.4%	12.1%	0.9%
Mining and quarrying	0.4%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.4%	0.3%	0.0%
Manufacturing	11.8%	11.4%	10.7%	10.1%	9.5%	9.2%	8.9%	9.3%	9.5%	9.5%	-2.3%
Electricity, gas, steam and air conditioning supply	0.7%	0.6%	0.6%	0.6%	0.7%	0.8%	0.8%	0.7%	0.8%	0.8%	0.1%
Water supply; sewerage. Waste management and remediation activities	0.7%	0.7%	0.7%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.7%	0.1%
Construction	8.6%	8.1%	7.3%	6.1%	5.4%	4.6%	4.3%	4.0%	4.0%	4.0%	-4.6%
Wholesale and retail trade; repair of motor vehicles and motorcycles	18.2%	18.2%	18.2%	18.6%	18.0%	17.9%	17.7%	18.3%	17.9%	18.1%	-0.1%
Transportation and storage	4.7%	4.8%	4.7%	4.8%	4.8%	4.9%	4.9%	4.7%	5.0%	5.0%	0.3%
Accommodation and food service activities	7.0%	7.0%	7.0%	7.3%	7.4%	7.4%	8.4%	9.0%	9.3%	9.3%	2.4%
Information and communication	1.7%	1.9%	2.0%	1.9%	1.9%	2.2%	2.2%	2.0%	2.2%	2.3%	0.6%
Financial and insurance activities	2.6%	2.5%	2.6%	2.8%	3.0%	3.0%	2.6%	2.4%	2.6%	2.5%	-0.2%
Real estate activities	0.2%	0.2%	0.1%	0.1%	0.2%	0.1%	0.1%	0.2%	0.2%	0.1%	-0.1%
Professional, Scientific and technical activities	5.1%	5.2%	5.0%	5.3%	5.9%	5.6%	5.5%	5.8%	5.5%	5.5%	0.3%
Administrative and support service activities	1.7%	1.6%	1.7%	1.9%	1.8%	1.8%	2.4%	2.4%	2.4%	2.4%	0.7%
Public administration and defence; compulsory social security	8.2%	8.3%	8.4%	8.8%	8.8%	9.3%	8.8%	8.7%	9.0%	8.8%	0.6%
Education	7.0%	7.2%	7.3%	7.5%	7.9%	7.8%	8.2%	8.1%	8.0%	7.9%	0.9%
Human health and social work activities	5.1%	5.1%	5.6%	5.9%	6.1%	6.1%	5.9%	5.9%	5.9%	6.2%	1.1%
Arts, entertainment and recreation	1.3%	1.2%	1.1%	1.2%	1.1%	1.2%	1.3%	1.3%	1.3%	1.4%	0.1%
Other service activities	2.1%	1.9%	2.0%	2.1%	2.1%	2.0%	2.0%	2.1%	1.8%	2.1%	0.0%
Activities of households as employers	1.7%	2.0%	2.1%	1.8%	1.5%	1.4%	1.4%	1.3%	1.1%	0.9%	-0.7%
Activities of extraterritorial organisations and bodies	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%

Source: ELSTAT, Data processing: IOBE

**Table 3.11:** Composition of total employment per sector in the Euro area, 2008-2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average 2008-2017
Agriculture, forestry and fishing	3.6%	3.7%	3.7%	3.5%	3.5%	3.4%	3.4%	3.3%	3.2%	3.1%	3.4%
Mining and quarrying	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Manufacturing	17.2%	16.4%	16.0%	16.0%	15.8%	15.6%	15.6%	15.6%	15.5%	15.5%	15.9%
Electricity, gas, steam and air conditioning supply	0.6%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.6%	0.6%	0.7%
Water supply; sewerage. Waste management and remediation activities	0.6%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
Construction	8.3%	7.8%	7.5%	7.2%	7.0%	6.7%	6.5%	6.5%	6.4%	6.4%	7.0%
Wholesale and retail trade; repair of motor vehicles and motorcycles	14.2%	14.2%	14.2%	14.0%	14.0%	14.5%	14.3%	14.3%	14.3%	14.1%	14.2%
Transportation and storage	5.0%	5.0%	4.9%	5.0%	4.9%	5.0%	5.0%	5.0%	5.1%	5.1%	5.0%
Accommodation and food service activities	4.7%	4.7%	4.7%	4.8%	4.8%	4.8%	4.9%	5.0%	5.2%	5.2%	4.9%
Information and communication	2.8%	2.8%	2.9%	2.9%	3.0%	2.8%	2.8%	2.9%	2.9%	3.0%	2.9%
Financial and insurance activities	3.0%	3.1%	3.1%	3.0%	3.0%	3.1%	3.0%	3.0%	3.0%	2.9%	3.0%
Real estate activities	0.7%	0.7%	0.7%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
Professional, Scientific and technical activities	5.0%	5.1%	5.1%	5.2%	5.2%	5.5%	5.6%	5.6%	5.7%	5.7%	5.4%
Administrative and support service activities	3.9%	4.0%	4.1%	4.2%	4.3%	4.3%	4.4%	4.4%	4.5%	4.5%	4.3%
Public administration and defence; compulsory social security	7.4%	7.5%	7.6%	7.5%	7.4%	7.2%	7.3%	7.2%	7.1%	7.0%	7.3%
Education	6.6%	6.7%	6.8%	6.8%	6.9%	7.0%	7.1%	7.1%	7.1%	7.1%	6.9%
Human health and social work activities	9.8%	10.3%	10.6%	10.8%	11.1%	11.1%	11.3%	11.4%	11.4%	11.5%	10.9%
Arts, entertainment and recreation	1.4%	1.4%	1.5%	1.5%	1.5%	1.6%	1.6%	1.6%	1.6%	1.6%	1.5%
Other service activities	2.7%	2.7%	2.7%	2.6%	2.6%	2.7%	2.6%	2.6%	2.6%	2.6%	2.6%
Activities of households as employers	1.6%	1.6%	1.7%	1.7%	1.7%	1.7%	1.6%	1.5%	1.5%	1.4%	1.6%
Activities of extraterritorial organisations and bodies	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
No response	0.4%	0.6%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.8%	0.7%

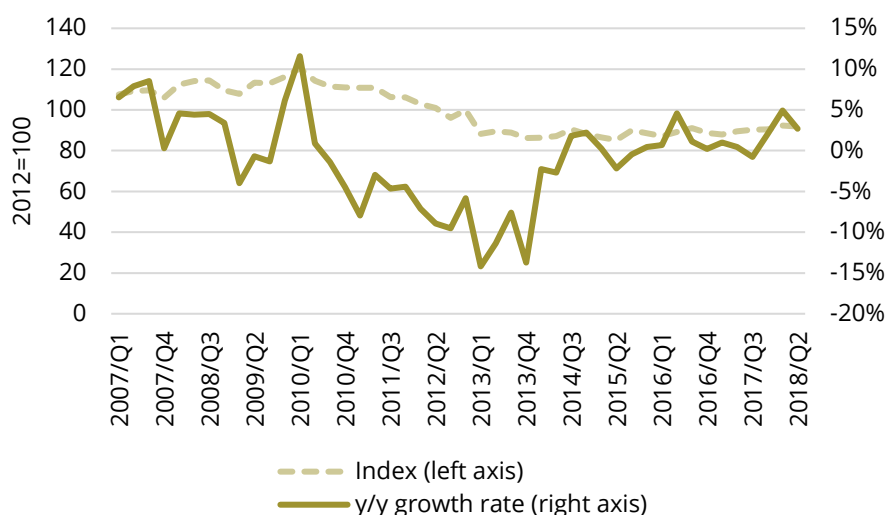
Source: ELSTAT, Data processing: IOBE

Concerning the seasonally adjusted labour costs index for the Greek economy, it increased for the third consecutive quarter year on year (by 2.7%).

Figure 3.7

Seasonally adjusted wage cost index (Q1/2007-Q2/2018)

Rise of the seasonally adjusted wage cost index for the third consecutive quarter in Q2 2018, by 2.7%



Source: ELSTAT

Table 3.12

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

Reference period	Total	% of Population	Employed	Percentage (%) of the labour force	Unemployed	Percentage (%) of the labour force
2010	9,399.4	53.5	4,389.8	87.3	639.4	12.7
2011	9,372.9	52.7	4,054.4	82.2	881.8	17.9
2012	9,344.8	52.3	3,695.0	75.6	1,195.1	24.4
2013	9,309.5	52.1	3,513.2	72.5	1,330.4	27.5
2014	9,282.1	51.8	3,536.3	73.5	1,274.4	26.5
2015	9,246.6	52.0	3,610.7	75.1	1,197.0	24.9
2016	9,212.8	52.1	3,673.6	76.5	1,130.9	23.5
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

Source: ELSTAT, Labour Force Survey

### Medium-term outlook

The easing of the concern about the Greek following the conclusion of the third programme, the mid-term debt measures and the outcome of the banking system stress test have calmed the

current tumult in the Athens Stock Exchange. Nevertheless, at least temporarily, there are still obstacles to raising additional funding by the private sector and risk taking in investments by companies, with negative effects on job creation as well. Meanwhile, household expectations strengthened after the conclusion of the adjustment programme, but also because of the anticipated lifting of fiscal measures pre-legislated for next year (pension cuts), a trend which will probably reflect on consumer demand, boosting employment in related sectors. The rise of activity in Tourism and other export-oriented sectors will have a positive and growing impact as well, while the effects from the US protectionist policies and the corresponding counter-measures are anticipated to become notable in 2019.

In greater detail, the continuing high growth rate in the EU and in the US will continue to support the strong growth of exports, maintaining the employment growth in the corresponding sectors. According to the latest data of the Bank of Greece, the exports of goods, excluding fuels and ships, increased in January through July of 2018 by 12.4%, to €12.9 billion from €11.5 billion in 2017. Travel receipts also increased by 16.0%, to €8.2 billion from €7.03 billion last year. The stronger international tourist flows during the summer mark a further increase of the contribution of Tourism to domestic economic activity and jobs this year, especially during its second half. It is now considered likely that the effects from the US protectionist policies and from the corresponding counter-measures will be felt in 2019. The conclusion of the QE programme will also have a negative effect on the demand for Greek exports in the EU next year. These developments will moderate the stimulating effect of exports on GDP and job creation.

The strengthening of household expectations during the current half due to the conclusion of the adjustment programme and the further relaxation of the capital controls will probably be reflected in consumer demand, strengthening employment in sectors like Wholesale-Retail trade, Food Services and Tourism. Consumer demand is not expected to receive pressure from new fiscal measures, as the pre-legislated pension cuts will likely not be implemented, while if all the alternative to the MTFS 2019-2022 measures included in the Draft State Budget are implemented (reduction in social insurance contributions for sole proprietors, self-employed and farmers, weighted average reduction by 10% of the property tax ENFIA, subsidised social security contributions for young employees), will slightly boost dispensable income in comparison with 2018. The outcome of the process of readjusting the minimum wage will have a major impact on the trend in disposable income next year.

In addition, the public sector will also have a positive impact on employment. It is indicative that in late September, the Manpower Employment Organisation OAED announced the finalised recruitment lists of 30.333 unemployed people in community service programmes in local authorities. Moreover, a new community service work programme call for 2.082 unemployed people in regional refugee reception and identification centres, and a call for an employment programme for 5.500 unemployed with tertiary education degrees aged 22-29 in ministries and entities supervised by public bodies are expected to be announced in the upcoming days. As the number of regular staff in the public sector has not changed since September 2015, there is room for increase, in accordance with the relevant rules for withdrawals and redundancies. The alternatives fiscal measures of the Draft State Budget for 2019 include the intake of 7.500 people.

The recovery of the construction activity, after many years of contraction, is also expected to boost employment during the second half of 2018 and in 2019, mainly through residential construction projects and investment in completed privatisation-concession deals. As in 2017, the PIP

expenditures are expected to stand at a very low level, forming a low basis of comparison for 2019, for which the PIP budget is higher by €250 - €550 million.

Considering the above effects, the IOBE forecast regarding the unemployment rate in 2018 is revised down to around 19.3%, while weaker fall is expected in 2019, to 18.0%, mainly due to developments regarding the labour cost.

According to the latest IOBE business surveys, the short-term employment expectations improved quarter on quarter in the third quarter of 2018 in Retail Trade, while deterioration of the expectation was recorded in Services, Industry and Construction. Year on year, the expectations strengthened in Retail Trade, weakened in Services and remained stable in Industry and Construction. In greater detail:

In Industry, the average balance of 8 points of the previous quarter fell by 2 points in the third quarter of 2018. Compared to last year, the average quarterly index remained unchanged. In the quarter under examination, the percentage of industrial firms that expected a drop in employment in the coming months increased to 8% (from 7%), while the percentage of those expecting employment growth decreased to 13% (from 15%). The vast majority of businesses in the sector (79%) were expecting employment to remain unchanged.

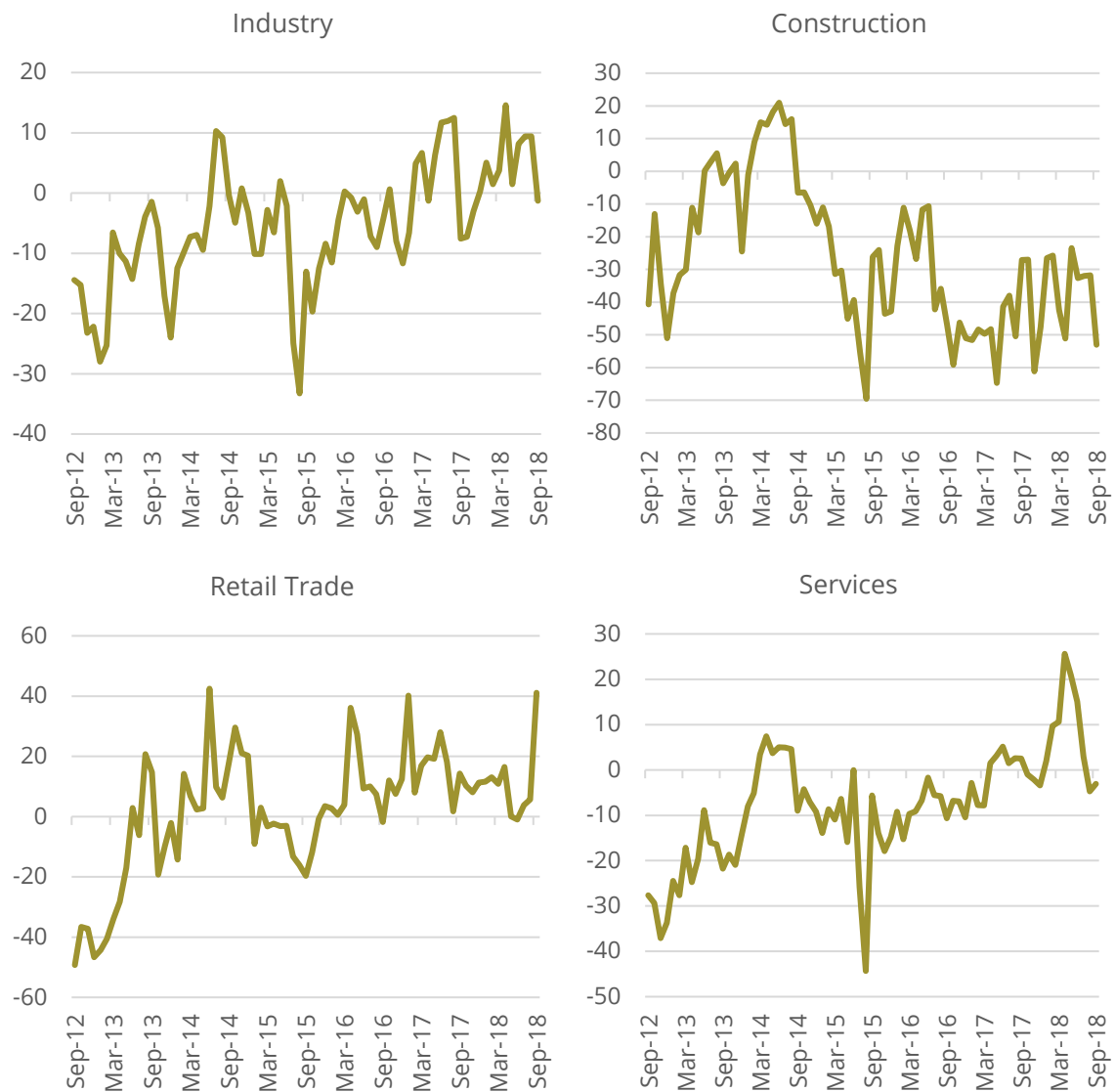
In Construction, the balance of employment expectations deteriorated from an already very low level, to -39 (from -36) points, at the same level as in the same period of 2017. In the third quarter of 2018, 48% (from 47%) of the businesses in the sector were anticipating further job losses, while 9% (from 12%) of the respondents were expecting employment growth. At the sub-sector level, the fall of the index in Private Construction (-4 from -3 points) was accompanied by a small decrease, from an already very low level, of the index in Public Works (to -59 from -56).

