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Editorial Policy

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FOREWORD

This is the second IOBE bulletin on the Greek economy for 2017. The second review of the third economic adjustment programme was recently completed, yet there are still significant challenges ahead, such as Greece's application for short-term funding (14 months) by the IMF and the country's entry in the ECB's quantitative easing programme. As every IOBE quarterly bulletin, this report includes **four chapters** and an **appendix** with key structural indicators. The bulletin starts with an analysis of the challenges and the opportunities for growth of the Greek economy under the conditions created after the completion of the second review of the third programme. The rest of the report is structured as follows:

The **first chapter** presents a **brief overview** of the report. **Chapter two** examines the general economic conditions, including a) an analysis of the **global economic environment** in the first quarter of 2017 and its outlook for the rest of the year, based on the latest report of the International Monetary Fund and the European Commission; b) an outline of the **economic climate** in Greece in the second quarter of 2017, based on data from the latest IOBE business surveys; c) an analysis of the execution of the **State Budget** in the first four months of 2017.

Chapter three focuses on the performance of the Greek economy in early 2017. It includes an analysis of: the **macroeconomic environment** during the first quarter of 2017 and its projected trends for the rest the year; the **developments in key production sectors** in the first four months of 2017; the **export performance** of the Greek economy during the same period; the developments in the **labour market** in the first quarter of 2017; the trends in **inflation** in the first five months of the year; and, finally, the trends in the **balance of payments** between January and April of 2017.

Chapter four presents the findings of an IOBE study on the impact of reforms on sectors producing internationally tradable goods and services.

The report is based on data that were available up to 21/06/2017. IOBE's next quarterly bulletin on the Greek economy will be published in mid-October 2017.

ECONOMIC RECOVERY: CHALLENGES AND OPPORTUNITIES

Stable public finances and stagnation in consumer and business expectations characterise the Greek economy during the period examined in the present quarterly report of IOBE. In macroeconomic terms, the performance of the economy is mixed. It is recovering at a rate which, in congruence with estimates of previous IOBE reports, is expected to approach 1.5% in real terms in 2017 overall. This is a positive development after the stagnation of the past several months, as is the successful completion of the second review of the economic adjustment programme. A series of indicators show improvement in specific aspects of the economy as well. However, the overall growth rates are lower than the targets set by the economic policy, due in part to the delay in completing the review, the relatively slow pace of the growth model transition and the inability of the country to benefit in liquidity terms from participating in the quantitative easing programme of ECB.

Prior to the completion of the second review, a significant further progress was expected in clarifying the country's financing conditions after the completion of the current programme and in the terms of public debt management over the long term. The fact that only relatively little progress was made, has not derailed the implementation of the programme or the economy. However, it has postponed important decisions well into the future and has failed to reduce drastically the relevant uncertainties, to the extent at least that the domestic economic policy has not completely and irreversibly turned to a firm commitment to implement the reforms necessary for growth.

Overall, the Greek economy is on track, but it is growing at a considerably slower pace than feasible and desirable. In the EU, the growth trends are becoming more robust, which, on the one hand, boosts Greek exports, yet on the other, widens the gap in the macroeconomic paths of Greece and the Eurozone average. This report records and analyses the elements that compose both the current recovery and the medium-term trends.

The dynamics of the trade balance is one of the major practical issues. While there is a positive momentum in the exports of both goods and services, it is not clear that this is sufficient enough to offset an increase in imports driven by a rise in consumption in the Greek economy. Already, while consumption is growing in the current period, the rise in imports is a strong impediment for higher GDP growth rates. In this respect, two particular observations can be made.

First of all, the improvement in the expectations of households and businesses, whenever and for whatever reason it occurs, after such a deep and prolonged recession, inevitably leads to a trend towards purchases of durables and capital goods. The relevant purchase decisions have been postponed for a long time and possibly the needs are becoming more and more intense. To the extent, therefore, that domestic manufacturing has not managed

to achieve competitiveness in these sectors, a part of the relevant purchases is leaking abroad. Secondly, internationally competitive production (whether for exports or for import substitution) requires innovation, long-term investment and the capability of effective interconnection with international value chains. As long as the uncertainty regarding the interim course of economic policy and the final outcome of the Greek crisis is not eliminated, the relevant momentum is going to be weak. Only with long-term investment in physical and human capital, a feature that requires strong credibility and confidence, the country's trade balance will improve in a systematic and sustainable way; besides, the latter is also the key indication of its international competitiveness.

The fiscal dimension is also important, of course. During the crisis, total tax revenues increased, with their share in GDP approaching the European averages. This contributed to the fiscal consolidation, which is a necessary development. However, either because of pressure for immediate results or because of poor design, the current mix of tax parameters creates disincentives for growth. Nowadays, there is little room for a further reduction in total public spending, so an immediate priority should be given to rationalising the composition of the two sides of the fiscal balance. Spending should be better targeted, on the one hand, to protect the weak and on the other to reduce bureaucracy, modernise the administration and achieve economic growth. On the revenue side, the tax rates that create disincentives for work and entrepreneurship should be reduced and the tax base should be broadened by boosting the use of electronic payment instruments.

While the current programme is gradually approaching its end, emphasis should be placed on accelerating the systematic improvement of the production base by attracting investment, as well as on continuing the structural reforms. A coherent growth policy, together with a timely completion of the third review of the programme, will have beneficial effects even if it is achieved on a small scale. If, however, the return to the markets to draw liquidity becomes a substitute for the rest of the growth policy, this will have negative effects in the medium term.

IOBE published a number of studies on different aspects of the Greek economy over the past month. Seen as a whole, they identify challenges and record the conditions under which sustainable medium-term growth can be achieved.

The study outlined in Chapter 4 of this report examines the impact of the reforms that have been launched in recent years on sectors producing tradable goods and services. The transition of the production model to internationally traded goods and services and the boost of the international competitiveness of the relevant sectors constitute jointly, perhaps, the most critical condition for the growth of the Greek economy.

A recent study quantified the expected benefits from the planned privatisation of the Thessaloniki Port Authority (ThPA). In addition to the fiscal benefits, the productivity growth

that can be achieved more broadly through the indirect effects of successful and properly designed public property development, is particularly important for the Greek economy.

Another recent study, on the challenges and significant potential of the manufacturing sector, analysed the interconnections of the sector with the rest of the economy. The study stressed that manufacturing contains very important elements of innovation and human capital utilisation. The further growth of this sector will be crucial for the shift to the new growth model that can only be based on investment and exports.

Another study examined the financial performance of the municipalities and how it is monitored through modern accounting methods. Effective resource management at every level of public life is crucial, especially in a period of fiscal tightness. At the same time, the use of modern methods of accounting can prove to be a key tool both for transparency vis-à-vis citizens and businesses and for the assessment of individual policies implemented at the local level.

Finally, a recent study looked at the interconnection of higher education with the Greek economy. The study confirmed that the large increase in the number of graduates in recent years has not been accompanied by a simultaneous improvement in labour market integration. As a result, a significant part of the graduates is still geared to areas, such as education and the wider public sector, where the scope for their absorption is significantly reduced. At the same time, the study confirmed that while there is a considerable capacity for scientific research, its interconnection with enterprises and production is particularly weak, resulting in a lag of the country in innovation terms. Overall, there is an urgent need to change the governance model, so that the tertiary education institutions have greater autonomy and flexibility, with accountability to society on the results of their operation.

In conclusion, with the Greek economy recording positive growth rates, albeit lower than desired, and the European economic environment improving, there are genuine opportunities on the horizon. A gradual ease of the uncertainty will create a positive feedback mechanism between investment and employment. However, if we do not take immediate advantage of the new opportunities, by accelerating the implementation of reforms that would facilitate the attraction of investment and increase the efficiency of the public administration, the economy may enter into new turbulence and be subjected to negative shocks, as the current program approaches its completion.

1. BRIEF OVERVIEW – CONCLUSIONS

The growth of the world economy is quite likely to strengthen in 2017

The GDP of the OECD member countries grew by 2.1% in the first quarter of 2017, compared with 1.7% in the corresponding quarter of 2016. It has improved, albeit moderately, for the third consecutive quarter. As the GDP growth rate in the seven major economies (G7) remained unchanged quarter on quarter, at 1.8%, the stronger growth at OECD level came from the remaining member countries. Among the G7 economies, stronger growth than in the previous quarter was observed in Canada (+2.3%, from +2.0%), USA (+2.1%, from +2.0%) and the UK (+2.0%, from +1.9%). The Japanese economy slowed down most, to 1.3% from 1.6%. Regarding the developing economies, the growth rate in China marginally increased, to 6.9% from 6.8%, while in India it declined strongly from 7.1% to 6.2%. In Brazil, the recession weakened markedly in early 2017, to 0.4%, from 2.4% in the preceding quarter.

The stronger world economic activity in the first quarter of 2017 came from the recovery of the developing economies, mainly due to the price increase of the commodities that they produce, from the expectations of an expansionary fiscal policy in the US, from the loose monetary policy in the Euro area through the QE programme and from the demand boost in the developed economies in general.

The positive impact of the above factors will carry over to the rest of 2017, albeit with less strength. The higher commodity prices will boost the emerging economies of Russia, Asia and South America. That said, the gradual decline in the oil price in the second quarter of 2017, after six months of stability, moderates the impact from its rise on the energy cost and the competitiveness of the oil-importing countries. The measures of fiscal expansion in the US will most probably be notably weaker than initially anticipated, yet this will prevent the second largest economy in the world from "overheating". Similar developments might come from the prolonged implementation of quantitative easing policies in the Euro area.

Regarding the European Union in particular, the results of recent elections in some of the Eurozone countries (Netherlands, France), but also the early elections in the United Kingdom, eased the political uncertainty, which had intensified strongly in the first quarter of the current year. This resulted in an appreciation of the exchange rate of the euro against the dollar since March, when the first elections took place in the Netherlands. Of course, the Brexit process and its possible effects remain a factor of concern for the EU economy prospects. The lingering doubt about the robustness of the banking system in some EU countries, which is going to be assessed soon with the ECB's regular stress test in January, hampers the attractiveness of the European economy.

Regarding the developments in major developing economies, the implementation of fiscal stimulus in China will continue to boost its economy. The transition to a new currency in India is going to have significant effects on its economy, in the current year at least, which have already started to transpire, with the strong deceleration of its growth in the first quarter of this year.

Given these conditions and prospects of the world economy, **IOBE continues to project a slight strengthening of the growth of the world GDP in 2017, at a rate slightly lower than 3.5%, from 3.0% in 2016.**

The GDP trend shifted once more in the first quarter of the current year

After the decline of the domestic product by 0.8% in the final quarter of 2016, GDP marginally increased in early 2017, by 0.4%, against a decline of 0.8% as well in the same quarter a year earlier. The weak output growth came mainly from the expansion of household consumption expenditure and from stronger investment, due to growth in fixed capital formation and, to a lesser extent, from inventory accumulation. The widening of public consumption also had a small contribution to GDP growth. In contrast, the deterioration of the external sector's balance prevented a further increase, despite stronger exports, as imports increased at a higher rate.