The employment outlook indicator in Retail Trade increased quarter on quarter in the third quarter of the year, to 17 points (from 5). The index was down by 6 points compared to last year. About 5% (from 3%) of the firms in the sector were expecting job cuts, while 22% (from 9%) were anticipating employment growth, with those expecting job stability taking up 73% (from 88%) of the sample. The employment expectations indicator improved in Food-Beverages-Tobacco, Household Appliances, Motor Vehicles – Spare Parts and Department Stores and declined in Textiles – Clothing – Footwear.

In Services, the employment expectations lost ground compared to the previous quarter, while they also deteriorated over the same period of last year. The balance of 21 points from the previous quarter declined in the quarter under examination to -2 points (from 2 points on average in the corresponding quarter of 2017). About 13% (from 7%) of the companies in the sector were expecting a drop in employment, with the percentage predicting an increase averaging 11% (from 28%). The trend is negative in all branches of services, except for Other Business Activities.

Figure 3.8

Employment expectations (difference between positive and negative responses)



Source: IOBE

Stronger short-term employment outlook in Retail Trade, weaker expectations in Services and stability in Industry and Construction

### 3.5 Consumer and Producer Prices

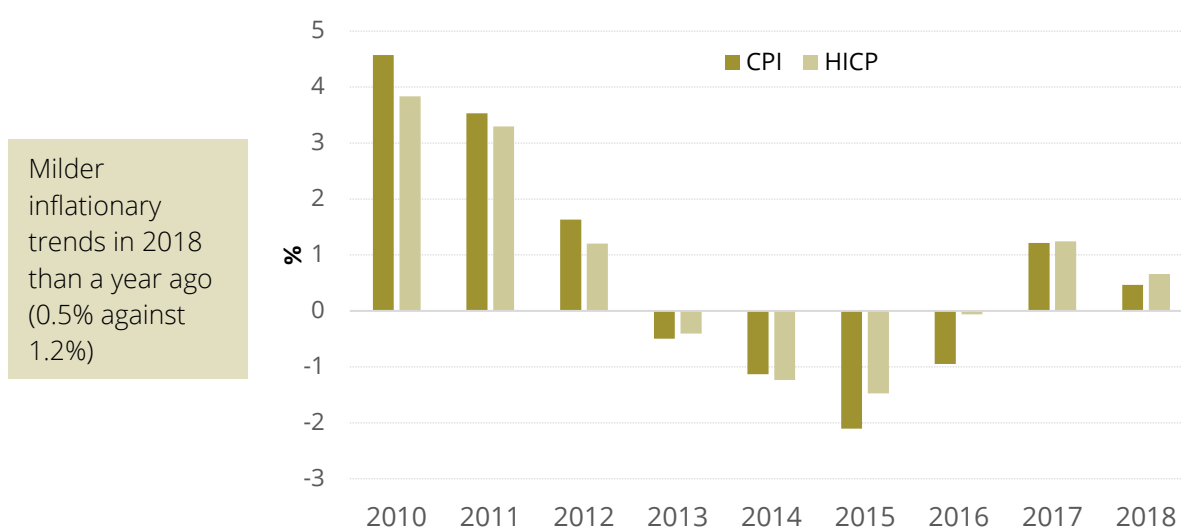
- Milder inflationary trends in the first nine months of 2018 compared to a year earlier
- Significantly weaker inflationary impact of indirect taxes and energy prices
- Marginally positive inflation without taxes and energy, after 7 years of deflation

#### Recent developments

In the third quarter of 2018, the rate of change of the Consumer Price Index (CPI) remained positive for the second consecutive quarter, after a CPI drop in Q1 2018. As a result, the domestic CPI increased marginally in the first nine months of 2018, by 0.5%, year on year, compared with a rise by 1.2% in the same period of 2017. The Harmonised Index of Consumer Prices (HICP) increased by 0.7% over the same period, compared to 1.2% 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 3.14).

Figure 3.9

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



Source: ELSTAT, processing IOBE

The price rise was driven mainly by the growing energy prices, an effect which will probably continue in the rest of this year. The indirect taxes had a marginal inflationary effect. By contrast, domestic demand seems to recover mildly (Figure 3.15).

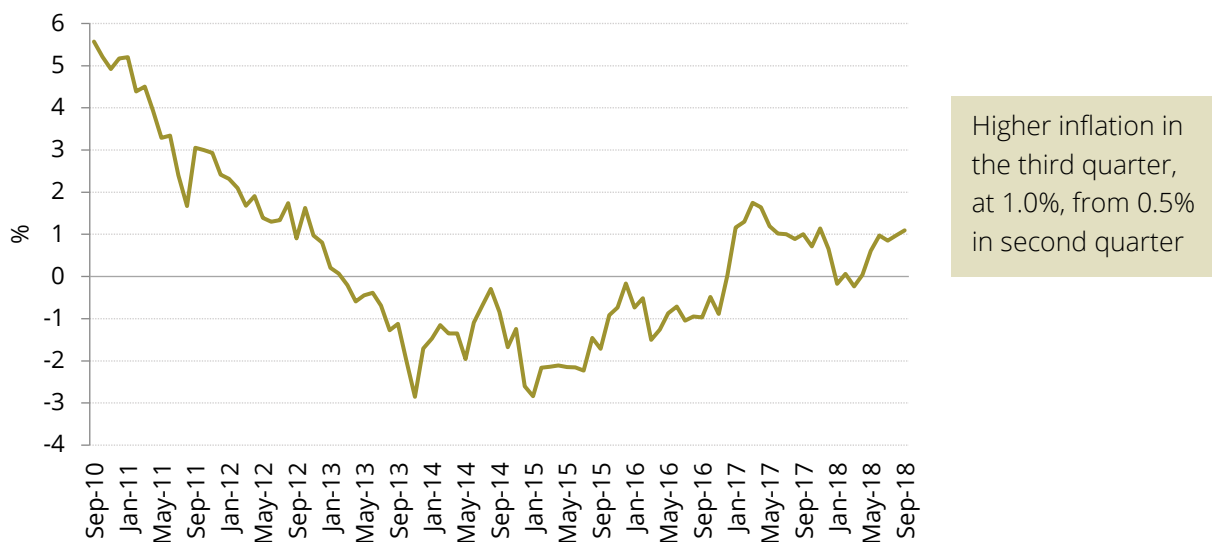
Regarding taxation, the new indirect taxes from 01/01/2018 (VAT increase in 27 of the 32 Northeast Aegean-Dodecanese islands<sup>16</sup> and the tax on bookings in hotels, rooms to let and apartments) caused small increase of prices, mainly in early 2018. The fact that the annual HICP change was only 0.1 percentage points in the first eight months of 2018, compared to 1.0 percentage points in

<sup>16</sup> Lesbos, Chios, Samos, Kos and Leros are excluded from the abolition of the VAT discount due to the refugee flows.

the same period of 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).

Figure 3.10

CPI in Greece (annual percentage change per month)



Source: ELSTAT, Processing IOBE

As to the impact from energy goods, the higher year on year international oil price in the first eight months of 2018, along with the gradual weakening of the euro-dollar exchange rate, which has been lower year on year since August, strengthened the oil price in Euros. The average global oil price increased year on year by 30% in the first nine months of 2018 (in \$/barrel)<sup>17</sup>, which was not offset by the marginally lower rate of the euro against the dollar, by 7.2%, to 1.19, from 1.11 a year ago. Consequently, the international oil price in euros averaged €59.6/barrel between January and August, 29% higher than a year ago. Note that the upward trend intensified in the second quarter of this year, when the international oil price stabilised at around €62.5/barrel, i.e. 39% higher than in the second quarter of 2017. The impact of energy prices on the change of the HICP in the first eight months of this year is estimated at around 0.2%. This effect is expected to strengthen over the rest of 2018, as argued in the outlook subsection (Figure 3.15).

Compared to the rest of the Euro area, Greece has a much lower inflation rate without taxes and energy products in the first eight months of the year, which highlights the sluggish domestic demand on average over this period (Figure 3.16). The HICP percentage change in Greece was lower than the Eurozone average by 100 basis points, at 0.6% against 1.6%, recording the second lowest rate in the Euro area, along with Ireland, and above Cyprus (0.4%). Without the effect of energy prices and taxes as well, prices rose slower in Greece than in the Euro area, by 0.2% against 1.1%. Prices excluding energy and taxes increased for the first time after seven consecutive years

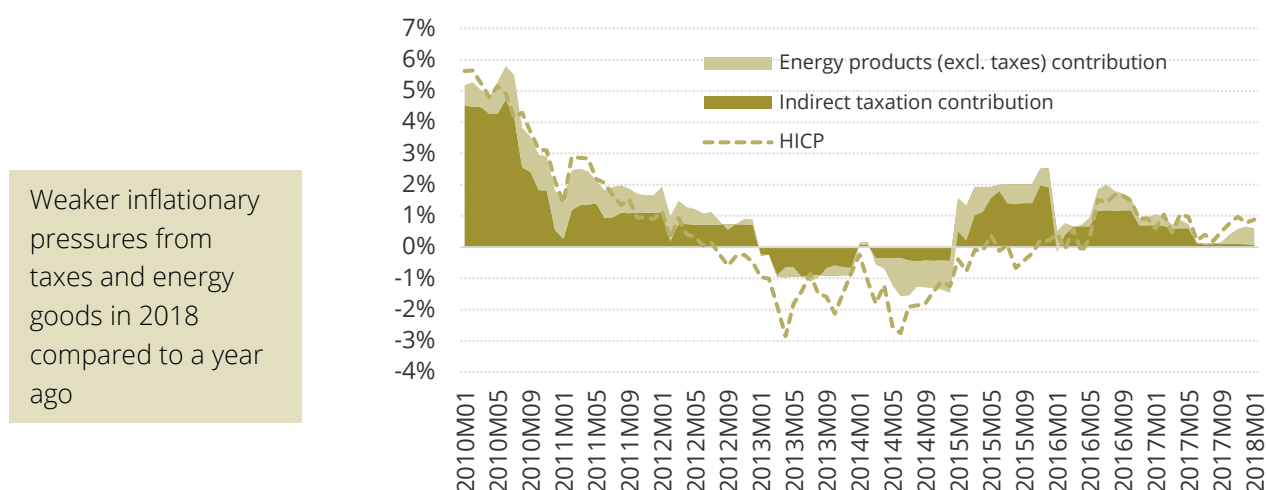
<sup>17</sup> Average values based on the Europe Brent Spot Price. Source: EIA, US Energy Information Administration



of decline (2011-2017), which is considered to be an indication of a small recovery of household demand. Nevertheless, Greece posted the second lowest rate of change in the Euro area after Cyprus and Ireland (0.0% in both countries).

Figure 3.11

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



Source: Eurostat, processing IOBE

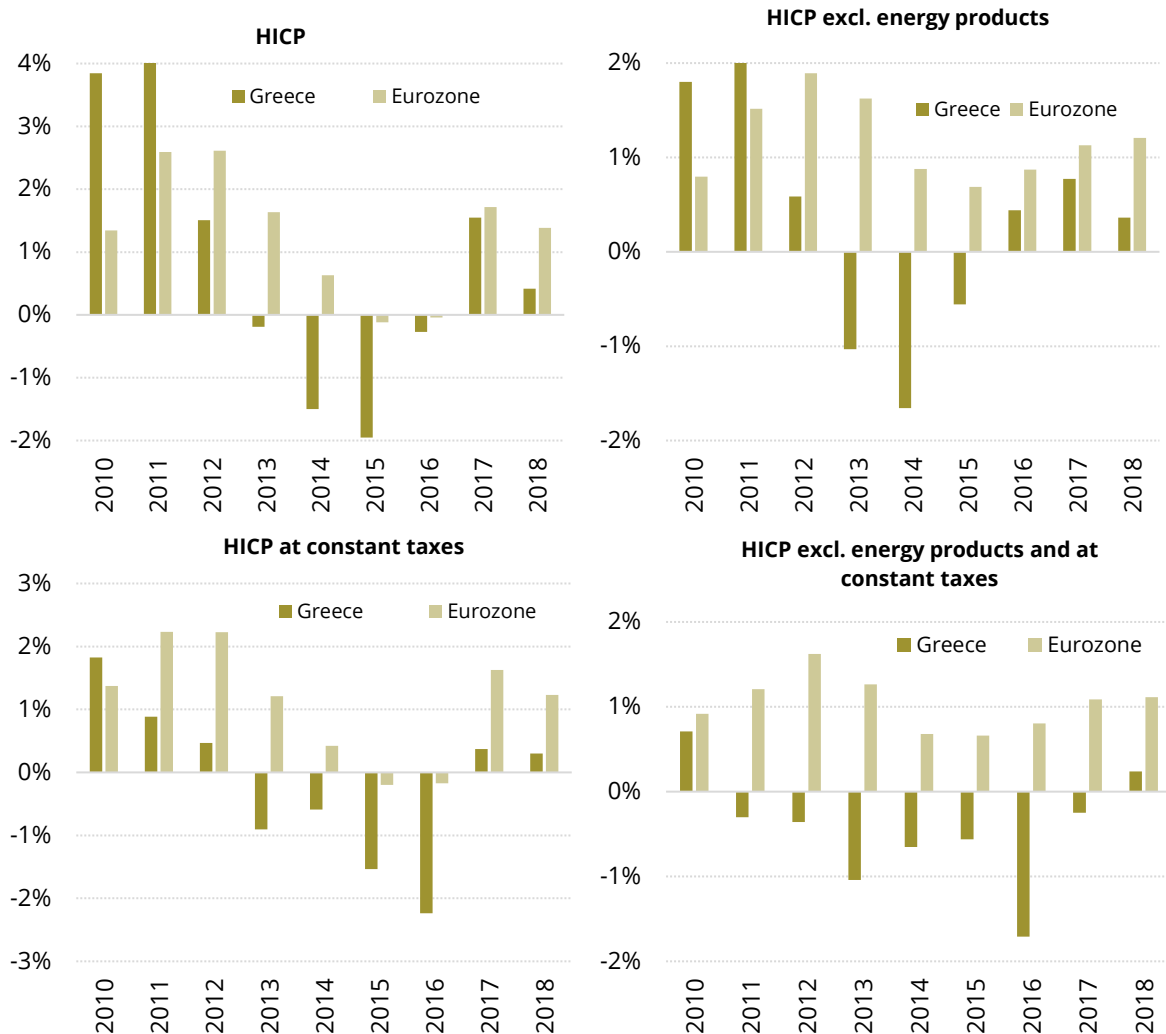
The inflationary effects of higher oil prices and indirect taxes were reflected in the different price changes in individual categories of goods and services in the first nine months of 2018. The largest increase in prices was recorded in Alcoholic Beverages – Tobacco, by 3.1%, against 5.5% a year ago, reflecting mainly the hike (from 01/01/2017) in indirect taxes on tobacco, which had led to extensive stockpiling of tobacco products in late 2016. Transport, a category affected by energy cost variations, recorded the second highest rise over the same period, by 2.8%, against 6.7% a year earlier. Communications came next, by 2.4% against 1.8% in the corresponding period of 2017, followed by Hotels-Cafe-Restaurants with 1.3%, from 1.8% a year ago, due to the new indirect tax on hotels, rented rooms and apartments, and probably, in part, stronger external demand for tourist services. Prices in Education - Health Services and Food Products – Non-Alcoholic Beverages increased marginally, by 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 the first nine months of 2018, with the greatest reduction occurring in Household Equipment (-1.5%, following a stronger fall by 3.1% in the same period of 2017), Miscellaneous Goods and Services and Recreation-Culture (-1.2% and -1.4% respectively), and Housing (-0.7%). Note that in the corresponding period of 2017, prices in Housing increased by 3.1%. The price decline in Housing came, inter alia, from lower regulatory tariffs on electricity, despite the impact from higher petroleum prices. The decline of prices slowed down in Clothing - Footwear, to -0.9% from -1.6% in the first nine months of 2017.

The Producer Price Index (PPI) of the domestic and foreign markets as a whole kept growing year on year in the first eight months of 2018, albeit at a lower rate, by 4.3%, compared with 6.1% increase in the same period of 2017 (Figure 3.17). The continued increase of the PPI largely reflects the strong growth of the prices of energy products both in 2018 and 2017. PPI without energy

decreased marginally in the first eight months of 2018, by -0.2%, against a 1.0% rise in the same period of 2017.

Figure 3.12

Annual HICP change in Greece and the Euro area



Inflation with fixed taxes and without energy goods was marginally positive, for the first time after seven years of price decline

Source: Eurostat, processing IOBE

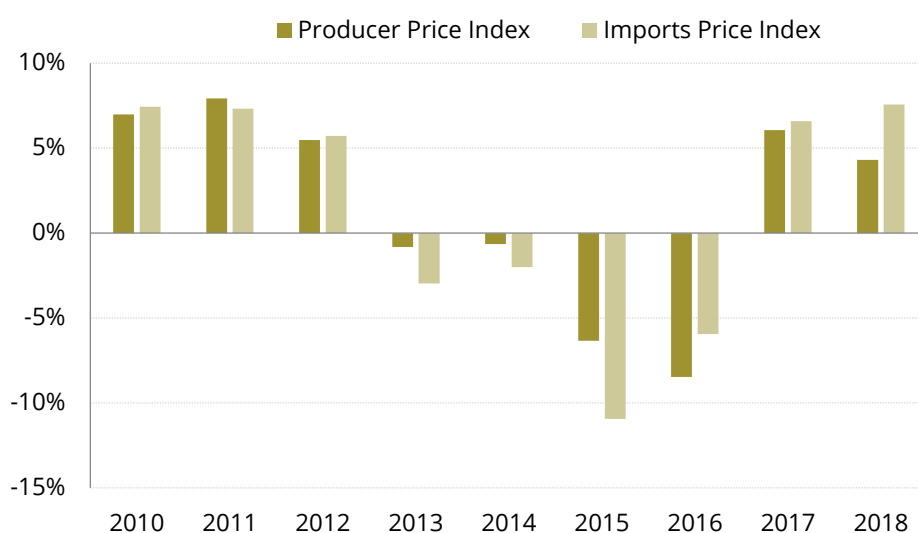
In greater detail, the strongest inflation for the second year in a row was recorded in Refined Petroleum Products and Energy Goods excluding Electricity, by 19.1% and 18.3%, respectively, followed by Energy Good, by 11.5%. Weaker positive changes of the PPI were recorded in Mining-Quarrying-Manufacturing, by 5.1%, while the prices of Basic Metals increased by 4.4%. By contrast, producer prices declined significantly in Basic Pharmaceuticals and Tobacco Products, by 9.2% and 8.4% respectively.

The overall Import Price Index (IPI) also increased faster this year than in the first eight months of 2017, by about 7.6%, against 6.6% a year earlier. Greece posted 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 3.3%. The strengthening of import prices in most countries is largely due to higher average oil price in comparison with the corresponding period of the previous year. 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 – August was recorded in Refined Petroleum Products by 24% (from 33.1% a year earlier) and Electricity Supply, by 14.2%, against a mild decrease in 2017 (-2.1%). Smaller positive changes were recorded in Mining of Metals, at around 3.5%. By contrast, import prices declined slightly year on year in Basic Metals, by 3%, and in Mining of Coal-Lignite, by 1.7%.

Figure 3.13

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



Increase of import and producer prices for the second consecutive year due to the inflationary impact of petroleum products

Source: ELSTAT, processing IOBE

### Medium-term outlook

As evident from the analysis of the trends in changes in consumer prices in the first nine months of 2018, despite the support from energy commodities, due to the substantially higher oil prices, CPI grew slower compared with last year, because of the significant weakening of the effect of indirect taxes. 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 steady taxes increased in 2018 for the first time since 2011. The effects of all these factors are expected to carry over to the rest of 2018, with the exception of the buffering effect of the euro/dollar exchange rate, which is expected to weaken in comparison with 2017.

In particular, as the impact from increases in indirect taxes that were put in effect from 01/01/2018 has been steadily marginal since the beginning of the year (0.1% each month), it is not expected to strengthen over the rest of the year. It is possible that their impact on prices will peter out over this period, especially after the tourist season is finished, as the new taxes were imposed on hotels and tourist accommodation.

The price of the Brent price is still rising, with minor interruptions. In the beginning of October, it reached \$85, its highest level since December 2014. Note that the increase continued despite the decision at the end of June by members of OPEC, Saudi Arabia and Russia to expand daily production. As noted in previous IOBE reports on the Greek economy, the uptrend in oil prices comes from the steadily strong economic growth in both developed and developing economies for the second consecutive year, Iran's responses to the US decision to re-impose sanctions, and the new escalation of the armed conflict in Libya. As a consequence, the average price of Brent oil in 2018 is expected to average \$75/barrel, slightly higher than in earlier forecasts by analysts (US Energy Information Administration – 74.4\$/ barrel), which implies that it will fluctuate on average 37% higher than in 2017.

In 2019, provided that the oil-producing countries will not reduce substantially their output, the expected slight weakening of the growth in the world economy, mainly as a result of the effects of protectionist trade policies and the weakening of the monetary policy support by the ECB and the Bank of Japan, will weaken the upward pressure on oil prices, resulting in a slight decline.

Until July, the higher year-on-year euro/dollar exchange rate compensated for the increase in oil price. Since August, however, the exchange rate has constantly fallen short of its last year level, and thus it no longer cushions the impact of higher oil prices. The weakening of the exchange rate is considered to be the result of the expanding US fiscal policy and the gradual tightening of the Fed's monetary policy, which has increased the yields of US bonds well above those in Europe. These developments have led to a flow of capital to the US. The ECB decision in mid-September to retain the statutory interest rates stable at least until the summer of 2019 will contribute to keeping Eurozone yields and interest rates at low levels. That said, the concern over the effects of the US protectionist measures on the competitiveness of the US products has intensified, especially after the announcement of counter measures by the EU, Canada and China. Consequently, the euro/dollar exchange rate is expected to fluctuate around its current level, a bit lower than a year earlier. As a result, it will not have a buffering effect on higher oil prices. It is also not expected to recover in the following year, according to the latest forecasts of international organisations.

The consumption demand of households in the next year will depend on the implementation or not of the pre-legislated pension cuts, the compensatory interventions included in the MTF5 2019-2022 or the proposed alternative measures. Domestic income is expected to increase further because of a new expansion in employment, driven mainly by the implementation of investments, in Tourism and the public sector. The outcome of the procedure for the readjustment of the minimum wage will constitute a critical factor of the trend in income and employment.

As a result of the above trends and forecasts, the CPI rate of change is anticipated to average 0.8% in 2018. The first forecast for 2019 is that the CPI will increase slightly, to around 1.3%.

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.

The price expectations had mixed quarter-on-quarter trends in the third quarter of 2018, as the balance was negative in Industry and Private Construction. In particular, the price expectations indicator slightly decreased quarter on quarter in Services and Private Construction, while by contrast it increased in Industry and remained stable in Retail Trade. Year on year, the expectations for price changes strengthened in all sectors except Services, where the indicator declined. In greater detail:

In Industry, the price expectations indicator increased quarter on quarter in the third quarter. In particular, the indicator increased by 8 points, from -1 point in the preceding quarter (and 0 points in the same quarter of the previous year). About 6% (from 7% 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% (from 6%), and the remaining 82% (from 86%) expecting price stability.

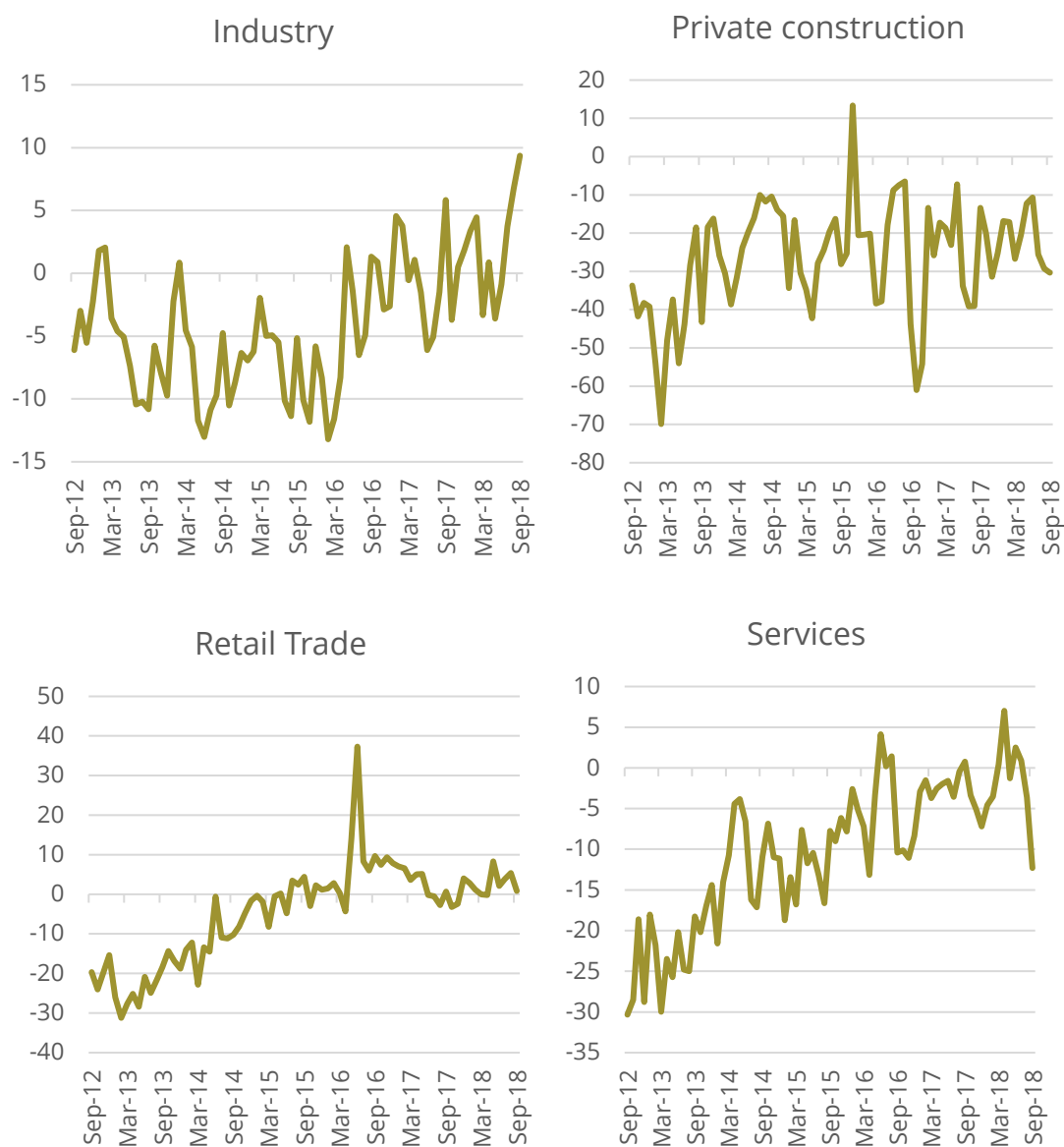
In Retail Trade, the positive balance of price expectations remained unchanged at 3 points from the second to the third quarter, higher by 4 points year on year. About 2% (from 4%) of the companies in the sector were expecting a fall in prices in the short term, while the percentage of those forecasting price growth decreased to 6% (from 7%), with the remaining 92% (from 90%) 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 Appliance and Motor Vehicles – Spare Parts.

The average index for the anticipated price changes in Services in the examined quarter weakened quarter on quarter to -5 (from 3) points, posting a lower level than in the same quarter of last year (-1 points). In the current quarter, 11% (from 10%) of the companies in the sector were expecting a fall in prices, while 6% (from 13%) were expecting an increase. At the branch level, the index increased in Financial Intermediaries, Miscellaneous Business Activities and IT Services and declined in Land Transport and Hotels – Restaurants – Travel Agencies.