In greater detail with regards to the trends in the GDP components in the first quarter of 2017, **domestic consumption**

expanded by 1.7% compared to a year earlier, when it had declined by 1.3%. Its rise came mainly from private consumption growth of the same rate, which had fallen by 0.7% in the corresponding quarter of 2016. Public consumption expenditure increased less, by 1.0%, while in the same period of last year they had declined by 3.5%.

Investment increased by 13.6% in the first quarter, following their rise in the same period of 2016 by 15.2%. Their new growth was mainly driven, by about 71%, by higher fixed capital formation, which strengthened by 11.2%, more than offsetting last year's decline by 10.1%. Larger compared to a year ago was the accumulation of inventories as well, reaching €959 million. **Note that the growth in investment in fixed assets came almost exclusively from Transport Equipment,** which more than doubled compared to the first quarter of 2016 (+155%). Among the remaining categories of fixed capital, an increase was recorded only in Other Products, by 1.5%, following their marginal increase a year earlier (+0.2%), while the investment in the other categories either remained unchanged or declined year on year.

In the external sector of the economy, **exports** grew by 4.8% in the first three months of the year, compared with a strong decline by 10.4% in the corresponding period of 2016. Both key components of exports increased year on year in the first quarter. The increase in the exports of services was stronger, at 8.0%. The relatively low base level in the

initial quarter of 2016, when they had shrunk by 22.0%, contributed to this rise. The exports of goods expanded by 4.4%, stronger than a year ago (+1.9%).

Regarding the other side of the balance of the external sector, **imports** expanded by 10.9% over the same quarter of 2016, a change that almost offset their decline a year ago (-10.1%). The growth rate in the two main components of imports, imports of goods and imports of services, was similar, 11.6% and 10.5% respectively, against a decrease of 3.7% and 32% a year earlier. **The stronger growth of imports compared to exports exacerbated the balance of the external sector in national accounting terms by 77.0%, resulting in a deficit of €2.2 billion or 4.8% of GDP.**

Growth of the Greek economy in 2017 by 1.5% or slightly less

The completion of the second implementation review of the third Economic Adjustment Programme with the Eurogroup decision of 15 June 2017 eased the uncertainty on reaching an agreement acceptable to all parties involved in the negotiations. Regarding the final item of the negotiations, the planned mid-term measures on public debt and the extent to which they are sufficient to secure its sustainability, the recent Eurogroup decision reiterated what had already been mentioned in the decision of 25 May 2016, without further deliberation. Three of the four measures are going to be implemented if deemed necessary to

ensure the sustainability of public debt from the relevant analysis that will take place at the end of this programme, in August 2018. For the implementation of the fourth measure (expansion of the average maturity of the EFSF bonds from the second programme and further postponement of payment of interest and principal on these bonds), with the new decision the final debt sustainability analysis need not be taken into account. Therefore, this measure may be implemented in the near future, enhancing the sustainability of public debt.

The expansion of the average maturity and further postponement of payment of interest and principal can be done again after the end of the third programme, whenever necessary, taking into account possible differences between the growth assumptions in the debt sustainability analysis and the actual trends in economic activity, through an adjustment mechanism which will be identified along with the other medium-term measures in 2018. This possibility was included in the Eurogroup decision of 25 May 2016, as an indicative long-term debt measure, depending on the trend of economic activity, without specifying a particular instrument. Obviously, the operation mode of the instrument is yet to be determined.

The recent Eurogroup decision does not specify other medium and long-term debt measures. However, there is a commitment for the first time from the Greek government on the size of the primary surplus in the period 2023-2060, which will be of the order of 2% or slightly

higher. This commitment, in conjunction with the redefinition of the servicing of the EFSF loan in the near term and the provision for its further restructuring (recalibration of reprofiling) in the post-programme period are considered by the International Monetary Fund as an important step towards achieving the sustainability of Greece's public debt, as also mentioned in the recent Eurogroup decision. In addition, this allows the IMF board to examine soon Greece's application for short-term funding, with 14-month duration.

Provided that, firstly, the terms of the loan granted by the EFSF under the second programme are redefined and, secondly, the financing by the IMF is approved, Greece might join the quantitative easing mechanism of the ECB. Regardless of whether and when this will happen, the international confidence in the sustainability of Greek public finances and in the prospects for recovery of its economy will gradually strengthen, due to forthcoming developments related to the revision of the EFSF loan terms and the new financing by the IMF. That said, as the first half of 2017 has already passed and any action on the above issues will be implemented gradually from its third quarter, the positive effects of the boost of the credibility of the domestic economy are expected to be felt towards the end of this year.

The decisions adopted as prior measures for the second review that are expected to gradually start to have an effect on the operation of the Greek economy from the

current period concern legislated reforms. The most important of these are the facilitation of licencing for investment, structural changes in the labour market, changes in the bankruptcy code and measures for the management of non-performing loans. The reforms in the labour market are not expected to have a significant impact on existing employment, as it was possible for the companies already in operation to make the necessary adjustments with the gradual lifting of rigidities over the past few years. But the new regulations are expected to contribute to the setting-up of new businesses and the realisation of expansionary investments by existing businesses, as they facilitate the management of new staff.

The choice of how the banks will manage their non-performing loans, selecting among available alternatives, will determine the response of borrowers, businesses and households, most probably from the fourth quarter of this year. Until then, the relative stagnation of deposits, at their level from the end of the first half of this year, would not allow for a significant change in the credit policy of the banking institutions. The private sector deposits (households and non-financial corporations) did not exceed €116.0 billion in April, just €450 million higher than in July 2015, the month when the capital controls were imposed. Another reason why the banks are not expected to change significantly their restrictive credit policy in 2017 is the need to secure as large capital reserves as possible in view of the regular ECB stress test for all Euro area banks in

January 2018. Subsequently, the credit to households will most likely continue to decline in the coming months, while the loans to businesses may grow slightly, reversing their weak contraction recorded until now. Hence, the flow of financing from the banking system is not expected to boost household spending, while its impact on investment is going to be weak.

With regards to the fiscal measures taken in the context of the second review as part of the Medium-term Fiscal Strategy Framework 2018-2021 (MFSF 2018 - 2021), most of which concern 2019 and 2020, no additional taxes are envisaged for 2017. Nevertheless, the households and businesses suffer the effects of the fiscal measures which were decided during the first review, phased in since June last year to early 2017. However, as the fiscal measures imposed on the incomes of individuals have come in force since the third quarter of 2016, their year-on-year impact on macroeconomic variables will gradually fizzle out from the third quarter of 2017.

Apart from the developments in the second half of this year stemming from the decisions undertaken in the context of the second review, the investment activity is not expected to strengthen from privatisations and concessions, even though the implementation of the programme accelerated in the second quarter of 2017 (extension of the Athens Airport concession agreement, winning bid announcement for the Thessaloniki Port Authority). Following the tenders completed thus far and provided that the

other planned tenders are completed within the year, the revenue target would likely be achieved. Even if the revenue programmed for 2017 is collected, the effect of concessions and privatisations that will be completed this year on investment is going to be felt gradually from next year, as it takes time to design the associated investment plans and obtain the relevant licences.

The difficulties of businesses to obtain capital from the banking system were moderated in early 2017 by the significant acceleration of payments of arrears to public sector suppliers in the second half of last year. Despite the allocation of the full amount envisaged for this purpose from the loan tranches, it is estimated that new arrears of about €1.37 billion were created between July 2016 and April 2017. The generation of new arrears is probably linked to the delay in completing the second review. Besides, in the preamble of the budget for the current year it was stated that the disbursements (credits to public entities for the settlement of arrears) that had started in July 2016 would be adjusted according to the ESM funding schedule. Therefore, given the recent completion of the review, the settlement of arrears will probably speed up. That said, as there is no plan to allocate a specific amount of the tranche associated with the second review to cover arrears, most probably their payment in the coming months will grow mildly.

Regarding the external sector of the economy, the latest available data on imports and exports in the first four

months of 2017 point to a deterioration in the goods and services account, for the first time since 2010. According to Bank of Greece data, the exports of goods and services at current prices were 19.2% higher year on year between January and April of this year. The growth rate of imports was slightly lower than that of exports, of the order of 16.0%. However, the change in their absolute size exceeded the increase in exports, broadening the external account deficit by 7.1%. The year-on-year growth of imports came mostly from goods (+€2.17 billion or +16.6%) and to a lesser extent from services (+€403 million or +13.3%). As on the export side, the value of imports primarily strengthened by petroleum products. The imports of goods other than fuel and ships and other services came next with lower growth rates. The relaxation of the capital controls related to import transactions since last July, together with the accumulated needs of the businesses and the households because of the capital controls, are considered to have contributed to the extensive growth of imports.

Regarding external to the Greek economy factors that might influence its course in the current year, the Brent oil price has been falling almost constantly since mid-April, to reach about \$45 in late June. As the fall in oil prices began almost two months before the fallout among the Arab member countries of OPEC, its main driver is low demand. Therefore, it is likely to continue at least in the coming months, until the beginning of the autumn, when

the energy needs for the forthcoming winter are going to be determined.

The strengthening of the exchange rate of the euro against the dollar since mid-March reflects the gradual weakening of the political uncertainty regarding the results of the tight elections that took place in some of the Eurozone countries (Netherlands, France). That said, the Brexit process and its possible effects remain a factor of concern for prospects of the EU economy. Under the above effects, the euro – dollar exchange rate is not expected to decline over most of the second half of 2017.

Taking into account the above trends in economic indicators, the latest politico-economic events (mainly those linked to the completion of the second review of the economic adjustment programme) and the anticipated developments for the forecasting of the GDP components and other macroeconomic indicators, the **household consumption** growth will carry over from the first quarter of 2017 to the following quarters of the year, albeit at a weakening rate. The boost of private consumption expenditure in the first quarter and for the remainder of this year stems mainly from a further decline in unemployment, due to the increase in employment in export-oriented manufacturing industries, Tourism and in the public sector. However, the weakening of unemployment is likely to be milder than in 2016, due to increased social security contributions and higher income tax. More generally in the current year, the expanding electronic transactions, boosted

by the relevant income tax deduction, will stimulate private sector consumption.

Fiscal measures, taken as part of the first review will prevent a larger growth of private consumption in the current year. However, as most measures have been in force already since the third quarter of last year, their effect on year-on-year changes in household disposable income will weaken from the third quarter of this year.

Taking into account the factors that will act on private consumption in the current year, it is projected to grow slightly by about 1.4%.

Concerning the other strand of domestic consumption spending, the growth of **public consumption** in the first four months of this year, despite the prolonged second review of the programme and the delay in disbursing the associated loan tranche, is considered to be an indication of its mild expansion overall in the current year. Besides, the disbursement of the tranche will facilitate payments for consumer spending in the second half of 2017. Given that in the same period of last year, the consumer spending of the state was restrained, it is quite likely that they will expand a year later. Subsequently, **public consumption is projected to be slightly higher this year than in 2016, by almost 1.0%.**

The low availability of funds will remain the major deterrent to the implementation of **investment**. The credit policy of the banks will not change significantly over the rest of 2017, as it remains uncertain whether the Greek sovereign bonds will join ECB's quantitative easing mechanism,

while the settlement of non-performing loans is about to start in earnest and the ECB's next stress test comes in early 2018. If Greece joins the QE mechanism, the banks will use the additional funds mainly to boost their capital reserves in view of the forthcoming stress test. Therefore, a small increase in the provision of credit to businesses in the current half of 2017, that will keep the year total close to its level from last year, is the most likely outcome. In addition to the overall financing conditions, the fund-raising opportunities for the large enterprises of the Greek economy, especially those listed on the stock markets, from the capital markets in Greece and abroad, have improved significantly since the start of this year. It is now expected that other businesses are already preparing to finance their operation and investments in the same way, taking advantage of the favourable environment which has been formed with the completion of the second review.

The weakening of the uncertainty for the Greek economy and the improving of the domestic economic environment after the completion of the second review are expected to have a catalytic effect on the implementation of investment plans whose preparation had either begun or was completed and the businesses were anticipating the outcome of the negotiations in order to decide if and when they will start the execution of these plans. A number of structural changes implemented as prior actions will contribute to the decision to execute these investment plans. That said, changes in the taxation and the social security

contributions of businesses and freelancers and, more broadly, the sense of volatility of the tax and social security system will continue to be a major deterrent to investment.

Regarding the investment funded by the public sector or dependent on its actions, the more back-loaded PIP implementation compared to last year will provide less impetus to investment. As the vast majority of investments in integrated privatisations and concessions are in their planning or licencing phase, they are anticipated to have a small contribution to investment activity in 2017, towards the end of the year.

As already noted in the previous IOBE bulletin on the Greek economy, the changes in inventories, following their extensive decline, by €1.55 billion, in 2016, constitute an artificial factor, expected to have a positive, possibly significant, impact on investment activity in 2017. Already in the first quarter, inventories increased by €215 million year on year. **Taking into account the various effects of the factors affecting investment, it is projected to grow by 13% to 15%.**

In the external sector of the Greek economy, the exports of services, mainly of transport services, are expected to dominate the trend in **exports** this year. Meanwhile, tourism receipts are expected to return to growth, at a low rate, overall in 2017. The exports of goods are anticipated to have a milder increase than the exports of services, close to their 2016 growth rate. **The expansion of the exports of goods excluding fuels and**

ships, but above all the higher demand for domestically produced services (transport and other), will drive the growth of total exports, at a rate of about 5.5%.

Regarding **imports**, the retention of domestic demand on a growth path in the coming quarters of 2017, probably at a slightly lower speed than in the first quarter, will continue to drive the demand for imports, especially for internationally produced goods. The appreciating exchange rate of the euro against the dollar since the beginning of the year, which is not expected to change soon, will reinforce the increase in imports.

Taking into account the above trends in factors that affect the GDP components, the Greek economy is projected to grow at around 1.5%, or perhaps slightly lower, in 2017.

The 2017 State Budget execution runs better than last year, overshooting the revised targets

According to the final data on the State Budget execution in the first five months of the current year, the **better results were achieved than in the same period of 2016**. In particular, its **deficit stood at €1,242 million, from €1,649 million in the same period of last year**, while **the primary surplus increased by almost €400 million**, to €1.84 billion. The execution results exceed the **revised targets**, as set in the Medium-term Fiscal Strategy Framework 2018-2021, for a deficit of €2,033 million and primary surplus of €1,055 million. **The**

improved performance year on year came mostly from the expenditure side. The Ordinary Budget expenditure was down year on year by €584 million, while the disbursement of **Public Investment Programme grants** declined year on year by €360 million. Regarding the State Budget revenues, the higher year on year **Ordinary Budget net revenues** are overcompensated by the extensive shortfall of the EU inflows into the **Public Investment Programme**, by about €1.18 billion. The increase in the revenues of the Ordinary Budget came almost exclusively from much larger privatisation revenues, by €910 million, due to the concession of the regional airports, and from stronger transaction tax collection, by almost €500 million.

Decline in unemployment in early 2017, projected to fall less than in 2016

The unemployment rate declined further year on year in the first quarter of this year. In addition, the unemployment rate in the first quarter was lower than in the preceding quarter, which has not happened for this period of the year since the first quarter of 2007. In particular, **the unemployment rate reached 23.3% in the first quarter of 2017, 1.6 percentage points lower year on year and 0.3 p.p. lower than in the final quarter of 2016.** At the branch level, the strongest job creation was recorded in Manufacturing (+10,900 jobs or +3.2%), Public Administration – Defence – Compulsory Social Security (+9,800 jobs or

+3.2%) and Human Health – Social Work Activities (+8,100 jobs or +3.8%).

The commencement of the execution of investment plans after the completion of the second review, together with the labour market reforms that took place as part of it, will contribute to better conditions in the labour market. Nevertheless, job creation this year will mainly come from the strengthening of export demand and thus the activity of export-oriented sectors, such as some manufacturing industries and Tourism. The public sector will continue to contribute to employment mainly through programmes of the Manpower Employment Organization OAED, but also with stronger recruitment, e.g. in health activities. Positive effects on employment are also expected to come from the construction industry, as civil engineering, including public works, significantly strengthened for a second year in a row, while building activity is expanding. That said, the changes in direct taxation and social security contributions of freelancers since the beginning of 2017 are likely to reduce employment in certain sectors. **Overall, the effects that are expected to be exerted on the labour market are, for the most part, positive. Hence, unemployment is going to decrease once more in 2017, to a lesser extent than last year, to 22.2%.**

Prices will increase in 2017, mainly due to higher indirect taxes

The Consumer Price Index increased during the first five months of the current year, for the first time in almost four years, by 1.4%, against a decline by 1.0% during the same period of

2016. As already noted in the previous IOBE report on the Greek economy, the year-on-year higher global oil prices and the higher indirect taxes, particularly on petroleum products, tobacco and cigarettes, were the key inflation drivers during that period. Their impact is reflected in the fact that the highest inflation among the CPI categories of goods and services was recorded in Housing, Alcoholic Beverages – Tobacco, and Transport (+6.8%, +6.6% and +3.8% respectively).

The price inflation due to the hikes in existing indirect taxes and the levy of new indirect taxes will continue to have an impact in the second half of the year. Besides, almost all recent changes in indirect taxation came into effect on 01/01/2017, so the price boost they cause will last throughout 2017. The rise in prices this year due to the growth of the global oil prices will probably weaken significantly over the rest of 2017, as the oil prices have steadily declined since the beginning of April and now range at the same level as last year. Note that as the oil prices have kept falling, despite the extension of the restraint on daily petroleum production until March 2018, its main driver is low demand. Therefore, the decline in the oil prices is likely to continue at least in the coming months, until the beginning of the autumn, when the energy needs for the forthcoming winter will be determined, weakening the inflationary pressures.

Given the above effects, the impact of the indirect taxes will be the main reason for the increase in CPI in 2017 by 1.5%.

Special study: Effects of reforms on sectors producing tradable goods and services

The crisis of the Greek economy has highlighted not only the chronic fiscal imbalances of the economy, but also the significant distortions of its operation. Since the drafting of the first agreement with the official lenders of the Greek state in May 2010, sets of fiscal measures were successively adopted in order to achieve fiscal consolidation. However, structural changes in product and service sectors and the labour market were also introduced. The main aim of these reforms was to change the growth model of the domestic economy through the transfer of production factors from sectors that produce goods and services for the domestic market to sectors and activities supplying internationally tradable output.

In this regard, the scope of the IOBE study presented in the fourth chapter of this quarterly report is to assess the effects of the reforms that have taken place in specific sectors of internationally traded goods and services in terms of achieved technical efficiency. In addition, the study examines the effect on the technical efficiency of these sectors of "horizontal" reforms that affect many or all sectors of the Greek economy, controlling for the effects of company-level factors and the macroeconomic environment.

2. ECONOMIC ENVIRONMENT

2.1 Trends and Prospects of the World Economy

The Global Environment

The GDP of the OECD member countries grew by 2.1% in the first quarter of 2017, compared with 1.7% in the corresponding quarter of 2016. It has improved, albeit moderately, for the third consecutive quarter.

In the major world economies (G20), the growth rate in the first quarter of 2017 was 3.4%, their best performance that since the third quarter of 2015.¹ Growth strengthened somewhat in the first quarter of 2017 in most major economies, with a better year-on-year performance as well. Among the developed countries, there is a steady rise in growth in the US since the second quarter of 2016. Its growth rate stood at 2.0% in the first quarter of 2017, compared with 1.6% in the corresponding quarter of 2016. In the Euro area, growth rose to 1.9%, compared with 1.7% in the first quarter of last year, while in the United Kingdom it was 2.0%, compared with 1.6% one year earlier. In China, growth strengthened to 6.9% from 6.7%, while in contrast in India it declined to 6.2% in the first quarter of this year, from 8.7% in the corresponding period of 2016. In Brazil, the recession weakened markedly in early 2017, to 0.4%, compared with a 3.6% decline in 2016, while the growth in Turkey is strengthened

to 4.5% in the first quarter of 2017, compared with 4.1% in 2016, with a significant recovery from the third quarter of 2016 where the growth rate stood at 0.9%.

According to the latest European Commission forecasts (spring 2017), the global economy grew in 2016 by 3.0%, as estimated in its previous report (winter 2017). For 2017, the rate is expected to accelerate to 3.4% and strengthen further to 3.6% in 2018, as in the previous estimates. The stronger performance is expected to come from stronger manufacturing and trade in developed and developing economies, which has boosted global economic activity since the last few months of 2016. In developed economies, the growth is expected to be fuelled by US fiscal expansion and possibly an improvement in international trade. In the developing economies, despite a significant slowdown in 2016, there are prospects for recovery in 2017. These prospects are mainly based on the strengthening of the prices of the goods they produce, the return to growth of major developing countries such as Brazil and Russia and the re-emergence of demand from developed economies.

Regarding the expected developments in the major economies, the US is expected to grow at 2.2% in 2017, with a slight weakening compared to the previous

¹ Source: Quarterly National Accounts - Quarterly Growth Rates of real GDP, change over previous quarter: <http://stats.oecd.org/index.aspx?queryid=350>

estimate. In contrast, the projected growth rate was revised upwards for China (6.6%) and India (7.2%), boosting growth in the Asian continent as a whole, whose economic activity accounts for around one third of the world GDP. In Brazil, the economy is expected to recover gently this year from the deep two-year recession of 2015-2016, at a rate of 0.5%, while similar developments are expected for Russia, where growth is expected to reach 1.2% in 2017.

In recent forecasts, the change in world trade volume has been revised upwards against previous estimates, both for last year and for the current two-year period 2017-2018. For 2016, the world trade expansion rate stood at 2%, while its growth is expected to reach 3.4% in 2017 and 3.8% in 2018.

According to the European Commission forecasts, the greatest challenges for the world economy are the following:

- US fiscal policy: a major public spending plan was announced, boosting consumer and business expectations, yet it has not materialized so far. In addition, the monetary policy is expected to tighten, as the Fed has announced interest rate hikes in 2017.
- Asymmetries between the developed economies in the conduct of monetary policy, with quantitative easing programmes in Europe and Japan, and a tendency for a restrictive monetary policy in

the US. These differences may result in significant changes in capital movements and in the exchange rates.