Finally, in Private Construction, the negative balance of -14 points from the previous quarter decreased to -28 points, strengthening compared to the same period of the preceding year as well (-31 points). About 28% (from 25%) of the businesses in the sector were anticipating prices to decline, while the percentage of those expecting inflation during the examined quarter dropped to zero (from 10%), with 72% (from 65%) predicting price stability.

Figure 3.14

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



Source: IOBE

The price expectations indicator decreased quarter on quarter in Services and Private Construction, while by contrast it increased in Industry and remained stable in Retail Trade

## 3.6 Balance of Payments

- Increase in the deficit of the Current Account in January-August to €909.6 million., from €52.4 million in the same period of last year
- Higher deficit in the Goods Account by €961.2 million, to €13.3 billion
- Higher surplus in the Services Account by €754.3 million (at €13.1 billion), not sufficient to offset the increase in the Goods Account deficit

In the first eight months of 2018, the Current Account had a deficit totalling €909.6 million, against a deficit of €52.4 million in 2017. The deficit strengthened by about €857.2 million, against a contraction by €373 million in 2017, as the increase of the surplus in Services Accounts, due to tourism and transportation, was more than offset by an increase of the deficit in the Goods Account and the emergence of a deficit in the Primary Income Account.

Regarding the trends in the components, the deficit of the Goods Account reached €13.3 billion in the first eight months of this year, expanding by €961.2 million year on year, compared with a reduction by €1.6 billion in 2017. Exports totalled €21.4 billion, stronger by 18.3% (€3.3 billion)<sup>18</sup>, with a significant rise in ships (241.5%), fuels (28.5%) and other goods (12.8%). Imports reached €34.7 billion, higher by 14.0% (€4.3 billion), with a rise in ships (82.7%), fuels (25.8%) and other goods (9.2%). The deficit of the Goods Account excluding fuel and ships stood at €9.9 billion in the first eight months of 2018, against €9.5 billion, higher year on year by 4.4%, as alongside the boost of exports in this category by €1.6 billion, imports increased by €2.1 billion. The deficit of the fuel account increased to €3.3 billion, from €2.7 billion in the same period of last year.

The surplus in the Services Account stood at €13.1 billion in the first eight months of 2018, higher by €754.3 million year on year, against stronger growth in 2017 by €1.6 billion. The "fatigue" in the increase came from the part of the other services, as receipts from tourism and transport strengthened. In particular, total receipts from services amounted to €21.3 billion, up on 2017 by 9.4% (€1.8 billion), while the total payments for services reached €8.2 billion in 2018, against €7.1 billion in the preceding year. At the constituent categories, the receipts from travel services reached €11.8 billion, up by 11.1%, the receipts from transport services increased by 13.9% to €6.7 billion, while lastly the receipts from other services decreased by 5.4% to 2.9 billion. Receipts from tourism reached their highest level for this period since 2002, with an average for the period 2002-2014 at €8.0 billion. The payments for travel services increased sharply, by 11.1%, to €1.4 billion, the payments for transport services increased by 17.4% to €3.9 billion, while the payments for other services reached €2.9 billion, higher by 14.0% compared with 2017.

The Primary Income Account was in a deficit of €632.4 million in the first eight months of this year, compared with a small surplus in 2017. Revenues amounted to €4.3 billion, lower year on year by €320.8 million, while payments increased by 8.9%, to €4.9 billion. In greater detail, income from labour slightly declined, to €90.0 million, income from investments declined by 26.5%, to €1.7 billion, while other primary income (subsidies and taxes on production) increased by 13.5%, to €2.5

<sup>18</sup> The figures in brackets represent an absolute change compared with the corresponding period of the previous year, unless stated otherwise.



billion. Payments for labour remained at €186.2 million, payments for investment increased by 9.8%, to €4.5 billion, and those for other primary income increased by 1.1%, to €285.7 million.

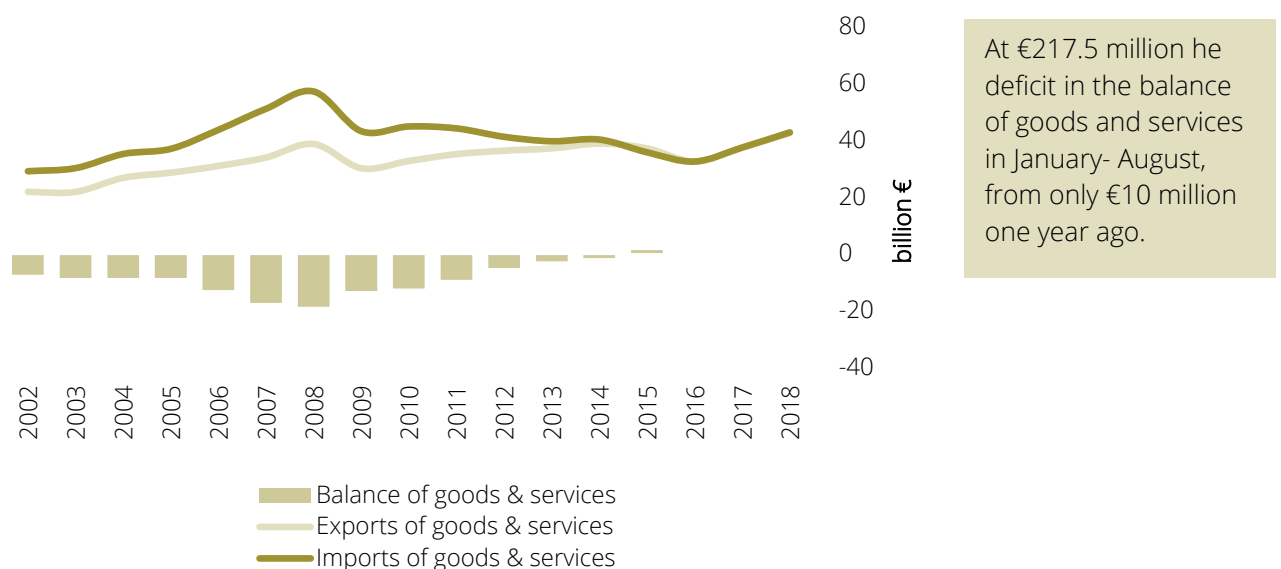
The deficit of the Secondary Income Account fell to €59.7 million, from €137.7 million in 2017, as receipts remained at €1.4 billion, while payments decreased to €1.5 billion.

## Capital Account

The Capital Account<sup>19</sup> was in a surplus of €283.6 million, against €374.1 million in 2017, as receipts increased to €497.5 million, while payments increased to €213.8 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 €625.9 million in the first eight months of 2018, against a surplus of €321.8 million in 2017.

Figure 3.15

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

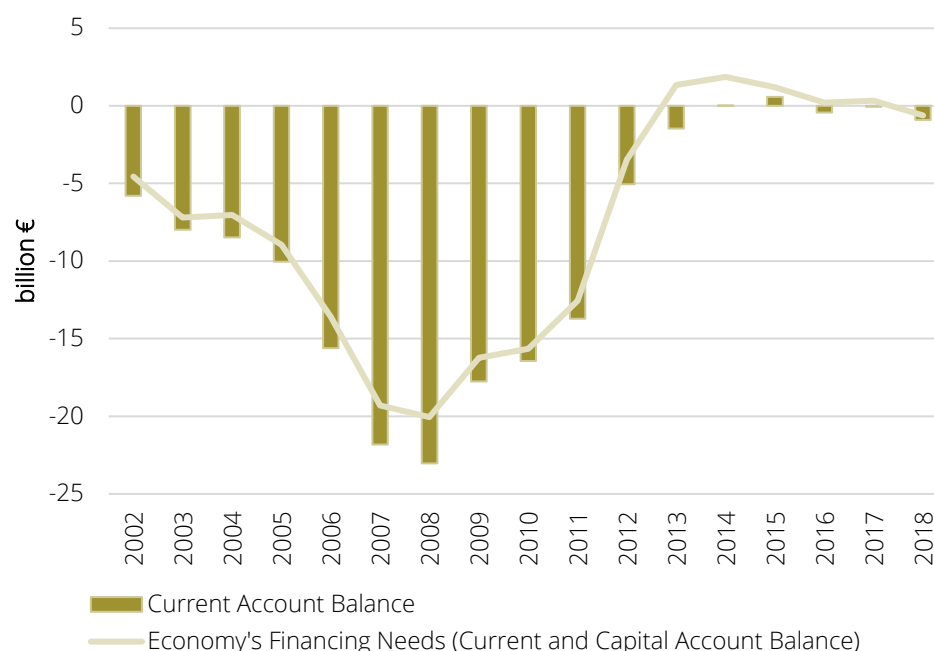


Source: Bank of Greece - Processing IOBE

<sup>19</sup> 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).

Figure 3.16

Current Account (January – August) 2002-2018



Strengthening of the current account deficit in 2018 to €909.6 million, against €52.4 million last year, as the borrowing needs of the economy expanded compared to 2017

Source: Bank of Greece - Data processing IOBE

## Financial Account

The Financial Account was in a deficit of €953.4 million in the first eight months of this year, compared to a deficit of €390.7 million in 2017.

In greater detail, the net receivables of residents from direct investment abroad increased by €432.0 million, while the net liabilities to non-residents (investments of non-residents in the country) strengthened by €2.6 billion.

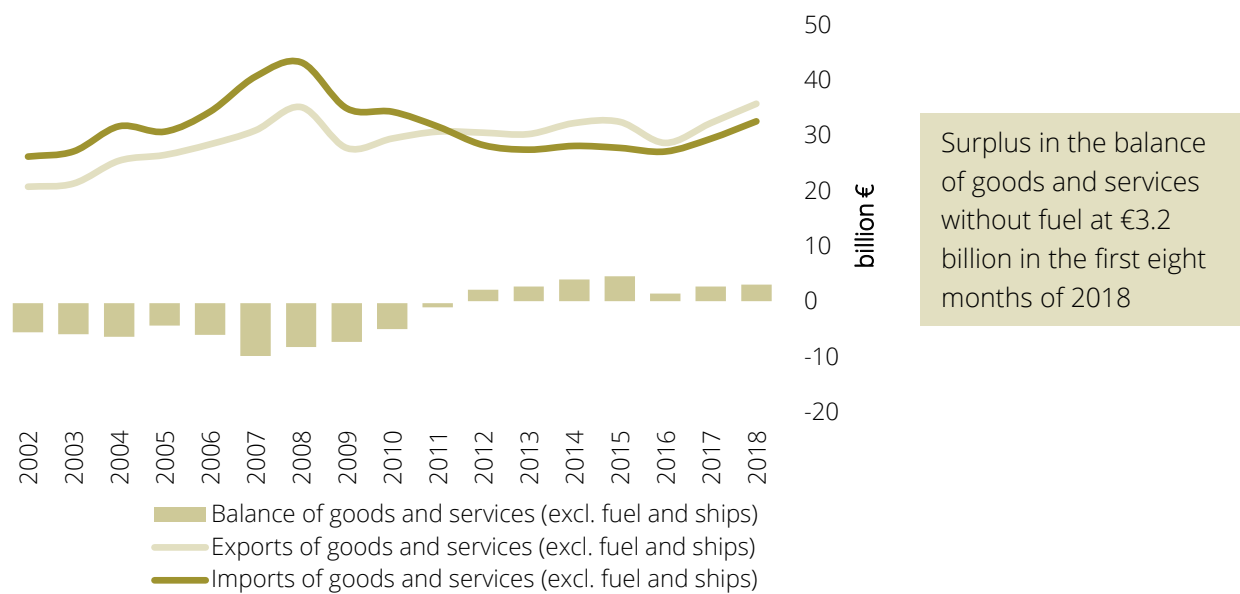
In the category of portfolio investments, the claims of the residents to non-residents decreased by €1.2 billion, as according to the Bank of Greece, the placements of residents in bonds and treasury bills abroad decreased, while the liabilities to non-residents increased by €2.1 billion, due to increase in the purchase of bonds and treasury bills.

In the category of other investments, the claims of residents to non-residents declined by €4.6 billion, with a net decrease of €2.0 billion in the deposits and repos of residents (credit institutions and institutional investors) abroad. The liabilities declined by €9.5 billion, reflecting the reduction of the deposits and repos of non-residents in Greece by €24.9 while public and private sector debt to non-residents increased by €20.2 billion.

Finally, the Reserve Assets of the country totalled €6.1 billion at the end of August 2018, against €6.4 billion in 2017.