- Protectionism remains an important issue - will the new US administration exercise a protective policy and how? No specific measures have been taken so far. Developments regarding this issue will have a significant impact on international trade and on the prospects of the developing economies in particular.
- Geo-political risks in the Middle East and East Asia, due to North Korea.
- China's transition to a new economic model, seeking to correct several imbalances accumulated in the past. This process may create friction in the global economy.
- Regarding Europe, in particular, the end of elections with significant external effects on the direction of the European Union (in the Netherlands and France). The results are expected to mitigate the uncertainties and risks accumulated over the past period, while the negative impact of the Brexit process seems to be stronger on the economy of the UK economy rather than on the Euro area.
- The issue of the robustness of European banks remains on the

agenda, with a significant proportion of non-performing loans (NPLs) constituting the soft spot of the banking sector, with a negative impact on liquidity in the European economy. Clearly, it also affects investment.

The estimates² for the global economy of IFO in the second quarter of 2017 show a significant improvement over the previous quarter. Analytically, the balance of estimates for the global economic climate improved significantly, at 13 points, compared

with 2.6 points in the previous quarter, a value that is the highest of the last three years. With regard to the assessment of the current situation, the balance became positive (+4.7 points), for the first time since the second quarter of 2011, i.e. after six years. Finally, improvement is also recorded in the expectations sub-index, with the balance standing at 21.6 points, compared with 15.0 in the previous quarter.

Table 2.1

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

| | | | Forecast | | |
|--|---------------|------|----------|------|------|
| | <i>Share*</i> | 2015 | 2016 | 2017 | 2018 |
| USA | 15.7 | 2.6 | 1.6 | 2.2 | 2.3 |
| Japan | 4.5 | 1.2 | 1 | 1.2 | 0.6 |
| Emerging Asia | 31.5 | 6.5 | 6.4 | 6.4 | 6.3 |
| <i>of which China</i> | 17.1 | 6.9 | 6.7 | 6.6 | 6.3 |
| <i>India</i> | 7.0 | 7.5 | 7.1 | 7.2 | 7.5 |
| Latin America | 8.2 | -0.1 | -1 | 1.2 | 2.1 |
| <i>of which Brazil</i> | 2.8 | -3.8 | -3.6 | 0.5 | 1.8 |
| The Middle East and North Africa (MENA) | 6.8 | 2.4 | 3.3 | 2.3 | 2.9 |
| Commonwealth of Independent States (CIS) | 4.6 | -2.3 | 0.3 | 1.6 | 2 |
| <i>of which Russia</i> | 3.3 | -2.8 | -0.2 | 1.2 | 1.4 |
| Sub-Saharan Africa | 3.2 | 3.4 | 1.2 | 2.6 | 3.4 |
| World Economy | 100 | 3.2 | 3.0 | 3.4 | 3.6 |
| | | | | | |
| World Trade | | 2.8 | 2.0 | 3.4 | 3.8 |

* Share (%) in world GDP based on GDP in constant PPS 2015

Source: European Economic Forecast, Spring 2017, European Commission

² Since early 2017, the IFO expectations indicators are based on the balance of positive and negative responses.

Meanwhile, there are still no recent data on regions other than the Euro area.

In the Eurozone, an equally significant improvement was recorded in the second quarter of 2017, with the economic climate indicator rising to 26.4 points, compared with 17.2 in the first quarter. This is its best performance since the beginning of 2008. It points to positive developments in the labour market and with regard to inflation, the level of which returns to the ECB's target ($\sim 2\%$). For the assessment of the current situation, the balance stood at 21.9 points, from 8.0 points in the previous period, also a spectacular performance with the index reaching the highest value since the beginning of 2008. Finally, the balance of expectations is boosting the overall economic climate, with a significant increase to 31.0 points, from 26.9 points in early 2017, recording its best performance since the third quarter of 2015.

The economies of the EU and the Euro area

The growth performance of the economies of the European Union and the Euro area last year was better than initially estimated earlier this year. The prospects for 2017 and 2018 have also improved, according to the latest European Commission forecast (Spring 2017). In particular, GDP rose in the European Union by 1.9% in 2016, while growth in the euro area stood at 1.8%, compared with an initial estimate of 1.7%. Public and private consumption gave a significant boost to growth in 2016, increasing their contribution to GDP growth in both regions. Meanwhile, the contribution of investment marginally increased in the Euro area, yet it marginally declined in the EU. On the trade side, net exports had a negative contribution in both regions, as the increase in exports was less intense than the increase in imports.

Table 2.2

IFO – World economic climate (balances)

| Quarter/Year | II/15 | III/15 | IV/15 | I/16 | II/16 | III/16 | IV/16 | I/17 | II/17 |
|---------------------------------|-------|--------|-------|-------|-------|--------|-------|------|-------|
| Economic climate | 8.8 | 2.4 | -5.7 | -7.5 | -4.0 | -7.1 | -1.2 | 2.6 | 13.0 |
| Assessment of current situation | -3.9 | -15.5 | -18.1 | -14.7 | -17.9 | -17.2 | -15.4 | -9.1 | 4.7 |
| Expectations | 22.3 | 22.0 | 7.6 | -0.1 | 11.0 | 3.7 | 14.1 | 15.0 | 21.6 |

Source: IFO, World Economic Survey, WES, Vol. II/ May 2017

Table 2.3

IFO – Economic climate in the Euro area (balances)

| Quarter/Year | II/15 | III/15 | IV/15 | I/16 | II/16 | III/16 | IV/16 | I/17 | II/17 |
|---------------------------------|-------|--------|-------|------|-------|--------|-------|------|-------|
| Economic climate | 24.3 | 18.9 | 16.9 | 13.2 | 6.5 | 4.5 | 8.2 | 17.2 | 26.4 |
| Assessment of current situation | -4.4 | -1.0 | 3.9 | 1.6 | -2.6 | 6.0 | 2.3 | 8.0 | 21.9 |
| Expectations | 57.3 | 40.8 | 30.8 | 25.5 | 16.1 | 3.0 | 14.3 | 26.9 | 31.0 |

Source: IFO, World Economic Survey, WES, Vol. II/ May 2017

In the first quarter of 2017 growth accelerated to 2.1% and 1.9% in both regions. The highest growth rates were recorded in Romania (5.6%), Slovenia (5.0) and Poland (4.2%). In contrast, subdued growth was recorded in Greece (0.4%), France (1.1%) and Italy (1.2%).

With regard to key leading indicators of economic activity in the Eurozone and the European Union, the €-COIN³ index remains close to 0.6 points, albeit lower than the very high level of February 2017 (0.72 points), its best performance since 2011, capturing the positive climate in the Eurozone economy.

The economic climate index of the European Commission has also steadily improved since early 2017 (with the exception of a short-lived weakening in May), with its level reaching 111 points in the EU and the Euro area in June, the best performance in the last decade in both areas (from the middle of 2007). In particular, in the European Union the economic climate index increased to 111.3 points in June, higher than in May and clearly higher than in the same month of last year (105.5 points), while in the Eurozone the index reached 111.1, higher than in May 2017, and in June 2016 (104.3). Overall in the second quarter, the EU index was higher by 1.7 points compared to the first quarter of 2017 and by 5.2 points compared to the corresponding quarter of 2016, while in the Eurozone the index was 2.0 points

higher than in the first quarter of 2017 and 5.8 points higher quarter on quarter. At country level, the climate improved further quarter on quarter in the second quarter of 2017 in France (+2.5), Austria (+2.5), Finland (+2.2) and Portugal (+2.0%), while in Slovakia, Lithuania and the Czech Republic it deteriorated.

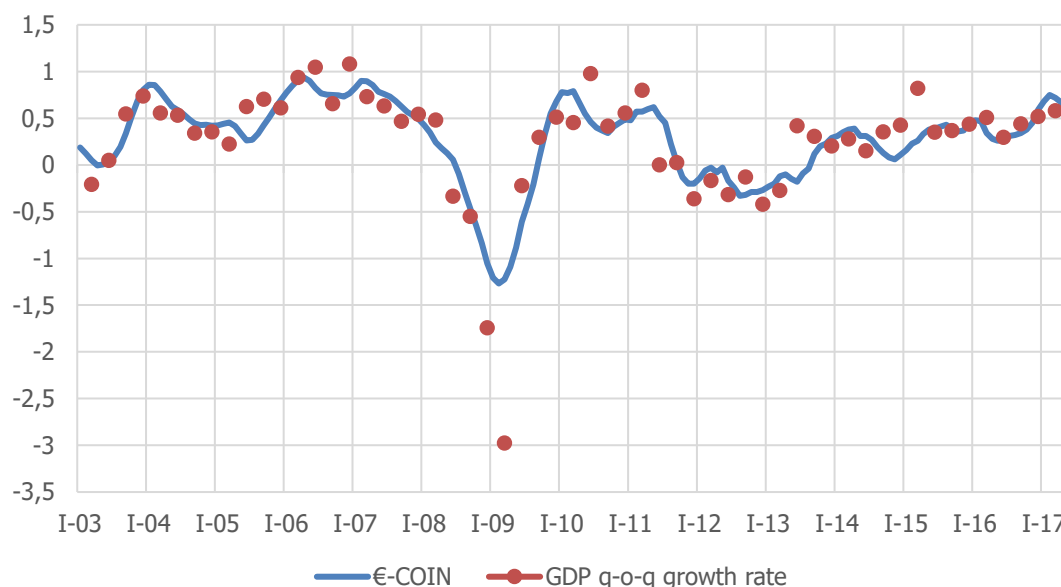
More detailed information on the key components of the Eurozone and EU GDP, as well as their potential trends over the next period is provided below in this section. The analysis is based on data for the initial quarter of 2017 and forecasts for 2017 and 2018, as presented in the latest European Commission forecasts (spring 2017).

In greater detail, according to Eurostat data for the first quarter of 2017, **private consumption** in the European Union increased by 2.0%, compared with an increase of 2.3% in the first quarter of 2016. Meanwhile, consumption in the Eurozone increased by 1.6%, less than in the first quarter of 2016 (+2.0%). Overall in 2017, household consumption is expected to increase by 1.8% in the EU and 1.5% in the Eurozone. Among the EU countries, private consumption increased strongly in the first quarter of the year in Romania (7.3%), Lithuania (6.3%) and Latvia (5.2%), while in contrast in France (1.0%), Sweden (1.2%) and Germany (1.3%) the consumption growth was subdued.

³ 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.

Figure 2.1
Monthly Index €-COIN of CEPR



Source: CEPR (www.cepr.org) and Bank of Italy

Table 2.4

European Commission – Economic Sentiment Indicator EU & Euro Area (1990-2015=100)

| Month | Jan-16 | Feb-16 | Mar-16 | Apr-16 | May-16 | June-16 | July-16 | Aug-16 | Sep-16 | Oct-16 | Nov-16 | Dec-16 |
|-----------|--------|--------|--------|--------|--------|---------|---------|--------|--------|--------|--------|--------|
| EU | 106.6 | 105.2 | 104.5 | 105.0 | 105.5 | 105.5 | 104.6 | 103.7 | 105.4 | 106.8 | 107.2 | 109.0 |
| Euro area | 105.0 | 103.9 | 102.9 | 103.9 | 104.5 | 104.3 | 104.4 | 103.4 | 104.8 | 106.3 | 106.5 | 107.8 |

| 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 | 108.6 | 108.9 | 109.2 | 110.7 | 109.7 | 111.3 | | | | | | |
| Euro area | 108.0 | 108.0 | 108.0 | 109.7 | 109.2 | 111.1 | | | | | | |

Source: European Commission (DG ECFIN)

The year-on-year growth of **public consumption** decelerated significantly in the first quarter of this year in the European Union and the Eurozone. In particular, public consumption increased by 1.0% in both regions, compared to 2% last year. For the whole of 2017, an

increase of 1.5% is expected in the EU and the EZ. Bulgaria (5.8%) and Latvia (3.6%) were the countries with the largest increase in the first quarter of this year, while a decrease has recorded in Hungary (-3.6%), Malta (-2.6%) and Portugal (-0.4%).

Investment increased significantly in the EU and the Euro area, with 6.9% and 8.2% respectively, compared with 1.5% and 2.2% in the first quarter of 2016. For the whole of 2017, investment growth is expected to grow by 2.7% in the EU and 2.9% in the Euro area. In the first quarter of 2017, a significant increase in investment was recorded in Hungary (14.6%), Greece (13.6%) and Estonia (12.3%), while investment fell in Latvia (-5.0%) and the Czech Republic (-1.4%).

The **exports** of goods and services expanded significantly in the first quarter of 2017, by 4.6%, in both the EU and the Euro area, compared with a moderate 2.8% and 2.5% growth in both regions in the first quarter of 2016. The forecast for 2017 is for 4.0% and 3.8% growth in the EU and the Euro area respectively, significantly improved (by 0.5 percentage points) compared to the previous estimates. The strongest increase in

exports in the last quarter was recorded in Estonia (10.9%), Romania (10.8%) and Portugal (9.6%), while exports increased weakly in France (1.4%), the UK (2.1%) and Sweden (2.2%) and shrank in Malta (-0.8%).

Imports strengthened even more than exports in both EU and the Euro area in the first quarter of 2017, at a rate of 6.6% and 7.1% respectively, compared with 3.5% and 3.4% in the corresponding period of 2016, returning close to the 2015 rates. Overall in 2017, an import growth rate of 4.2% is expected, boosted by around 0.3 points compared to the initial estimates in both regions. A high growth rate of imports was recorded in Lithuania (13.7%), Estonia (10.9%) and Greece (10.9%), while in addition to the decline in imports in Malta, a relatively low growth rate was recorded in Sweden, with 1.9%, and in Luxembourg, with 3.4%.

Table 2.5

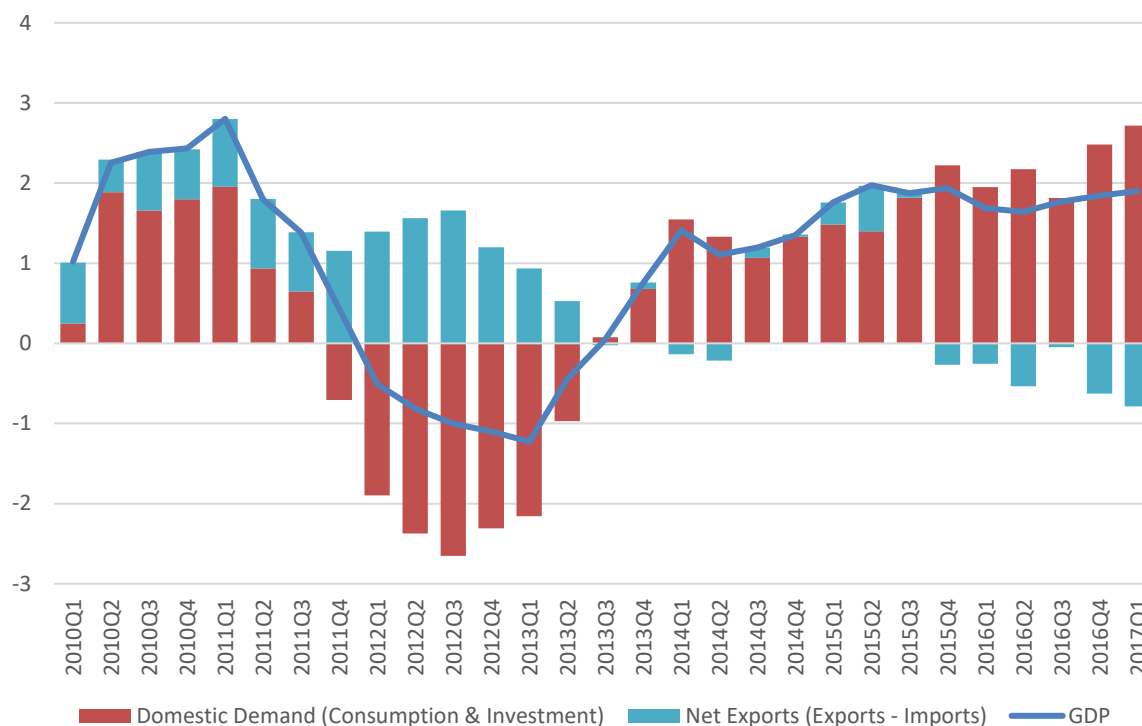
Key economic figures, EU, Euro area (annual % change unless otherwise noted)

| | EU | | | Euro area | | |
|---------------------------------------|------|------|------|-----------|------|------|
| | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 |
| GDP | 1.9 | 1.9 | 1.9 | 1.8 | 1.7 | 1.8 |
| Private Consumption | 2.3 | 1.7 | 1.6 | 2.0 | 1.5 | 1.6 |
| Public Consumption | 1.7 | 1.5 | 1.3 | 1.9 | 1.5 | 1.5 |
| Investment | 2.6 | 2.7 | 3.2 | 3.7 | 2.9 | 3.5 |
| Employment | 3.1 | 4.0 | 4.1 | 2.9 | 3.8 | 4.1 |
| Unemployment (% labour force) | 4.0 | 4.2 | 4.3 | 4.0 | 4.2 | 4.6 |
| Inflation | 1.3 | 0.9 | 0.9 | 1.4 | 1.2 | 1.1 |
| Exports of goods and services | 8.5 | 8.0 | 7.7 | 10.0 | 9.4 | 8.9 |
| Imports of goods and services | 0.3 | 1.8 | 1.7 | 0.2 | 1.6 | 1.3 |
| Balance of General Government (% GDP) | -1.7 | -1.6 | -1.5 | -1.5 | -1.4 | -1.3 |
| Debt of General Government (% GDP) | 85.1 | 84.8 | 83.6 | 91.3 | 90.3 | 89.0 |
| Current Account (% GDP) | 2.1 | 1.9 | 1.9 | 3.4 | 3.0 | 2.9 |

Source: European Economic Forecast, Spring 2017, European Commission

Figure 2.2

GDP components of the Euro area

**Source:** Eurostat

Based on the developments in the GDP components for the Eurozone, note that since the beginning of 2014 the contribution of domestic demand to GDP, i.e. total private consumption, public consumption and investment, has increased almost continuously. In contrast, net exports show an uneven and small contribution, either positive or negative, reflecting the weakening of the growth in world trade.

Harmonized **inflation** reached 1.6% and 1.4% in EU and the Euro area respectively in May, compared to a price decrease by 0.1% in the corresponding month of 2016. That said, compared to late 2016 and early 2017, its pace is slowing down as oil prices have weakened. For the whole of 2017

inflation is expected to reach 1.8% and 1.6% respectively in the EU and in the Euro area. In May, the highest inflation was reported by Estonia with 3.8%, Lithuania with 3.2%, and the UK with 2.9% due to the depreciation of the pound, while Ireland, Romania and Denmark had low inflation.

Employment, according to the Eurostat labour force data, increased at a marginally higher rate year on year in the first quarter of 2017, by 1.4% and 1.5% in the EU and the Euro area respectively, compared with 1.3% and 1.4% in the first quarter of 2017. For the whole of 2017, an increase of 0.9% and 1.2% is expected in both regions, an improvement compared to the previous estimates, but still below

2016. A strong employment growth was observed in Ireland (3.5%), Cyprus (3.4%) and Luxembourg (3.2%), while employment declined in Latvia (-2.8%), Romania (-0.7%) and Lithuania (-0.3%).

Unemployment fell to 8.0% in the EU in the first quarter of 2017, compared with 8.2% in the last quarter of 2016. Meanwhile, a decline was recorded in the Eurozone, with the unemployment rate falling to 9.5% from 9.7%. For the whole of 2017, an unemployment rate of 8.0% and 9.4% is expected in the two regions, compared with 8.5% and 10.0% respectively last year. In the first quarter of the year, the highest unemployment rate was recorded in Greece, with 22.8%, followed by Spain with 18.2% and Cyprus with 12.6%. On the opposite side of the spectrum were the Czech Republic with 3.3% and Germany with 3.9%.

With regard to **fiscal performance**, improvement was recorded in both economic regions, as the general government deficit narrowed to 1.7% and 1.5% in the EU and the Euro area respectively in 2016. Meanwhile, the deficit is expected to decline this year to 1.6% in the EU and to 1.4% in the Euro area. The countries with the highest deficit last year were Spain (-4.5%) and France (-3.4%), while the highest surpluses were recorded in Luxembourg (1.6%), Malta (1.0%) and Sweden (0.9%). Public debt improved as well in 2016 in the EU and the Euro area, to 85.1% and 91.3% of GDP respectively, and further contraction is expected in 2017.

2.2 The economic environment in Greece

A) Economic climate

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. In greater detail:

The economic climate indicator remained unchanged quarter on quarter in the second quarter of 2017. The forthcoming since April conclusion of the pending review of the programme seems to have blunted business uncertainty and pessimism, while the pressures from the tax and social security systems have already been significantly discounted in previous months. Moreover, positive changes in consumer expectations came to some extent from the partial lifting of the uncertainty about the continuation of the programme. That said, the wait for decisions on medium-term fiscal measures after 2018, on whether or not actions to alleviate public debt would be taken and on issues such as the possibility of restructuring overdue loans, prevented an improvement in the economic climate. As a result of the above factors, the small fluctuations of the index continued and the index consolidated in the last few months.

In greater detail:

The Economic Climate Index in Greece in the second quarter of 2017 remained relatively stable quarter on quarter, standing on average at 94 (from 93.8) points, at a higher level than the average from the same quarter of 2016 (90.3 points).

In Europe, the index increased quarter on quarter in the quarter under examination, both in the EU and in the Euro area. In particular, the climate index averaged 110 (from 108) points in the Euro area and 110.6 (from 108.9) points in the EU in the second quarter of 2017.