Figure 3.17

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



Source: Bank of Greece, Processing IOBE

Table 3.13 Balance of Payments in million €

		January - August			August		
		2016	2017	2018	2016	2017	2018
I	CURRENT ACCOUNT (I.A + I.B + I.C + I.D)	-425,5	-52,4	-909,6	1.637,2	1.825,8	1.564,4
	GOODS AND SERVICES ACCOUNT (I.A + I.B)	-10,0	-10,6	-217,5	2.064,9	2.181,1	2.101,4
I.A	GOODS ACCOUNT (I.A.1 - I.A.2)	-10.732,6	-12.370,2	-13.331,4	-1.174,0	-1.677,6	-1.695,9
	Oil balance	-1.454,1	-2.701,7	-3.260,2	-105,6	-579,4	-573,9
	Trade balance excluding oil	-9.278,5	-9.668,5	-10.071,2	-1.068,4	-1.098,2	-1.122,0
	Ships balance	-105,7	-150,8	-133,8	-1,6	-5,7	26,6
	Trade balance excluding ships	-10.627,0	-12.219,4	-13.197,6	-1.172,4	-1.671,9	-1.722,5
	Trade balance excluding oil and ships	-9.172,8	-9.517,7	-9.937,4	-1.066,8	-1.092,5	-1.148,6
I.A.1	Exports	15.629,4	18.075,3	21.389,1	1.853,0	1.951,6	2.539,4
	Oil	3.716,0	5.077,2	6.524,8	586,4	531,1	848,1
	Ships (sales)	123,3	89,2	304,7	9,1	10,1	52,0
	Goods excluding oil and ships	11.790,2	12.908,9	14.559,6	1.257,5	1.410,4	1.639,3
I.A.2	Imports	26.362,0	30.445,5	34.720,5	3.027,0	3.629,2	4.235,2
	Oil	5.170,1	7.778,9	9.785,1	692,0	1.110,5	1.422,0
	Ships (buying)	228,9	240,0	438,5	10,7	15,8	25,4
	Goods excluding oil and ships	20.963,0	22.426,6	24.497,0	2.324,4	2.502,9	2.787,8
I.B	SERVICES ACCOUNT (I.B.1-I.B.2)	10.722,6	12.359,6	13.113,9	3.238,9	3.858,7	3.797,3
I.B.1	Receipts	16.998,4	19.482,7	21.310,4	4.064,6	4.755,3	4.839,6
	Travel	9.643,2	10.586,9	11.764,2	3.024,9	3.552,7	3.603,6
	Transportation	4.968,1	5.867,9	6.682,0	690,7	814,2	909,7
	Other services	2.387,1	3.027,8	2.864,2	348,9	388,4	326,3
I.B.2	Payments	6.275,8	7.123,1	8.196,4	825,6	896,6	1.042,3
	Travel	1.344,6	1.275,3	1.416,9	193,4	164,7	167,3
	Transportation	2.873,2	3.311,2	3.887,4	389,9	451,4	496,5
	Other services	2.058,0	2.536,5	2.892,1	242,3	280,5	378,6
I.Γ	PRIMARY INCOME ACCOUNT (I.C.1-I.C.2)	-249,6	95,9	-632,4	-326,8	-247,0	-436,0
I.Γ.1	Receipts	4.199,7	4.650,2	4.329,4	292,2	516,3	296,6
	From work (wages, compensation)	86,9	97,1	90,0	11,3	10,0	12,6
	From investments (interest, dividends, profit)	1.678,2	2.323,0	1.707,5	208,8	404,5	190,1
	Other primary income	2.434,6	2.230,2	2.532,0	72,1	101,7	93,9
I.Γ.2	Payments	4.449,3	4.554,4	4.961,8	619,0	763,3	732,5
	From work (wages, compensation)	150,8	181,7	186,2	20,1	22,4	23,0
	From investments (interest, dividends, profit)	4.005,8	4.090,2	4.490,0	574,9	713,4	686,2
	Other primary income	292,8	282,5	285,7	24,0	27,5	23,4
I.Δ	SECONDARY INCOME ACCOUNT (I.D.1-I.D.2)	-165,8	-137,7	-59,7	-101,0	-108,3	-101,0
I.Δ.1	Receipts	1.298,4	1.442,6	1.442,6	87,9	117,6	102,1
	General government	811,5	743,4	844,0	24,0	33,9	31,3
	Other sectors	486,9	699,2	598,6	63,9	83,6	70,8
I.Δ.2	Payments	1.464,2	1.580,3	1.502,3	188,9	225,8	203,1
	General government	1.104,4	1.096,4	1.043,2	136,0	155,8	132,6
	Other sectors	359,8	483,9	459,1	52,9	70,1	70,5
II	CAPITAL ACCOUNT (II.1-II.2)	637,9	374,1	283,6	-4,4	2,3	91,3
II.1	Receipts	788,1	476,2	497,5	4,9	12,4	117,0
	General government	753,8	425,0	301,9	0,5	0,6	66,1
	Other sectors	34,2	51,2	195,5	4,4	11,8	50,9
II.2	Payments	150,2	102,0	213,8	9,4	10,1	25,6
	General government	1,1	1,8	1,9	0,1	0,2	0,4
	Other sectors	149,0	100,2	211,9	9,2	9,9	25,3
	BALANCE OF CURRENT AND CAPITAL ACCOUNT (I+II)	212,4	321,8	-625,9	1.632,7	1.828,2	1.655,7
III	FINANCIAL ACCOUNT (III.A+III.B+III.C+III.D)	631,7	-390,7	-953,4	1.540,9	1.884,7	1.234,3
III.A	DIRECT INVESTMENT*	-2.580,4	-2.031,5	-2.159,6	-345,7	-146,5	-80,1
	Assets	-1.542,7	187,8	432,0	21,1	43,7	46,7
	Liabilities	1.037,7	2.219,3	2.591,6	366,8	190,2	126,7
III.B	PORTFOLIO INVESTMENT**	7.669,4	-5.226,6	-3.358,8	149,6	-5.687,3	1.187,2
	Assets	5.616,5	-8.564,3	-1.217,0	425,8	-4.865,3	605,1
	Liabilities	-2.052,8	-3.337,6	2.141,8	276,2	822,0	-582,1
III.Γ	OTHER INVESTMENT*	-5.060,8	6.925,4	4.834,0	1.751,0	7.350,6	350,2
	Assets	-9.529,9	-6.942,1	-4.644,4	-694,5	-148,1	2.302,9
	Liabilities	-4.469,1	-13.867,5	-9.478,4	-2.445,5	-7.498,6	1.952,7
	(Loans of general government)	4.265,3	4.665,3	20.156,0	-8,8	-0,6	14.995,2
III.Δ	CHANGE IN RESERVE ASSETS***	603,5	-58,0	-269,0	-14,0	368,0	-223,0
IV	BALANCE ITEMS (I + II + IV + V = 0)	419,3	-712,5	-327,5	-91,8	56,6	-421,4
	RESERVE ASSETS (STOCK)***				6.797	6.430	6.083

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. DIGITAL PAYMENTS AFTER THE CAPITAL CONTROLS: SUPPORT MEASURES AND TAX REVENUES<sup>20</sup>

- The use of payment cards in Greece more than tripled in value between 2014 and 2017
- The penetration lifted off with the imposition of the capital controls and then remained on an uptrend, aided further by the measures of law 4446/2016.
- The law had a statistically significant, positive impact on card usage, especially in the second half of 2017, controlling for the effects of macroeconomic factors and capital controls
- The penetration of electronic payments had a significant positive impact on tax compliance
- Nevertheless, the average level of card use in Greece has remained lower than the EU average, while it presents significant heterogeneity across sectors and geographical areas
- More targeted measures are warranted in order to enhance further the penetration of electronic payments, which would yield even greater fiscal benefits

### 4.1 Introduction

Following the imposition of capital controls in 2015, the usage of payment card in Greece increased impressively, recording one of the fastest growth rates worldwide. This report examines the size,

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<sup>20</sup> The full text of the study is available in Greek at the IOBE website: [http://iobe.gr/research\\_dtl.asp?RID=162](http://iobe.gr/research_dtl.asp?RID=162)

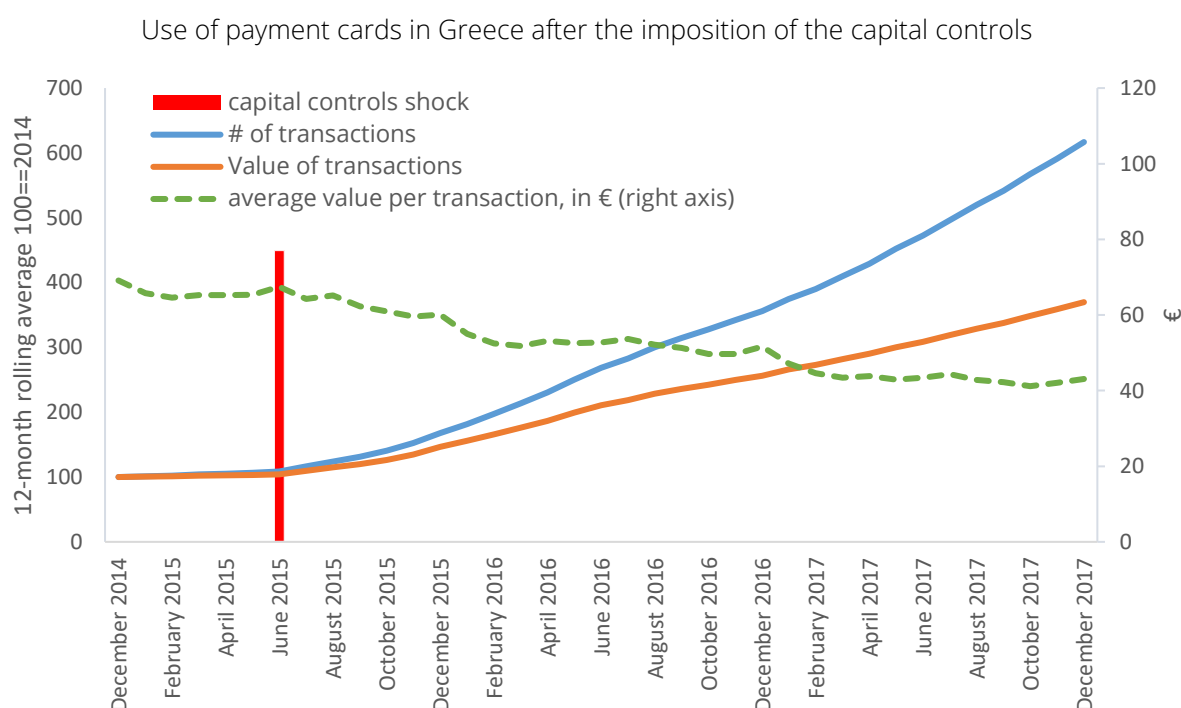
the qualitative features and the causes of this increase for the period 2014-2017 and quantifies the impact on tax compliance.

The report makes use and extends the findings of a previous report that was published a quarter after the imposition of the capital controls.<sup>21</sup> The aim of the study is to examine the effects of recent policies on the use of Electronic Means of Payment (EMP) and especially in the use of payment cards. In addition, this study examines the effect of the usage of EMP on tax revenues and presents some policy options for further spread of the EMP use in Greece.

## 4.2 Evolution of EMP use

Three key factors affected the use of EMP in Greece between 2014-2017: (a) the imposition of capital controls in late June 2015, in order to stabilise the banking system, (b) the macroeconomic environment, which steadied over the examined period, after a deep and prolonged recession, (c) the regulatory measures introduced by law 4446/2016 aimed at strengthening the EMP use.

Figure 4.1



Source: HBA bank members – Data processing: IOBE

The descriptive analysis shows that the digital payments in Greece increased significantly after the imposition of the capital controls, while a new push was given with the measures of law 4446/2016. Indicatively, between 2014 and 2017, the number card payments increased sixfold, while the value of card transactions more than tripled (Figure 4.1). Over the same period, the number of active e-banking users doubled and the number of active mobile banking users increased by ten times.

The level of use of payment cards converged with the EU average faster than in 2017, yet it remained comparatively low and heterogeneous across sectors and geographical areas. The total

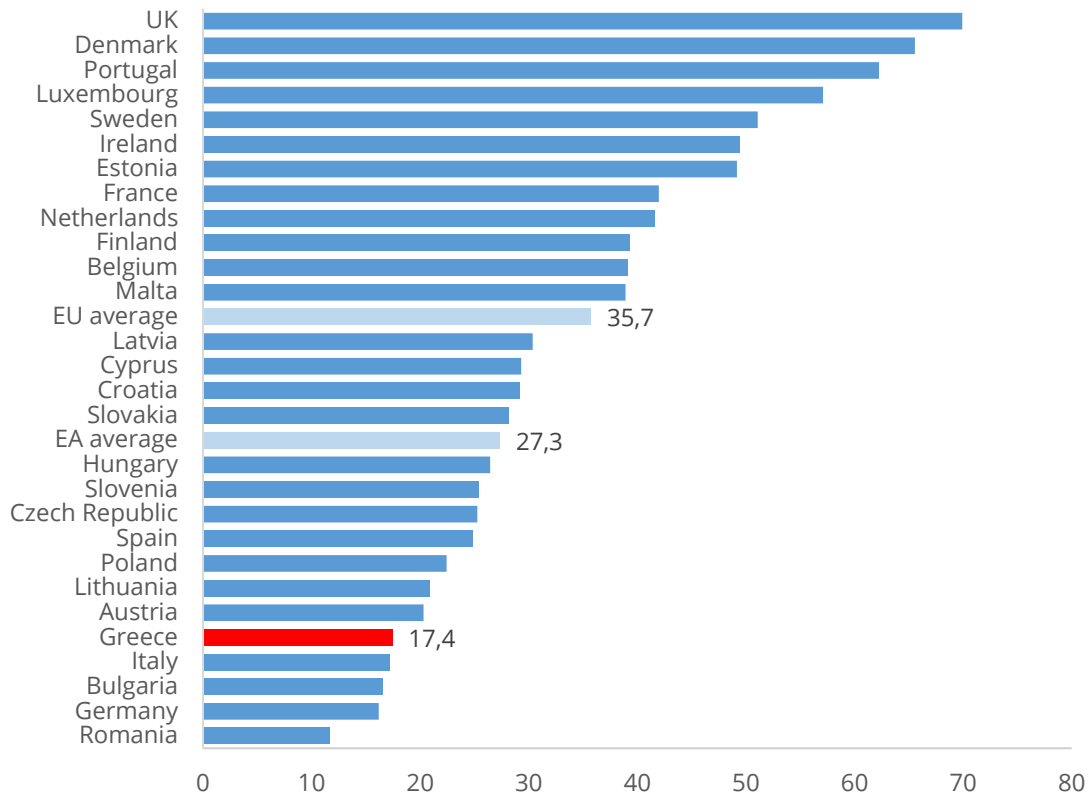
<sup>21</sup> IOBE. (2015). Digital payments and tax revenues in Greece. [http://iobe.gr/research\\_dtl.asp?RID=119](http://iobe.gr/research_dtl.asp?RID=119)



use of cards as a percentage of private consumption remained 18.3 p.p. lower than the EU average (Figure 4.2).

Figure 4.2

Value of card transactions in the EU, as percentage of private consumption, 2017



Source: ECB - Data processing: IOBE

The share of card use increased notably in sectors of low risk of tax evasion, such as supermarkets, gas stations, drug stores, but also in some transactions with a higher risk of tax evasion. However, the total level of card use in sectors with an increased possibility of tax evasion is significantly lower than the share of these sectors in private consumption.

Similar is the heterogeneity in the geographical spread of card usage. Despite the fact that a significant increase was recorded in the periphery, compared to the cities of Athens and Thessaloniki, the level of payment card use in regions outside Attica remains small, given the regional composition of GDP.

Concerning the demographic features of the users of payment cards, a higher rate is observed among men, although the difference seems to decline, as the use among women growing slightly stronger after the imposition of the capital controls. The difference between the two sexes is reversed when the employment and professional statuses are taken into account. In particular, the use of payment cards is lower among people that are not active labour market participants and the unemployed, while bank employees, armed forces personnel and those working in the private sector seem to have adopted the use of cards for their transactions to a higher degree.

Concerning age, the higher frequency of card use is observed among the 35-54 years old, although the average monthly value of transactions is higher among people aged 55-64, due to higher average value per transaction. For those aged less than 25 years old, the fall in the average value of transactions is offset by an increase in the transactions frequency. As a result, the average monthly spending in May 2017 was at about the same level as in May 2015.

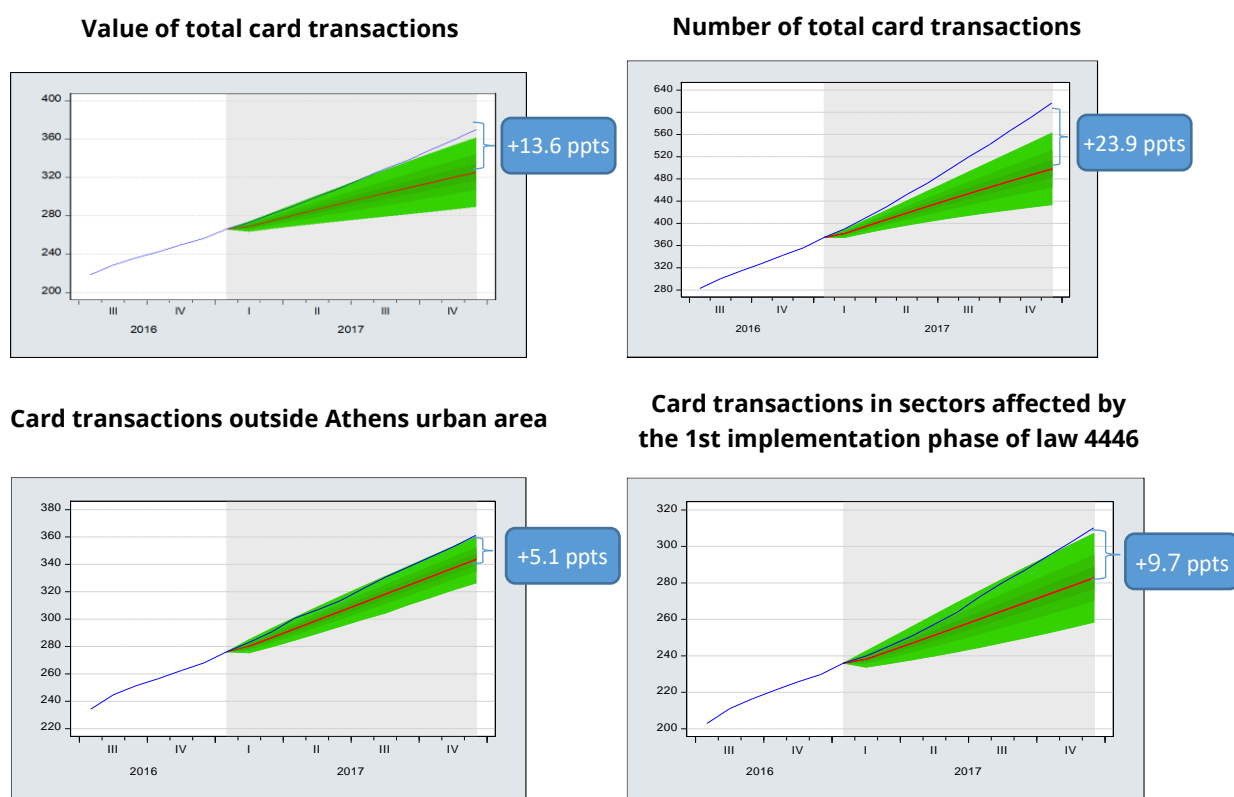
### 4.3 Impact of incentives on EMP use

With the use of econometric methods, we examined the question of whether the measures of the law 4446/2017 affected EMP use, by isolating the effects of the cash withdrawal restrictions and the macroeconomic trends. The analysis reveals that law 4446/2016 had a positive impact on the use of EMP, with a different strength among different sectors and EMP types.

Indicatively, the share of card payments increased in the sectors included in the first implementation stage of the measure to make POS terminals mandatory. The estimations show that the law contributed to the increase of card use by €3 billion in terms of value of transactions and 110 million in terms of number of transactions, on an annual basis, until December 2017.

Figure 4.3

Evolution of card use in 2017, compared with an alternative scenario without the measures of law 4446



Source: IOBE

**Note:** Prediction of the model without measures: red line. Actual values: blue line (12-month moving average, 2014 = 100). Confidence interval of 30%, 60% and 90% with dark, neutral and light shades of green respectively.

## 4.4 Impact of EMP use on tax revenues

A key question examined by the study is the extent to which the expansion of card use affected the revenues from VAT through stronger tax compliance. The results of the analysis show that the expansion of card payments had a positive and statistically significant effect on revenues from indirect taxes.

In particular, the expansion of electronic payments is estimated to have contributed at least €400 million or about 50% of the annual increase in revenues in 2017. As to the effect of law 4446/2016 on revenue from VAT through the spread of card payments that is not due to other factors (e.g. changes in consumption, impact of capital controls), the results show that it contributed approximately a third of the total annual increase of revenue from VAT in 2017. The annual direct fiscal benefit of the measures is estimated to range between €210 million and €323 million. Note that the total fiscal benefit is greater, as this analysis does not include the benefit from additional revenues from income taxation and social security contributions for economic activity that remained undeclared before the spread of payment cards.

Given that the level of card use remains low in Greece compared with international practice, there is room for greater fiscal benefits from further spread of EMP use. Based on international practices for card usage share in private consumption, the annual VAT revenue would be higher by 21% (€3.3 billion) if Greece reached the EU average level of card usage and by 54% (€8.5 billion) if Greece reached the level of card usage of Portugal. Based on a more uniform penetration of card use by sector and region, the annual revenue from VAT would be higher by:

- 25% (€3.9 billion) if the share of Food Services in card usage equalled its share in private consumption
- 12% (€2.0 billion) if the share of transactions with freelancers in card usage equalled their share in private consumption
- 8% (€1.3) or 5.9% (€930 million) if the use of cards in mainland Greece except Athens and Thessaloniki, and in the islands respectively, reached the share of these regions in GDP.

## 4.5 Policy options

The study concludes with a discussion of additional or corrective policy options, towards targeted EMP penetration in sectors with moderate or high risk of tax evasion, and in areas with low usage. The options are divided into three categories - measures related to consumers, to businesses, and administrative measures related to the role of the State and the regulatory authorities (Figure 4.4).

Figure 4.4

Indicative policy measures for strengthening the incentives to EMP use along 3 dimensions

#### Demand - Consumers

- Refund of 5% of the value of card transactions in targeted sectors and areas
- Small income tax discount, targeted to high EMP use in branches with medium and high risk of tax evasion
- Incentives for reporting businesses that do not accept card payments

#### Supply - Businesses

- Lottery or tax discount for freelancers that meet targets for EMP acceptance
- Discounting expenditure only if paid through EMP
- Implementation of electronic invoicing

#### State

- Surveillance of the timely and complete implementation of law 4446/2016
- Mandatory declaration of all business accounts that are used by corporations and freelancers until a set deadline and levying fines in case of non-compliance

## APPENDIX

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**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	1.5	3.0
Belgium	0.8	-2.3	2.7	1.8	0.2	0.2	1.3	1.4	1.4	1.7
Bulgaria	6.0	-3.6	1.3	1.9	0.0	0.9	1.3	3.6	3.9	3.6
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	1.9	2.2
Denmark	-0.5	-4.9	1.9	1.3	0.2	0.9	1.6	1.6	2.0	2.3
Czech Republic	2.7	-4.8	2.3	1.8	-0.8	-0.5	2.7	5.3	2.6	4.4
EU	0.5	-4.3	2.1	1.7	-0.4	0.3	1.8	2.3	2.0	2.5
Greece	-0.3	-4.3	-5.5	-9.1	-7.3	-3.2	0.7	-0.3	-0.2	1.4
Estonia	-5.4	-14.7	2.3	7.6	4.3	1.9	2.9	1.7	2.1	4.9
Euro area	0.4	-4.5	2.1	1.6	-0.9	-0.2	1.3	2.1	1.8	2.4
United Kingdom	-0.3	-4.2	1.7	1.6	1.4	2.0	2.9	2.3	1.8	1.7
Ireland	-3.9	-4.6	1.8	3.0	0.0	1.6	8.3	25.6	5.1	7.8
Spain	1.1	-3.6	0.0	-1.0	-2.9	-1.7	1.4	3.4	3.3	3.1
Italy	-1.1	-5.5	1.7	0.6	-2.8	-1.7	0.1	1.0	0.9	1.5
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	2.0	3.4	3.9
Latvia	-3.5	-14.4	-3.9	6.4	4.0	2.4	1.9	3.0	2.2	4.5
Lithuania	2.6	-14.8	1.6	6.0	3.8	3.5	3.5	2.0	2.3	3.8
Luxemburg	-1.3	-4.4	4.9	2.5	-0.4	3.7	5.8	2.9	3.1	2.3
Malta	3.3	-2.5	3.5	1.3	2.7	4.6	8.1	9.6	5.2	6.4
Netherlands	2.2	-3.7	1.3	1.6	-1.0	-0.1	1.4	2.0	2.2	2.9
Hungary	0.9	-6.6	0.7	1.7	-1.6	2.1	4.2	3.4	2.2	4.0
Poland	4.2	2.8	3.6	5.0	1.6	1.4	3.3	3.8	3.0	4.6
Portugal	0.2	-3.0	1.9	-1.8	-4.0	-1.1	0.9	1.8	1.6	2.7
Romania	8.3	-5.9	-2.8	2.0	1.2	3.5	3.1	4.0	4.8	6.9
Slovakia	5.6	-5.4	5.0	2.8	1.7	1.5	2.8	3.9	3.3	3.4
Slovenia	3.3	-7.8	1.2	0.6	-2.7	-1.1	3.0	2.3	3.1	5.0
Sweden	-0.6	-5.2	6.0	2.7	-0.3	1.2	2.6	4.5	3.2	2.3
Finland	0.7	-8.3	3.0	2.6	-1.4	-0.8	-0.6	0.1	2.1	2.6

**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	84.6	83.6	78.4
Belgium	92.5	99.5	99.7	102.6	104.3	105.5	107	106.1	105.9	103.1
Bulgaria	13	13.7	15.3	15.2	16.7	17	27	26	29	25.4
France	68.8	83	85.3	87.8	90.6	93.4	94.9	95.6	96.6	97
Germany	65.2	72.6	80.9	78.6	79.8	77.5	74.7	71	68.2	64.1
Denmark	33.3	40.2	42.6	46.1	44.9	44	44.3	39.9	37.9	36.4
Czech Republic	28.3	33.6	37.4	39.8	44.5	44.9	42.2	40	36.8	34.6
EU	60.8	73.4	78.9	81.5	83.9	85.8	86.5	84.5	83.3	81.6
Greece	109.4	126.7	146.2	172.1	159.6	177.4	178.9	176.8	180.8	178.6
Estonia	4.5	7	6.6	6.1	9.7	10.2	10.7	10	9.4	9
Euro area	68.7	79.2	84.6	86.6	89.7	91.6	91.9	89.9	89	86.7
United Kingdom	49.9	64.1	75.6	81.3	84.5	85.6	87.4	88.2	88.2	87.7
Ireland	42.4	61.5	86.1	110.3	119.6	119.4	104.5	76.9	72.8	68
Spain	39.5	52.8	60.1	69.5	85.7	95.5	100.4	99.4	99	98.3
Italy	102.4	112.5	115.4	116.5	123.4	129	131.8	131.5	132	131.8
Croatia	39	48.3	57.3	63.8	69.4	80.5	84	83.8	80.6	78
Cyprus	45.1	53.8	56.3	65.7	79.7	102.6	107.5	107.5	106.6	97.5
Latvia	18.2	35.8	46.8	42.7	41.2	39	40.9	36.8	40.5	40.1
Lithuania	14.6	28	36.2	37.2	39.8	38.8	40.5	42.6	40.1	39.7
Luxemburg	14.9	15.7	19.8	18.7	22	23.7	22.7	22	20.8	23
Malta	62.6	67.6	67.5	70.1	67.8	68.4	63.8	58.7	56.2	50.8
Netherlands	54.7	56.8	59.3	61.6	66.3	67.8	68	64.6	61.8	56.7
Hungary	71.6	77.8	80.2	80.5	78.4	77.1	76.6	76.7	76	73.6
Poland	46.3	49.4	53.1	54.1	53.7	55.7	50.3	51.1	54.2	50.6
Portugal	71.7	83.6	96.2	111.4	126.2	129	130.6	128.8	129.9	125.7
Romania	12.4	22.1	29.7	34	36.9	37.5	39.1	37.7	37.4	35
Slovakia	28.5	36.3	41.2	43.7	52.2	54.7	53.5	52.3	51.8	50.9
Slovenia	21.8	34.6	38.4	46.6	53.8	70.4	80.3	82.6	78.6	73.6
Sweden	37.8	41.4	38.6	37.9	38.1	40.7	45.5	44.2	42.1	40.6
Finland	32.7	41.7	47.1	48.5	53.9	56.5	60.2	63.5	63	61.4

**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	-0.7
Belgium	-1.1	-5.4	-4.0	-4.1	-4.2	-3.1	-3.1	-2.5	-2.5	-1.0
Bulgaria	1.6	-4.1	-3.1	-2.0	-0.3	-0.4	-5.5	-1.6	0.2	0.9
France	-3.3	-7.2	-6.9	-5.2	-5.0	-4.1	-3.9	-3.6	-3.4	-2.6
Germany	-0.2	-3.2	-4.2	-1.0	0.0	-0.1	0.5	0.8	1.0	1.3
Denmark	3.2	-2.8	-2.7	-2.1	-3.5	-1.2	1.1	-1.5	-0.4	1.0
Czech Republic	-2.0	-5.5	-4.2	-2.7	-3.9	-1.2	-2.1	-0.6	0.7	1.6
EU	-2.5	-6.6	-6.4	-4.6	-4.3	-3.3	-2.9	-2.3	-1.6	-1.0
Greece	-10.2	-15.1	-11.2	-10.3	-8.9	-13.2	-3.6	-5.7	0.6	0.8
Estonia	-2.7	-2.2	0.2	1.2	-0.3	-0.2	0.7	0.1	-0.3	-0.3
Euro area	-2.2	-6.3	-6.2	-4.2	-3.7	-3.0	-2.5	-2.0	-1.5	-0.9
United Kingdom	-5.2	-10.1	-9.4	-7.5	-8.2	-5.4	-5.4	-4.3	-3.0	-1.9
Ireland	-7.0	-13.8	-32.1	-12.7	-8.0	-6.1	-3.6	-1.9	-0.5	-0.3
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	-2.3
Croatia	-2.8	-6.0	-6.5	-7.8	-5.2	-5.3	-5.1	-3.4	-0.9	0.8
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	-0.5
Lithuania	-3.1	-9.1	-6.9	-8.9	-3.1	-2.6	-0.6	-0.2	0.3	0.5
Luxemburg	3.3	-0.7	-0.7	0.5	0.3	1.0	1.3	1.4	1.6	1.5
Malta	-4.2	-3.2	-2.4	-2.4	-3.5	-2.4	-1.8	-1.1	1.0	3.9
Netherlands	0.2	-5.4	-5.0	-4.3	-3.9	-2.4	-2.3	-2.1	0.4	1.1
Hungary	-3.7	-4.5	-4.5	-5.4	-2.4	-2.6	-2.6	-1.9	-1.7	-2.0
Poland	-3.6	-7.3	-7.3	-4.8	-3.7	-4.1	-3.6	-2.6	-2.3	-1.7
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	-0.8	-3.0	-2.9
Slovakia	-2.4	-7.8	-7.5	-4.3	-4.3	-2.7	-2.7	-2.7	-2.2	-1.0
Slovenia	-1.4	-5.8	-5.6	-6.7	-4.0	-14.7	-5.5	-2.9	-1.9	0.0
Sweden	1.9	-0.7	0.0	-0.2	-1.0	-1.4	-1.6	0.2	1.2	1.3
Finland	4.2	-2.5	-2.6	-1.0	-2.2	-2.6	-3.2	-2.8	-1.8	-0.6