At sector level, business expectations in Greece significantly improved quarter on quarter in the second quarter of the year in Services and worsened in the remaining sectors. On the demand side, the quarterly average of the very weak consumer confidence increased. Compared to the same quarter of last year, the index increased again only in Services, while in other sectors it weakened, with consumer confidence rising. Analytically:

The **Consumer Confidence Index** in Greece averaged at -70.2 in the second quarter of 2017 (from -71.8 in the first quarter), higher year on year (from -71.2 points). At country level, the Greeks maintained their top rank on the European pessimism scale. The corresponding average European index improved quarter on quarter in the quarter under review in

the Euro area (-2.7 from -5.3 points) and in the EU (-3 from -4.6 units). The index improved year on year in both regions (-7.9 and -6.2 points respectively in the Eurozone and the EU).

Most of the individual components that make up the overall indicator improved quarter on quarter. The expectations of the Greek consumers for the financial situation of their households in the next 12 months and the corresponding expectations for the country's economic situation slightly improved, as was the case with the unemployment expectations, with the intention to save remaining largely unchanged.

More specifically, in the second quarter of the year, the percentage of those who were pessimistic about their household's economic situation in the next 12 months fell to an average of 73% (from 75%), with 23% considering once more that it would remain unchanged. Furthermore, the percentage of Greek consumers with gloomy expectations about the country's economic situation declined to 81% (from 83%), with 12% (from 10%) believing that it would not change. Concerning the intention to save, the percentage of households considering unlikely that they would do any savings over the next 12 months remained at 93%. Meanwhile, 74% (from 77%) were believing that unemployment would deteriorate, with 7% (from 5%) on average holding the opposite opinion. The percentage of consumers responding that they were "running into debt" remained at 15-16% in the second quarter of 2017, a slightly

higher level than in the same quarter of last year (14%), while 6-7% of respondents said they were saving little or a lot (from 10% last year). Finally, the percentage of those who declared they were "just about managing to make ends meet on their income" remained at 63%, while the percentage of households reporting that they were "drawing on their savings" stood at 14-15% (from 12% in the second quarter of 2016).

The Business Climate Indicator in **Industry** stood at 91.1 points in the first quarter of the year (from 92 in the preceding quarter), slightly lower than last year's performance (91.9 points). In the key activity indicators, the forecast for short-term output change remained at the same level in the examined quarter (+18 points on average), while the estimates for the level of orders and demand deteriorated (to -27 from -24 points). The assessment of the stock of finished products remained stable (at +13 the relative index), while the trends in the export indicators were mixed. The export expectations over the following quarter improved, the current assessment of the exports in the sector did not vary, while the assessment of foreign orders and demand worsened. The quarterly balance of employment expectations increased to +6 (from +2) points on average. The production capacity utilisation rate reached 68.7% (from 68.2%), while the months of guaranteed production of the enterprises remained on average at 4.1.

The Business Climate Indicator in **Retail Trade** declined in the second quarter, to

92.7 (from 94.1) points, lower than last year's level (100.2). Among the key components of the indicator, the average balance of the current sales assessment decreased to +6 (from +9) points. About 33% (from 45%) of the enterprises reported their sales to have risen, with 40% (from 36%) declaring the opposite. The projected sales indicator increased to +13 (from +10) points, while the balance of responses on the assessment of inventories dropped to zero from +8. Regarding the remaining activity data, the change in the balance of expectations for orders to suppliers is positive (+8 from -4 points on average per quarter), while in the sector's short-term employment forecast remained at +22 points. Finally, the balance of price expectations declined slightly to +3 points in the current quarter from +6 points in the preceding quarter, with 5% (from 7%) of companies expressing expectations of a decline in prices and 86% (from 80%) predicting stability.

Regarding the examined subsectors, the first quarter of the year saw a sharp decline in Food-Beverage-Tobacco and Department Stores and a rise in the other sectors.

The business expectations in **Construction** declined in the second quarter of 2017, with the balance standing at 42.9 (out of 52) on average, lower year on year (62.9). Among the key components of the indicator, the employment expectations in the sector remained unchanged, with a relative balance of -51 points and 60% of the

companies expecting fewer jobs. The expectations of the businesses about their activity level became more pessimistic (at -67 from -51 points), while the assessment of their current level of activity also declined (at -32 from -21). The months of activity accounted for by work in hand in the sector fell to 7.2 (from 8.1). The negative balance of price expectations eased by 3 points, to -21 (from -28), with 28% (from 34%) of the companies expecting a decrease in the short-term and 7% a new increase. Finally, the percentage of companies reporting that they were not facing any obstacles to the proper functioning of their business increased to 7-8%, while among the remaining businesses, 30% selected as the major obstacle low demand, 48% insufficient funding and 11% factors such as the country's general economic situation, the capital controls, high taxes, lack of projects, and late payment by the state.

At subsector level, the decline in overall business confidence in the examined quarter stemmed both from Private Construction (to 55.3 from 76.2 points on average) and from Public Works (to 33.7 from 37.6 points).

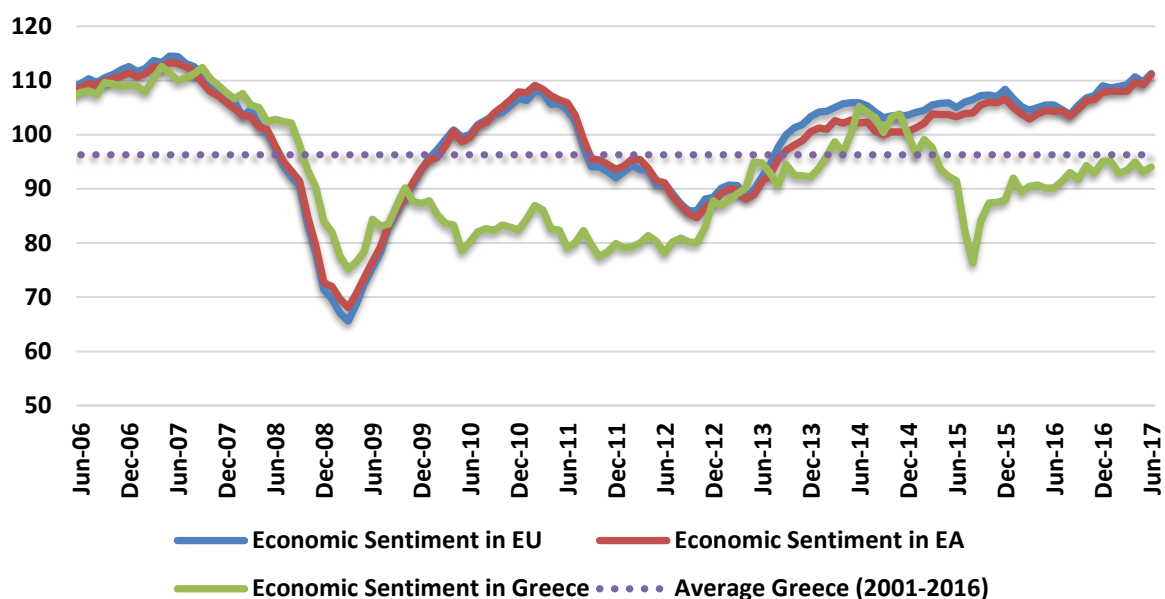
In **Services**, the average Business Climate Indicator increased quarter on quarter in the second quarter of 2017 to 86.5 (from

77.9) points, higher than in the same period of last year (74.3). Among the key components, the assessment of current demand gained ground, with the relative index estimated at +4 (from -4 points) on average. An increase was also recorded in the assessment of the current level of business activity (+7 from -7 on average) and in the short-term demand expectations of the businesses in the sector (+13 from +2 the balance). Regarding the remaining activity indicators, an increase was also recorded in the employment expectations of the respondents (to +3 from -6 points on average), while the price expectations remained close to their previous level at -2 points on average. Finally, the percentage of respondents reporting a seamless business operation moved back to 22%, with 32% declaring as the major barrier to their operation demand deficiency, 20% working capital shortages and 22% other factors related to the general economic situation and the crisis, the capital control, lack of access to finance, high taxation, arrears etc.

The indicators improved in the second quarter in all examined subsectors of Services, with the exception of Information Technology, where the relevant index remained stable.

Figure 2.3

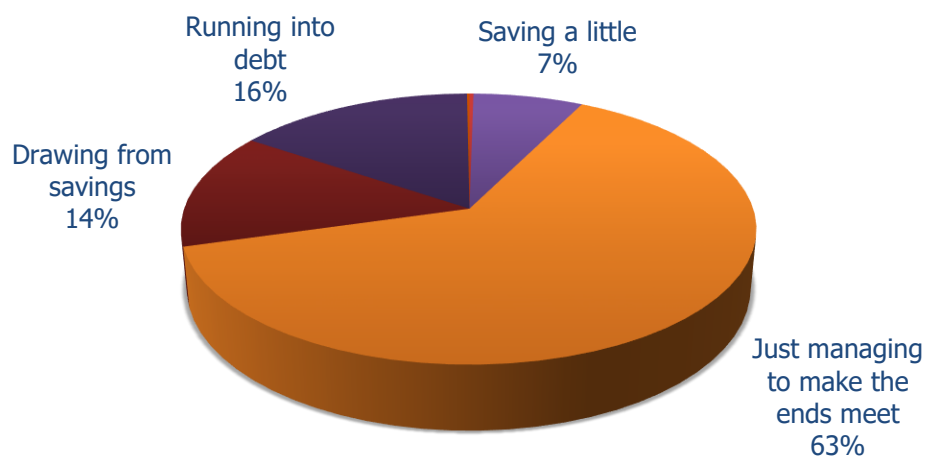
Economic Sentiment Indicators: EU, Eurozone and Greece, (1990-2015=100, seasonally adjusted data)



Source: European Commission, DG ECFIN

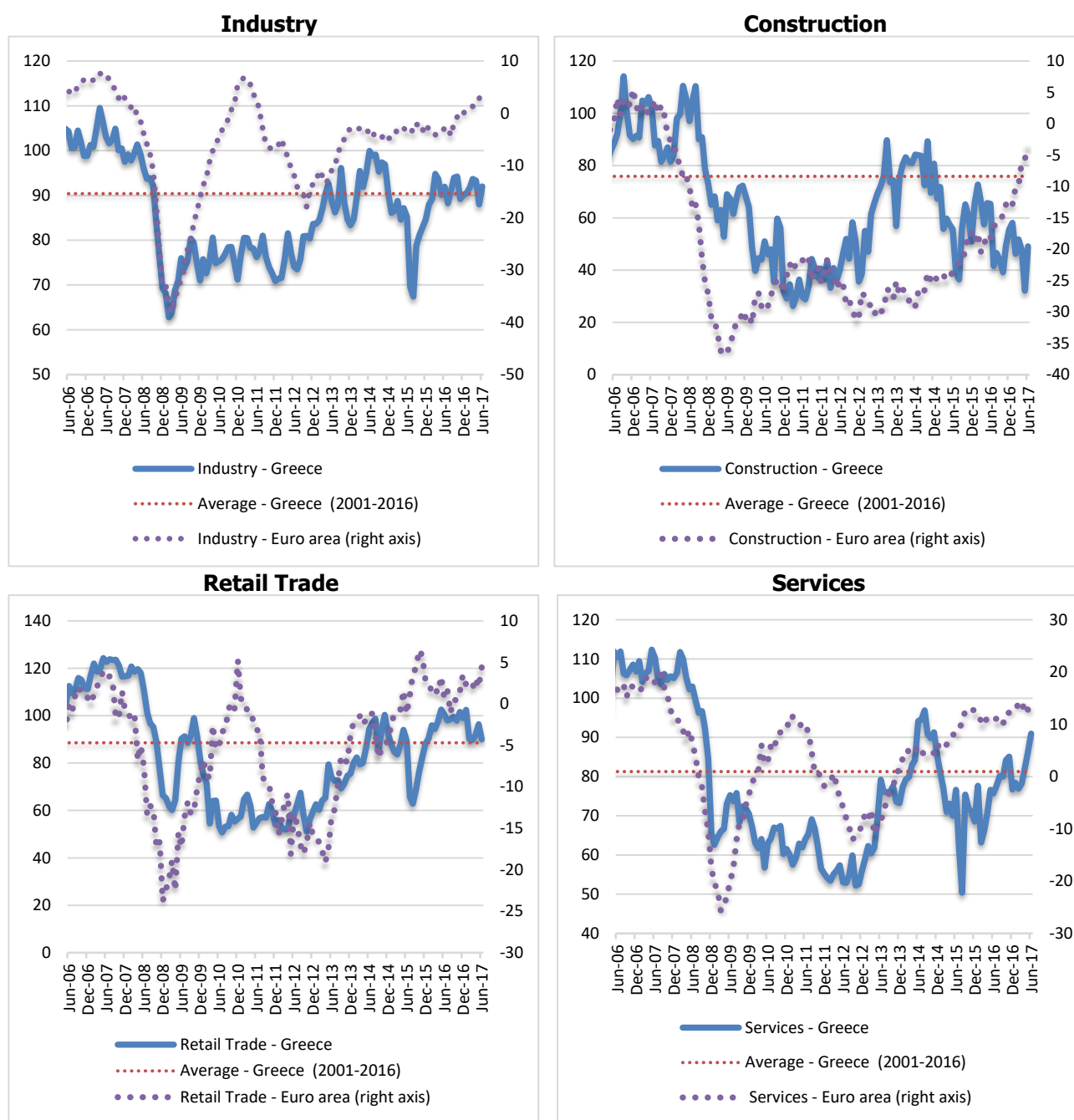
Figure 2.4

Consumer Survey data on their household's financial situation, (average of April – June 2017)



Source: IOBE

Figure 2.5
Business Climate Index



Source: IOBE

Table 2.6

Economic sentiment indicators

| Time period | Economic Sentiment Indicator ¹ | | | Business Climate Index ² (Greece) | | | | Consumer Confidence Index ¹ (Greece) |
|----------------|---|-----------|--------|--|--------------|--------------|----------|---|
| | EU | Euro area | Greece | Industry | Construction | Retail Trade | Services | |
| 2010 | 101.2 | 101.6 | 79.3 | 76.2 | 45.2 | 59.5 | 62.9 | -63.4 |
| 2011 | 100.3 | 102.4 | 77.6 | 76.9 | 34.2 | 58.9 | 61.7 | -74.1 |
| 2012 | 90.9 | 90.6 | 80.0 | 77.2 | 43.2 | 57.1 | 54.8 | -74.8 |
| 2013 | 95.7 | 93.8 | 90.4 | 87.8 | 65.0 | 70.2 | 70.4 | -69.3 |
| 2014 | 105.1 | 101.6 | 99.3 | 94.6 | 81.5 | 89.1 | 87.2 | -55.0 |
| 2015 | 106.2 | 104.2 | 89.4 | 81.9 | 56.4 | 81.0 | 70.6 | -50.7 |
| 2016 | 105.9 | 104.9 | 91.3 | 91.3 | 55.7 | 98.0 | 76.1 | -68.0 |
| Q1 2016 | 105.5 | 104.0 | 90.2 | 90.7 | 68.0 | 93.6 | 69.0 | -67.5 |
| Q2 2016 | 105.5 | 104.3 | 89.9 | 91.9 | 62.9 | 100.2 | 74.3 | -71.2 |
| Q3 2016 | 104.7 | 104.3 | 91.6 | 91.1 | 43.9 | 98.6 | 79.3 | -68.4 |
| Q4 2016 | 107.8 | 106.9 | 93.6 | 91.2 | 48.1 | 99.5 | 82.0 | -65.0 |
| Q1 2017 | 108.9 | 107.9 | 93.8 | 92.0 | 52.0 | 94.1 | 77.9 | -71.8 |
| Q2 2017 | 111.3 | 111.1 | 94.0 | 92.0 | 49.1 | 90.0 | 90.9 | -68.8 |

Sources: European Commission, DG ECFIN, IOBE

B) Fiscal developments and outlook*General Government Results: 2012—2016*

According to the latest national accounting General Government (GG) data,⁴ notified to Eurostat in April, the 2016 GG balance stood at a surplus of 0.7% of GDP for the first time in the decades, compared with a deficit of 2.1% of GDP initially forecasted in the budget. Similarly, the primary surplus amounted to 3.9% of GDP, against a surplus of 1.8% of GDP in the budget (Table 2.6). It should be noted that almost one-third of the primary surplus came from

the surplus of social security funds (1.2% of GDP or €2.05 billion). Furthermore, according to the methodology of the Financial Assistance Facility Agreement (FIFA), the primary surplus amounted to 4.2% of GDP, while the country's contractual obligation envisaged a small surplus of 0.5% of GDP.

Undoubtedly, the fiscal performance of 2016 was much better than expected. However, as noted in the first IOBE quarterly report for 2017, **the very positive financial performance was achieved with a cost in terms of**

⁴ National Accounts Data ESA 2010.

growth, production and employment, as the pursuit of a very tight fiscal policy did not allow the economy to come out of the recession. In addition, the direct and indirect taxation of the economy, the unjustified cut in public investment by €462 million and the lower than the anticipated in the FIFA update repayment of government arrears⁵ did not contribute to the effort of the Greek economy to come out of the recession.

It is indicative that the central macroeconomic scenario for 2016 predicted a 0.7% economic downturn and a 0.5% of GDP primary surplus. In spite of the fact that the primary surplus was eight times higher, economic activity did not decline by 0.7% but remained stagnant. If fewer measures were taken, just about necessary for a primary surplus of 0.5%, the performance of the Greek economy last year would have been much better, achieving growth instead of stagnation. At the same time, the conditions for strong growth in current year would have been created. Consider how much the expectations would have improved if, for

example, in June 2016, instead of increasing the VAT rate to 24%, it was reduced to 22%. The loss of revenue would have been minimal, while the improvement in the economic climate would have been great.

That said, the budgetary measures taken in excess of the target, contributed to the payment of interest at the end of last year, as the second review and the disbursement of the associated loan instalment were not completed at the time.

Concluding the fiscal policy assessment for 2016, after seven years of fiscal consolidation efforts, the overarching goal of economic policy should now be to increase output, reduce unemployment and set the economy on a path of steady growth. In this context, fiscal policy and all the other specific policies should contribute to achieving this primary objective. Moreover, no financial result will be viable nor will debt be "sustainable", if the recession of the economy continues.

Table 2.7

General Government aggregates*
(% of GDP, in national accounting terms, ESA 2010)

| | 2012 | 2013 | 2014 | 2015 | 2016 | |
|----------------------------|------|------|------|------|-----------------|--------|
| | | | | | Initial targets | Actual |
| General Government Balance | -6.1 | -2.4 | -3.7 | -3.2 | -2.1 | 0.7 |
| GG Primary Balance | -1.0 | 1.6 | 0.3 | 0.4 | 1.8 | 3.9 |

Source: Main aggregates of General Government 2013 - 2016, ELSTAT, April 2017 and Introductory Report, 2016 Budget, Ministry of Finance, November 2015

* Without the impact of financial support to banks.

⁵ The May 2016 agreement envisaged that if the primary surplus target is overshoot, 30% of the excess amount (i.e.

about €1.7 billion in 2016) should be spent on paying arrears, in excess of the funds provided for that purpose by the ESM.

General Government Debt

In 2016, the absolute size of the consolidated debt of the GG rose marginally, reaching €314.9 billion, compared with €311.7 billion in 2015. Because of the stagnation of GDP, the debt-to-GDP ratio rose to 179.0%, from 177.4% of GDP in 2015 (see Table 2.7).

Given that the interest on debt servicing was paid out of national sources, after achieving a primary surplus, the debt increase in 2016 essentially derived from a €3.5 billion tranche from the European Stability Mechanism for the repayment of arrears to suppliers.

In recent years, the trend in the public debt to GDP ratio is mainly determined by the GDP component. That is why, but also for many other reasons, it is very important to pursue by all means the return of the economy to a path of growth.

Implementation of the budget in January - April 2017

The implementation of the State Budget (SB) in the first four months of the current year is very similar to the implementation of the budget for the corresponding four-month periods of 2015 and 2016. Intensive and prolonged negotiations with uncertain outcome were ongoing in all three periods. It appears that the same practice was followed in the execution of this year's budget with that followed in the previous two years.

Specifically, the expenditures of the Ordinary Budget (OB) once again significantly fell short of the relevant

target, by €1.2 billion, similarly to last year and two years ago (-€2.1 billion and -€1.6 billion respectively). The OB revenues before tax refunds and without the proceeds from licenses and such overshot the target by €0.9 billion in the current year (2016: +€0.4 billion, 2015: +€0.1 billion). Furthermore, the Public Investment Programme (PIP) expenditure was significantly below the corresponding target once more in the first four months of the year, as in the previous two years. The largest shortfall was recorded this year (-€0.7 billion), followed by 2015 (-€0.4 billion) and then 2016 (-€0.2 billion). Meanwhile, in all three cases the arrears of the state increased in the first quarter (2015: €0.7 billion, 2016: €0.9 billion, 2017: €0.6 billion). Consequently, in all three quarters, the SB deficit was much lower than the target, with the best performance achieved in 2015 (€2.4 billion overshoot), followed by 2016 (€2.1 billion) and the current year (€0.9 billion). Subsequently, the primary surplus exceeded the corresponding target by the same amount.

Thus, the finalised data on the implementation of the SB in the first four months of the year show, at first sight, a positive picture, as in the previous two years.

The fiscal developments in the four months, however, due to the short period they cover, do not allow reliable conclusions to be drawn for the whole year, while at the same time there is considerable uncertainty about the achievement of the macroeconomic

forecasts of the Greek economy in 2017, maintained by the official lenders even in their latest reports, as evident from the macroeconomic scenario analysed in another section of the IOBE report (section 3.1).

➤ *SB deficit and primary surplus*

The State Budget deficit was capped at €1,132 million in the first four months, against a deficit target of €2,042 million. However, year on year, the deficit increased. Similarly, the SB primary surplus stood at €1,736 million, compared with a primary surplus target of €798 million, yet it was below the primary surplus of 2016 (Table 2.8).

The better performance against the targets came:

- a) Mainly from primary OB expenditure lower than the target by €1,187 million,
- b) Lower investment expenditure by €569 million and
- c) OB revenue (before tax refunds and without the receipts from public licences and rights) higher than the target by €534 million.