**Table 4:** Share of population at risk of poverty or social exclusion\* (see p.147)

	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
Denmark	16.3	17.6	18.3	17.6	17.5	18.3	17.9	17.7	16.7	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	23.7	23.5	:
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	23.0	23.1	:
United Kingdom	23.2	22.0	23.2	22.7	24.1	24.8	24.1	23.5	22.2	:
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	28.5	:
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
Luxemburg	15.5	17.8	17.1	16.8	18.4	19.0	19.0	18.5	19.8	:
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	16.8	17
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	:
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	16.0	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 (%)				January - August			Change (%)	
	2014	2015	2016	2017	2016	2017	2018	2018/17	2017/16
Austria	1.5	0.8	1.0	2.2	0.8	2.1	2.1	0.0	1.4
Belgium	0.5	0.6	1.8	2.2	1.7	2.3	2.1	-0.3	0.7
Bulgaria	-1.6	-1.1	-1.3	1.2	-1.6	1.0	2.4	1.4	2.5
France	0.6	0.1	0.3	1.2	0.1	1.2	2.0	0.9	1.0
Germany	0.8	0.1	0.4	1.7	0.1	1.7	1.7	0.0	1.6
Denmark	0.4	0.2	0.0	1.1	0.0	0.9	0.7	-0.2	0.9
Czech Republic	0.4	0.3	0.6	2.4	0.4	2.4	2.0	-0.4	2.1
EU	0.5	0.0	0.3	1.7	0.0	1.7	1.8	0.1	1.7
Greece	-1.4	-1.1	0.0	1.1	-0.1	1.3	0.6	-0.7	1.3
Estonia	0.5	0.1	0.8	3.7	0.4	3.5	3.3	-0.1	3.1
Euro area	0.4	0.0	0.2	1.5	0.0	1.6	1.6	0.0	1.5
United Kingdom	1.5	0.0	0.7	2.7	0.4	2.5			2.1
Ireland	0.3	0.0	-0.2	0.3	-0.2	0.2	0.6	0.4	0.4
Spain	-0.2	-0.6	-0.3	2.0	-0.8	2.2	1.7	-0.6	3.1
Italy	0.2	0.1	-0.1	1.3	-0.1	1.4	1.1	-0.3	1.6
Croatia	0.2	-0.3	-0.6	1.3	-0.9	1.2	1.6	0.4	2.1
Cyprus	-0.3	-1.5	-1.2	0.7	-1.6	1.0	0.4	-0.6	2.5
Latvia	0.7	0.2	0.1	2.9	-0.5	3.0	2.3	-0.7	3.5
Lithuania	0.2	-0.7	0.7	3.7	0.5	3.5	2.6	-0.9	3.0
Luxemburg	0.7	0.1	0.0	2.1	-0.3	2.2	1.8	-0.4	2.6
Malta	0.8	1.2	0.9	1.3	0.9	1.2	1.7	0.5	0.3
Netherlands	0.3	0.2	0.1	1.3	0.0	1.3	1.6	0.3	1.3
Hungary	0.0	0.1	0.4	2.4	0.1	2.4	2.7	0.3	2.3
Poland	0.1	-0.7	-0.2	1.6	-0.4	1.6	1.1	-0.4	2.0
Portugal	-0.2	0.5	0.6	1.6	0.6	1.5	1.2	-0.2	0.9
Romania	1.4	-0.4	-1.1	1.1	-1.5	0.6	4.2	3.7	2.1
Slovakia	-0.1	-0.3	-0.5	1.4	-0.6	1.1	2.7	1.5	1.8
Slovenia	0.4	-0.8	-0.2	1.6	-0.5	1.6	1.9	0.3	2.1
Sweden	0.2	0.7	1.1	1.9	1.1	1.9	1.9	0.1	0.8
Finland	1.2	-0.2	0.4	0.8	0.2	0.9	1.0	0.1	0.7

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

	Annual data (%)								
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Austria	127	126	128	132	131	130	130	127	128
Belgium	118	120	120	121	120	119	118	118	117
Bulgaria	43	44	45	46	46	47	47	49	49
France	108	108	108	107	108	107	105	104	104
Germany	117	120	123	124	124	126	124	124	123
Denmark	125	129	128	127	128	128	127	124	125
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	75	75	77
Euro area	109	108	108	107	107	107	106	106	106
United Kingdom	107	108	106	107	108	109	108	108	105
Ireland	129	130	130	132	132	137	181	183	184
Spain	101	96	93	91	89	90	91	92	92
Italy	106	104	104	102	98	96	95	97	96
Croatia	62	59	60	60	60	59	59	60	61
Cyprus	105	100	96	91	84	81	82	83	84
Latvia	52	53	57	60	62	63	64	65	67
Lithuania	56	60	66	70	73	75	75	75	78
Luxemburg	255	257	265	260	261	270	267	257	253
Malta	81	84	83	84	85	88	93	94	96
Netherlands	137	134	133	133	134	130	129	128	128
Hungary	64	65	66	66	67	68	68	67	68
Poland	59	62	65	67	67	67	68	68	70
Portugal	82	82	77	75	77	77	77	77	77
Romania	51	51	52	54	54	55	56	58	63
Slovakia	71	74	75	76	77	77	77	77	77
Slovenia	85	83	83	82	82	82	82	83	85
Sweden	123	125	126	127	125	124	125	123	122
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
Luxemburg	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 of workers aged 20-64 (\*)

	Annual data (%)				Q1		Change (%)		
	2014	2015	2016	2017	2016	2017	2018	2018/17	2017/16
Austria	74.2	74.3	74.8	75.4	74.9	75.7	76.3	0.6	0.8
Belgium	67.3	67.2	67.7	68.5	67.3	68.2	69.0	0.8	0.9
Bulgaria	65.1	67.1	67.7	71.3	68.0	71.7	72.6	0.9	3.7
France	69.2	69.5	70.0	70.6	70.2	71.0	71.5	0.5	0.8
Germany	77.7	78.0	78.6	79.2	78.3	79.0	79.6	0.6	0.7
Denmark	75.9	76.5	77.4	76.9	77.7	76.8	78.5	1.7	-0.9
Czech Republic	73.5	74.8	76.7	78.5	76.5	78.2	79.8	1.6	1.7
EU	69.2	70.0	71.0	72.1	71.1	72.3	73.2	0.9	1.2
Greece	53.3	54.9	56.2	57.8	56.6	58.2	59.9	1.7	1.6
Estonia	74.3	76.5	76.6	78.7	77.7	77.7	79.6	1.9	0.0
Euro area	68.1	68.9	69.9	70.9	69.9	70.9	71.9	1.0	1.0
United Kingdom	76.2	76.8	77.5	78.2	77.5	78.2	78.5	0.3	0.7
Ireland	68.1	69.9	71.4	73.0	71.1	72.7	74.0	1.3	1.6
Spain	59.9	62.0	63.9	65.5	63.7	65.5	67.1	1.6	1.8
Italy	59.9	60.5	61.6	62.3	62.1	62.5	63.5	1.0	0.4
Croatia	59.2	60.6	61.4	63.6	62.0	63.8	65.8	2.0	1.8
Cyprus	67.6	67.9	68.7	70.8	69.8	71.1	74.9	3.8	1.3
Latvia	70.7	72.5	73.2	74.8	73.5	74.3	76.8	2.5	0.8
Lithuania	71.8	73.3	75.2	76.0	75.4	76.3	77.6	1.3	0.9
Luxemburg	72.1	70.9	70.7	71.5	70.3	71.4	71.3	-0.1	1.1
Malta	66.4	67.8	69.6	71.4	70.9	72.7	74.5	1.8	1.8
Netherlands	75.4	76.4	77.1	78.0	77.0	77.9	78.9	1.0	0.9
Hungary	66.7	68.9	71.5	73.3	71.4	73.2	74.5	1.3	1.8
Poland	66.5	67.8	69.3	70.9	69.1	71.1	72.4	1.3	2.0
Portugal	67.6	69.1	70.6	73.4	70.5	73.2	75.5	2.3	2.7
Romania	65.7	66.0	66.3	68.8	66.6	70.5	70.7	0.2	3.9
Slovakia	65.9	67.7	69.8	71.1	69.9	71.1	72.0	0.9	1.2
Slovenia	67.7	69.1	70.1	73.4	70.6	73.4	75.5	2.1	2.8
Sweden	80.0	80.5	81.2	81.8	81.5	82.1	82.8	0.7	0.6
Finland	73.1	72.9	73.4	74.2	73.9	74.6	76.8	2.2	0.7

(\*) 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 (%)				Q1		Change (%)		
	2014	2015	2016	2017	2016	2017	2018	2018/17	2017/16
Austria	45.1	46.3	49.2	51.3	49.5	50.8	53.4	2.6	1.3
Belgium	42.7	44.0	45.4	48.3	45.6	47.7	49.8	2.1	2.1
Bulgaria	50.0	53.0	54.5	58.2	54.8	58.3	61.0	2.7	3.5
France	46.9	48.7	49.8	51.3	49.8	51.7	52.1	0.4	1.9
Germany	65.6	66.2	68.6	70.1	68.4	70.2	70.8	0.6	1.8
Denmark	63.2	64.7	67.8	68.9	68.2	69.7	70.9	1.2	1.5
Czech Republic	54.0	55.5	58.5	62.1	58.2	61.6	65.1	3.5	3.4
EU	51.8	53.3	55.2	57.1	55.2	57.1	58.6	1.5	1.9
Greece	34.0	34.3	36.3	38.3	35.7	38.0	40.9	2.9	2.3
Estonia	64.0	64.5	65.2	68.1	68.1	68.3	66.8	-1.5	0.2
Euro area	51.7	53.3	55.3	57.1	55.3	57.2	58.5	1.3	1.9
United Kingdom	61.0	62.2	63.4	64.1	63.6	64.0	65.3	1.3	0.4
Ireland	53.0	55.6	57.2	58.6	57.1	58.9	60.5	1.6	1.8
Spain	44.3	46.9	49.1	50.5	48.8	50.5	52.0	1.5	1.7
Italy	46.2	48.2	50.3	52.2	50.7	52.3	54.1	1.8	1.6
Croatia	36.2	39.2	38.1	40.3	39.0	40.0	43.4	3.4	1.0
Cyprus	46.9	48.5	52.2	55.3	52.9	53.7	61.7	8.0	0.8
Latvia	56.4	59.4	61.4	62.3	62.1	62.1	65.3	3.2	0.0
Lithuania	56.2	60.4	64.6	66.1	64.8	66.2	67.5	1.3	1.4
Luxembourg	42.5	38.4	39.6	39.8	39.7	39.1	39.6	0.5	-0.6
Malta	37.8	40.3	44.1	45.3	45.2	44.1	48.3	4.2	-1.1
Netherlands	59.9	61.7	63.5	65.7	63.2	65.5	67.3	1.8	2.3
Hungary	41.7	45.3	49.8	51.7	49.8	51.2	53.5	2.3	1.4
Poland	42.5	44.3	46.2	48.3	45.3	48.2	49.4	1.2	2.9
Portugal	47.8	49.9	52.1	56.2	52.2	56.1	59.4	3.3	3.9
Romania	43.1	41.1	42.8	44.5	43.5	46.1	46.0	-0.1	2.6
Slovakia	44.8	47.0	49.0	53.0	48.8	52.7	53.4	0.7	3.9
Slovenia	35.4	36.6	38.5	42.7	39.5	43.5	47.6	4.1	4.0
Sweden	74.0	74.5	75.5	76.4	75.5	76.7	77.7	1.0	1.2
Finland	59.1	60.0	61.4	62.5	61.2	62.4	65.1	2.7	1.2

(\*) % 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 (%)				Q1	
	2014	2015	2016	2017	2018/17	2017/16
Austria	0.1	0.8	1.8	1.0	1.2	1.3
Belgium	0.3	0.0	0.9	1.0	1.7	1.0
Bulgaria	1.3	1.6	-0.6	4.0	-0.5	4.1
France	2.2	0.0	0.5	1.0	0.6	1.2
Germany	0.7	0.7	2.5	0.8	0.3	0.8
Denmark	0.7	1.4	2.6	-0.5	2.4	-1.2
Czech Republic	0.8	1.0	1.7	1.6	1.4	1.4
EU	1.3	1.1	1.5	1.4	1.0	1.5
Greece	0.6	2.0	1.8	2.0	1.7	2.3
Estonia	0.5	2.3	-0.1	2.2	1.9	-0.6
Euro area	0.9	1.0	1.7	1.3	1.3	1.3
United Kingdom	2.2	1.5	1.4	1.2	0.9	1.3
Ireland	2.5	3.2	3.7	2.8	2.9	2.6
Spain	1.2	2.9	2.6	2.6	2.8	2.7
Italy	0.2	0.7	1.2	0.9	1.3	0.4
Croatia	3.2	1.1	0.5	2.3	1.9	1.9
Cyprus	-0.4	-1.4	1.1	4.5	5.5	3.8
Latvia	-0.9	1.1	-0.6	0.0	1.7	-0.8
Lithuania	1.9	1.0	1.3	-0.9	0.5	-0.8
Luxembourg	2.8	5.1	1.6	4.0	2.4	4.0
Malta	2.8	2.4	3.6	3.4	5.7	5.5
Netherlands	-0.9	1.1	1.3	1.9	1.9	1.8
Hungary	5.4	2.6	3.2	1.5	1.1	1.5
Poland	1.8	1.4	0.6	1.1	0.4	1.6
Portugal	2.3	1.3	1.4	3.3	2.7	3.1
Romania	0.9	-0.2	-0.8	2.4	-1.3	4.7
Slovakia	1.4	2.4	2.8	1.2	0.7	1.1
Slovenia	0.5	1.0	0.1	4.5	2.4	3.7
Sweden	0.9	1.4	1.6	2.1	1.8	1.8
Finland	-0.7	-0.8	0.5	1.0	3.1	0.7

**Table 11:** Unemployment rate – Total population

	Annual data (%)				Q2		Change (%)		
	2014	2015	2016	2017	2016	2017	2018	2018/17	2017/16
Austria	5.6	5.7	6.0	5.5	6.1	5.4	4.6	-0.8	-0.7
Belgium	8.5	8.5	7.8	7.1	7.9	7.0	6.1	-0.9	-0.9
Bulgaria	11.4	9.2	7.6	6.2	8.1	6.3	5.5	-0.8	-1.8
France	10.3	10.4	10.1	9.4	9.6	9.1	8.7	-0.4	-0.5
Germany	5.0	4.6	4.1	3.8	4.2	3.8	3.5	-0.3	-0.4
Denmark	6.6	6.2	6.2	5.7	6.0	5.5	:	:	-0.5
Czech Republic	6.1	5.1	4.0	2.9	3.9	3.0	2.2	-0.8	-0.9
EU	10.2	9.4	8.6	7.6	8.6	7.6	6.8	-0.8	-1.0
Greece	26.5	24.9	23.6	21.5	23.1	21.2	19.0	-2.2	-1.9
Estonia	7.4	6.2	6.8	5.8	6.5	7.0	:	:	0.5
Euro area	11.6	10.9	10.0	9.1	10.0	9.0	8.2	-0.8	-1.0
United Kingdom	6.1	5.3	4.8	4.4	4.8	4.3	3.9	-0.4	-0.5
Ireland	11.9	10.0	8.4	6.7	9.1	6.9	6.0	-0.9	-2.2
Spain	24.5	22.1	19.6	17.2	20.0	17.2	15.3	-1.9	-2.8
Italy	12.7	11.9	11.7	11.2	11.5	10.9	10.7	-0.2	-0.6
Croatia	17.2	16.1	13.4	11.1	12.7	10.5	8.1	-2.4	-2.2
Cyprus	16.1	15.0	13.0	11.1	12.1	10.7	7.4	-3.3	-1.4
Latvia	10.8	9.9	9.6	8.7	9.5	8.9	7.7	-1.2	-0.6
Lithuania	10.7	9.1	7.9	7.1	8.0	7.0	5.9	-1.1	-1.0
Luxemburg	6.0	6.5	6.3	5.6	6.0	5.3	5.0	-0.3	-0.7
Malta	5.8	5.4	4.7	4.6	5.4	4.6	3.8	-0.8	-0.8
Netherlands	7.4	6.9	6.0	4.9	6.2	5.0	3.9	-1.1	-1.2
Hungary	7.7	6.8	5.1	4.2	5.1	4.3	3.6	-0.7	-0.8
Poland	9.0	7.5	6.2	4.9	6.2	5.0	3.6	-1.4	-1.2
Portugal	14.1	12.6	11.2	9.0	11.0	9.0	6.8	-2.2	-2.0
Romania	6.8	6.8	5.9	4.9	5.9	4.8	4.1	-0.7	-1.1
Slovakia	13.2	11.5	9.7	8.1	9.6	8.1	6.6	-1.5	-1.5
Slovenia	9.7	9.0	8.0	6.6	7.8	6.4	5.2	-1.2	-1.4
Sweden	7.9	7.4	6.9	6.7	7.5	7.3	6.8	-0.5	-0.2
Finland	8.7	9.4	8.8	8.6	10.0	9.9	8.2	-1.7	-0.1

**Table 12:** Unemployment rate among men

	Annual data (%)				Q2		Change (%)		
	2014	2015	2016	2017	2016	2017	2018	2018/17	2017/16
Austria	5.9	6.1	6.5	5.9	6.6	5.8	4.9	-0.9	-0.8
Belgium	9.0	9.1	8.1	7.1	7.9	7.0	6.3	-0.7	-0.9
Bulgaria	12.3	9.8	8.1	6.4	8.8	6.9	6.1	-0.8	-1.9
France	10.5	10.8	10.3	9.5	10.0	9.2	8.7	-0.5	-0.8
Germany	5.3	5.0	4.5	4.1	4.6	4.3	3.9	-0.4	-0.3
Denmark	6.4	5.9	5.8	5.6	5.7	5.3	:	:	-0.4
Czech Republic	5.1	4.2	3.4	2.3	3.4	2.4	1.8	-0.6	-1.0
EU	10.1	9.3	8.4	7.4	8.4	7.5	6.6	-0.9	-0.9
Greece	23.7	21.8	19.9	17.8	19.5	17.7	15.3	-2.4	-1.8
Estonia	7.9	6.2	7.4	6.2	7.6	7.7	:	:	0.1
Euro area	11.5	10.7	9.7	8.7	9.7	8.7	7.9	-0.8	-1.0
United Kingdom	6.4	5.5	5.0	4.5	4.9	4.5	3.9	-0.6	-0.4
Ireland	12.7	10.8	9.1	7.1	9.7	7.5	6.2	-1.3	-2.2
Spain	23.6	20.8	18.1	15.7	18.4	15.6	13.7	-1.9	-2.8
Italy	11.9	11.3	10.9	10.3	10.6	10.1	9.8	-0.3	-0.5
Croatia	16.6	15.6	12.7	10.4	12.3	9.7	7.6	-2.1	-2.6
Cyprus	17.1	15.1	12.7	10.9	12.0	10.2	7.3	-2.9	-1.8
Latvia	11.8	11.1	10.9	9.8	10.6	10.4	9.2	-1.2	-0.2
Lithuania	12.2	10.1	9.1	8.6	9.5	8.6	6.5	-2.1	-0.9
Luxemburg	5.8	5.9	6.1	5.6	5.7	5.4	4.6	-0.8	-0.3
Malta	6.1	5.5	4.4	4.5	5.0	4.8	4.0	-0.8	-0.2
Netherlands	7.2	6.5	5.6	4.5	5.9	4.6	3.8	-0.8	-1.3
Hungary	7.6	6.6	5.1	3.8	5.3	4.0	3.5	-0.5	-1.3
Poland	8.5	7.3	6.1	4.9	6.3	5.2	3.7	-1.5	-1.1
Portugal	13.8	12.4	11.1	8.6	10.9	8.5	6.5	-2.0	-2.4
Romania	7.3	7.5	6.6	5.6	6.6	5.7	4.7	-1.0	-0.9
Slovakia	12.8	10.3	8.8	7.9	8.5	8.0	6.2	-1.8	-0.5
Slovenia	9.0	8.1	7.5	5.8	7.1	5.5	4.8	-0.7	-1.6
Sweden	8.2	7.5	7.3	6.9	7.8	7.6	7.0	-0.6	-0.2
Finland	9.3	9.9	9.0	8.9	10.1	10.1	8.4	-1.7	0.0

**Table 13:** Unemployment rate among women

	Annual data (%)				Q2		Change (%)		
	2014	2015	2016	2017	2016	2017	2018	2018/17	2017/16
Austria	5.4	5.3	5.6	5.0	5.5	4.9	4.3	-0.6	-0.6
Belgium	7.9	7.8	7.6	7.1	8.0	7.1	5.9	-1.2	-0.9
Bulgaria	10.4	8.4	7.0	6.0	7.2	5.7	4.7	-1.0	-1.5
France	10.0	9.9	9.9	9.3	9.2	8.9	8.7	-0.2	-0.3
Germany	4.6	4.2	3.8	3.3	3.8	3.2	3.0	-0.2	-0.6
Denmark	6.8	6.4	6.6	5.9	6.2	5.8	:	:	-0.4
Czech Republic	7.4	6.1	4.7	3.6	4.6	3.7	2.7	-1.0	-0.9
EU	10.3	9.5	8.8	7.9	8.8	7.8	7.0	-0.8	-1.0
Greece	30.2	28.9	28.1	26.1	27.6	25.5	23.6	-1.9	-2.1
Estonia	6.8	6.1	6.1	5.3	5.2	6.2	:	:	1.0
Euro area	11.8	11.0	10.4	9.5	10.4	9.3	8.5	-0.8	-1.1
United Kingdom	5.8	5.1	4.7	4.2	4.7	4.1	3.9	-0.2	-0.6
Ireland	10.9	8.9	7.6	6.3	8.3	6.2	5.8	-0.4	-2.1
Spain	25.4	23.6	21.4	19.0	21.8	19.1	17.1	-2.0	-2.7
Italy	13.8	12.7	12.8	12.4	12.8	12.1	11.8	-0.3	-0.7
Croatia	18.0	16.7	14.2	12.0	13.2	11.5	8.7	-2.8	-1.7
Cyprus	15.1	14.8	13.4	11.3	12.2	11.2	7.5	-3.7	-1.0
Latvia	9.8	8.6	8.4	7.7	8.4	7.4	6.1	-1.3	-1.0
Lithuania	9.2	8.2	6.7	5.7	6.6	5.4	5.3	-0.1	-1.2
Luxemburg	6.4	7.1	6.5	5.6	6.5	5.3	5.5	0.2	-1.2
Malta	5.3	5.2	5.2	4.7	5.9	4.4	3.6	-0.8	-1.5
Netherlands	7.8	7.3	6.5	5.3	6.7	5.5	4.0	-1.5	-1.2
Hungary	7.9	7.0	5.1	4.6	4.9	4.6	3.7	-0.9	-0.3
Poland	9.6	7.7	6.2	4.9	6.0	4.7	3.5	-1.2	-1.3
Portugal	14.5	12.9	11.3	9.5	11.0	9.4	7.1	-2.3	-1.6
Romania	6.1	5.8	5.0	4.0	4.9	3.6	3.3	-0.3	-1.3
Slovakia	13.6	12.9	10.8	8.4	11.0	8.3	7.2	-1.1	-2.7
Slovenia	10.6	10.1	8.6	7.5	8.5	7.5	5.7	-1.8	-1.0
Sweden	7.7	7.3	6.5	6.4	7.1	6.9	6.6	-0.3	-0.2
Finland	8.0	8.8	8.6	8.4	9.9	9.8	7.9	-1.9	-0.1

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

	Annual data (%)				Q2		Change (%)		
	2014	2015	2016	2017	2016	2017	2018	2018/17	2017/16
Austria	33.7	30.5	33.7	35.2	34.4	32.8	30.8	-2.0	-1.6
Belgium	52.8	52.9	52.8	51.3	53.1	53.9	51.6	-2.3	0.8
Bulgaria	59.6	61.9	59.6	55.9	60.6	55.3	58.3	3.0	-5.3
France	47.2	45.4	47.2	46.7	47.8	47.1	43.8	-3.3	-0.7
Germany	42.7	45.3	42.6	43.6	42.1	42.8	41.4	-1.4	0.7
Denmark	25.5	29.8	25.5	25.7	21.6	20.7	21.0	0.3	-0.9
Czech Republic	42.8	48.2	42.8	35.7	43.5	37.4	30.2	-7.2	-6.1
EU	48.6	50.2	48.6	47.0	47.8	46.2	44.9	-1.3	-1.6
Greece	72.4	73.6	72.4	73.2	72.2	74.0	72.1	-1.9	1.8
Estonia	32.6	40.0	32.6	35.3	30.5	30.7	35.0	4.3	0.2
Euro area	51.5	52.8	51.5	50.4	51.2	50.3	48.4	-1.9	-0.9
United Kingdom	30.3	34.0	30.3	28.9	28.1	26.0	26.8	0.8	-2.1
Ireland	57.3	58.1	56.0	49.9	50.5	48.9	35.2	-13.7	-1.6
Spain	49.2	52.5	49.2	45.5	48.9	45.7	43.4	-2.3	-3.2
Italy	59.1	59.7	59.1	59.7	60.0	60.9	60.7	-0.2	0.9
Croatia	53.2	66.2	53.2	42.5	52.9	46.6	44.4	-2.2	-6.3
Cyprus	45.3	46.7	45.6	41.6	46.8	46.3	33.7	-12.6	-0.5
Latvia	41.8	46.2	41.8	38.0	40.3	39.4	41.3	1.9	-0.9
Lithuania	38.8	43.3	38.8	38.3	39.3	37.9	33.7	-4.2	-1.4
Luxemburg	37.0	30.3	37.0	40.0	35.8	44.2	22.2	-22.0	8.4
Malta	45.3	48.2	45.2	47.4	33.2	37.8	23.5	-14.3	4.6
Netherlands	47.4	48.0	47.4	45.7	44.6	42.0	41.4	-0.6	-2.6
Hungary	47.7	46.8	47.7	41.3	48.2	42.0	40.3	-1.7	-6.2
Poland	35.9	40.1	35.9	31.9	35.6	30.0	28.2	-1.8	-5.6
Portugal	56.9	59.1	56.9	51.4	56.5	51.6	45.3	-6.3	-4.9
Romania	51.7	45.1	51.7	42.7	51.4	41.0	43.2	2.2	-10.4
Slovakia	61.4	66.9	61.4	63.4	60.6	63.1	62.6	-0.5	2.5
Slovenia	53.9	53.0	53.9	48.4	55.2	51.3	44.8	-6.5	-3.9
Sweden	22.4	24.1	22.4	22.8	18.0	18.0	19.7	1.7	0.0
Finland	29.4	27.5	29.4	27.4	23.0	21.3	19.8	-1.5	-1.7

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

**Table 15:** Unemployment rate of persons aged 15-24

	Annual data (%)					Q2		Change (%)	
	2014	2015	2016	2017	2016	2017	2018	2018/17	2017/16
Austria	10.3	10.6	11.2	9.8	10.8	8.9	9.1	0.2	-1.9
Belgium	23.2	22.1	20.1	19.3	19.2	19.9	18.0	-1.9	0.7
Bulgaria	23.8	21.6	17.3	12.9	14.4	13.2	15.1	1.9	-1.2
France	24.2	24.7	24.6	22.3	22.9	21.9	19.5	-2.4	-1.0
Germany	7.7	7.2	7.1	6.8	7.4	7.0	6.6	-0.4	-0.4
Denmark	12.6	10.8	12.0	11.1	10.6	10.1	8.3	-1.8	-0.5
Czech Republic	15.9	12.6	10.5	8.0	10.0	8.3	7.0	-1.3	-1.7
EU	22.2	20.4	18.7	16.9	18.7	16.9	15.0	-1.9	-1.8
Greece	52.4	49.	47.4	43.6	49.1	43.8	38.8	-5.0	-5.3
Estonia	15.0	13.1	13.5	14.1	13.4	15.9	8.7	-7.2	2.5
Euro area	23.7	22.4	20.9	18.8	20.9	19.0	16.9	-2.1	-1.9
United Kingdom	16.9	14.6	13.0	12.1	12.9	11.6	10.6	-1.0	-1.3
Ireland	23.9	20.9	16.8	14.4	18.4	16.1	15.4	-0.7	-2.3
Spain	53.2	48.3	44.5	38.7	46.5	39.5	34.7	-4.8	-7.0
Italy	42.7	40.3	37.8	34.8	35.5	34.2	31.6	-2.6	-1.3
Croatia	45.5	43.0	31.3	27.5	29.6	20.5	21.1	0.6	-9.1
Cyprus	36.0	32.8	29.1	24.7	26.7	25.3	17.9	-7.4	-1.4
Latvia	19.6	16.3	17.3	17.0	18.9	16.5	11.2	-5.3	-2.4
Lithuania	19.3	16.3	14.5	13.3	15.7	13.1	10.9	-2.2	-2.6
Luxemburg	22.3	17.3	18.7	15.4	18.0	15.7	13.0	-2.7	-2.3
Malta	11.7	11.8	11.0	10.5	11.5	10.2	8.6	-1.6	-1.3
Netherlands	12.7	11.3	10.8	8.9	10.9	9.0	6.9	-2.1	-1.9
Hungary	20.4	17.3	13.0	10.7	13.3	11.0	9.5	-1.5	-2.3
Poland	23.9	20.8	17.6	14.8	16.9	14.6	10.2	-4.4	-2.3
Portugal	34.7	32.0	27.9	23.9	26.9	22.7	19.4	-3.3	-4.2
Romania	24.0	21.7	20.6	18.5	19.4	15.4	15.5	0.1	-4.0
Slovakia	29.7	26.5	22.2	18.9	20.6	17.7	13.7	-4.0	-2.9
Slovenia	20.2	16.3	15.3	11.3	13.7	10.0	8.1	-1.9	-3.7
Sweden	22.9	20.4	18.8	17.9	22.9	21.9	20.6	-1.3	-1.0
Finland	20.5	22.4	19.9	19.8	26.3	27.4	21.6	-5.8	1.1

(\*) 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=16664385&RdoSearch=BEGIN&TxtSearch=&CboTheme=36940331&IsTer=TERM&IntCurrentPage=4&ter_valid=0)

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