On the other hand, the proceeds from licensing and the PIP (Public Investment Programme) revenue were lower than the target by €411 million and €666 million respectively.

➤ *OB revenues*

In the first four months of the year, the OB revenues before tax refunds increased by 4.9% compared to 2016, reaching €15.8 billion and overshooting the target by €123 billion (Table 2.9). However, there is currently no clear trend, as the revenues in the first four months were significantly affected by one-off receipts or revenue losses, the importance of which will be declining over the remaining months of the year.

The revenue from direct taxes decreased by 8.9% compared to 2016, to €4,350 million, yet it overshoot the target for the first four months by €319 million (Table 2.9). Among the constituent categories, the receipts from the income tax of natural and legal persons increased by 1.3% compared to 2016, to reach €2,440 million, yet it fell short of the target by €172 million. In contrast, the real estate tax revenue declined by 40.2% year on year, yet it exceeded the target by €182 million. The decline against the previous year came from the fact that two instalments of the unified property tax (ENFIA) were collected in early 2016, compared with only one in 2017. The revenues from direct taxes of previous years increased by 14.7% to reach €899 million, surpassing the corresponding target by €275 million.

This development probably reflects the intensification of the efforts to collect the arrears to the State. Finally, the revenue from other direct taxes declined by 30.6% compared to 2016, as the insurance contributions of civil servants are not accounted for as OB revenue since 1 January 2017.

Table 2.7

Consolidated General Government Debt (million €)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Consolidated General Government Debt | 356,289 | 305,096 | 320,511 | 319,728 | 311,668 | 314,897 |
| % of GDP | 172.1 | 159.6 | 177.4 | 179.7 | 177.4 | 179.0 |
| GDP | 207,028 | 191,204 | 180,654 | 177,941 | 175,697 | 175,888 |

Source: Main aggregates of General Government 2013 - 2016, ELSTAT, April 2017

Regarding the indirect taxation, receipts increased by 3.6% year on year, at €8.0 billion, yet they fell short of the target by €247 million (Table 2.9). The VAT receipts increased by 3.4% compared to the previous year, but were short of the target by €229 million. As a full year has not yet been completed since the last VAT rate increase on 1 June 2016, while fuel, cigarette and other commodity prices have increased due to the increase in excise duty from 1 January 2017, the VAT receipts should have had a stronger year-on-year growth. From their small increase and the target slippage, it may be concluded that the linking of the contributions of the self-employed to their gross income restricted the issue of receipts, with a negative impact on the VAT revenues.

Moreover, despite a significant increase in existing excise duty rates and the enactment of new excise duties (e.g. on coffee), the corresponding receipts declined by 0.7% year on year, short of the target as well, by €234 million. This is partly due to the fact that in the beginning of 2016, the tobacco companies had stockpiled products. As a result, the revenues from excise duties on tobacco products fell year on year, but also against the four-month target by €180 million.

Nevertheless, the revenue from the fuel excise duty was also below the target, despite the significant tax increase in January. The receipts from indirect taxes from previous economic years increased by 27.1% year on year, exceeding the respective target by €192 million. This is due to the same reasons mentioned in the case of direct taxes of previous economic years.

Finally, non-tax revenues grew by 34.4% compared to 2016, to €3,459 million. This development is mainly due to the collection of €956 million from the concession of regional airports. Also, the public proceeds from the Bank of Greece dividends were higher than the target by €334 million. In contrast, the revenues from EU funds fell short of the target by €127 million.

Summing up, the OB revenue in the first four months of the year was favourably influenced by the tax measures of May 2016, from the measures that came into effect on 1 January 2017, as well as from high one-off receipts. However, the general macroeconomic developments and the measures related to the social security of freelancers have had a negative impact on revenues.

Table 2.8
2017 State Budget Execution (million €)

| | January-April | | | % change | | 2014 | 2015 | 2016 | Budget | % change | | |
|--|---------------------|---------------|---------------|-------------|--------------|---------------|---------------|---------------|---------------|--------------|-------------|------------|
| | 2015 ^[4] | 2016 | 2017 | 2016/15 | 2017/16 | | | | 2017 | 2015/14 | 2016/15 | 2017/16 |
| I. SB REVENUES (1+2) | 15,815 | 16,017 | 15,300 | 1.3 | -4.5 | 51,367 | 51,421 | 54,038 | 54,411 | 0.1 | 5.1 | 0.7 |
| 1. OB net revenues | 14,290 | 14,107 | 14,558 | -1.3 | 3.2 | 46,650 | 46,589 | 49,860 | 50,256 | -0.1 | 7.0 | 0.8 |
| Revenues before tax refunds ^[1] | 15,234 | 15,085 | 15,821 | -1.0 | 4.9 | 50,020 | 49,510 | 53,124 | 53,545 | -1.0 | 7.3 | 0.8 |
| <i>Minus tax refunds</i> | <i>943</i> | <i>978</i> | <i>1,262</i> | <i>3.7</i> | <i>29.0</i> | <i>3,370</i> | <i>2,922</i> | <i>3,263</i> | <i>3,289</i> | <i>-13.3</i> | <i>11.7</i> | <i>0.8</i> |
| 2. PIP Revenues | 1,525 | 1,910 | 742 | 25.2 | -61.2 | 4,717 | 4,832 | 4,178 | 4,155 | 2.4 | -13.5 | -0.6 |
| <i>of which: EU funds</i> | <i>1,437</i> | <i>1,853</i> | <i>600</i> | <i>28.9</i> | <i>-67.6</i> | <i>4,649</i> | <i>3,900</i> | <i>3,861</i> | <i>3,975</i> | <i>-16.1</i> | <i>-1.0</i> | <i>3</i> |
| II. SB Expenditure (3+4) | 16,324 | 16,713 | 16,432 | 2.4 | -1.7 | 55,063 | 54,951 | 55,179 | 56,079 | -0.2 | 0.4 | 1.6 |
| 3. OB expenses | 15,503 | 15,794 | 15,897 | 1.9 | 0.7 | 48,472 | 48,545 | 48,891 | 49,329 | 0.2 | 0.7 | 0.9 |
| Primary expenses ^[2,3] | 12,891 | 12,916 | 13,029 | 0.2 | 0.9 | 42,902 | 42,744 | 43,314 | 43,779 | -0.4 | 1.3 | 1.1 |
| Interest | 2,612 | 2,878 | 2,868 | 10.2 | -0.3 | 5,569 | 5,800 | 5,577 | 5,550 | 4.1 | 3.8 | -0.5 |
| 4. PIP Expenses | 821 | 919 | 535 | 11.9 | -41.8 | 6,592 | 6,406 | 6,288 | 6,750 | -2.8 | -1.8 | 7.3 |
| III. SB Balance (I-II) | -509 | -696 | -1,132 | | | -3,696 | -3,530 | -1,140 | -1,668 | | | |
| <i>% of GDP</i> | <i>-0.3</i> | <i>-0.4</i> | <i>-0.6</i> | | | <i>-2.1</i> | <i>-2</i> | <i>-0.7</i> | <i>-0.9</i> | | | |
| OB Balance | -1,213 | -1,687 | -1,339 | | | -1,822 | -1,956 | 970 | 927 | | | |
| PIP Balance | 704 | 991 | 207 | | | -1,875 | -1,574 | -2,110 | -2,595 | | | |
| IV. SB Primary Balance | 2,103 | 2,182 | 1,736 | | | 1,873 | 2,270 | 4,437 | 3,882 | | | |
| <i>% of GDP</i> | <i>1.2</i> | <i>1.2</i> | <i>1</i> | | | <i>1.1</i> | <i>1.3</i> | <i>2.5</i> | <i>2.2</i> | | | |
| GDP (current prices) | 175,697 | 175,888 | 180,817 | | | 177,941 | 175,697 | 175,888 | 180,817 | -1.3 | 0.1 | 2.8 |

[1] The proceeds from the granting of licences and public rights are also included.

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

[3] The called guarantees were recorded in net terms for all months and years.

[4] Includes revenues of €555 million from the Financial Stability Fund, €191 million from the granting of licences, €284 million for the settlement of (one-week and 100-installments) arrears and other revenues to the total amount of €1,286 million.

Source: State Budget Monthly Execution Bulletin, April 2017, Ministry of Finance, May 2017

Table 2.9

State Budget Revenue (million €)

| Revenue categories | January-April | | | % change | |
|------------------------------------|---------------|---------------|---------------|-------------|--------------|
| | 2015 | 2016 | 2017 | 2016/15 | 2017/16 |
| 1. SB Net Revenues (2+4) | 15,815 | 16,017 | 15,300 | 1.3 | -4.5 |
| 2. OB net revenues | 14,290 | 14,107 | 14,558 | -1.3 | 3.2 |
| Tax refunds | 943 | 978 | 1,262 | 3.7 | 29.0 |
| 3. OB revenue | 15,234 | 15,085 | 15,821 | -1.0 | 4.9 |
| Direct taxes | 4,869 | 4,776 | 4,350 | -1.9 | -8.9 |
| --Income tax | 2,614 | 2,409 | 2,440 | -7.8 | 1.3 |
| --Property tax | 884 | 909 | 544 | 2.8 | -40.2 |
| --Direct taxes of previous years | 755 | 784 | 899 | 3.8 | 14.7 |
| --Other direct taxes | 616 | 674 | 468 | 9.4 | -30.6 |
| Indirect taxes | 7,352 | 7,735 | 8,010 | 5.2 | 3.6 |
| --Transaction taxes | 4,537 | 4,812 | 4,996 | 6.1 | 3.8 |
| (of which VAT) | (4,416) | (4,699) | (4,858) | (6.4) | (3.4) |
| --Consumption taxes | 2,444 | 2,432 | 2,414 | -0.5 | -0.7 |
| --Indirect taxes of previous years | 262 | 380 | 483 | 45.0 | 27.1 |
| --Other indirect taxes | 109 | 112 | 117 | 2.8 | 4.5 |
| Non-tax revenues | 3,013 | 2,574 | 3,459 | -14.6 | 34.4 |
| --Receipts from the EU | 50 | 216 | 216 | 332.0 | 0.0 |
| --Non-ordinary revenue | 1,077 | 516 | 474 | -52.1 | -8.1 |
| (of which: ANFA, SMP) | (291) | (375) | (345) | (28.9) | (-8.0) |
| --Permits and rights | 191 | 52 | 956 | -72.8 | 1738.5 |
| --Other | 1,695 | 1,790 | 1,813 | 5.6 | 1.3 |
| 4. PIP revenues | 1,525 | 1,910 | 742 | 25.2 | -61.2 |

Source: State Budget Monthly Execution Bulletin, April 2017, Ministry of Finance, May 2017

➤ *OB expenditure⁶*

In the first four months of the year, the Ordinary Budget expenditure increased by 0.7% year on year, to reach €15.9 billion. However, compared with the target for the four-month period, payments are down by €1,189 million, with the restraint located solely in primary expenditure. Interest payments, on the other hand, fell marginally by 0.3%, but exceeded the target by €28 million (Table 2.10).

It should be noted that since 2017 the composition of OB expenditure has changed significantly.⁷ Government pensions were transferred from the category "earnings and pensions" to

"insurance fund subsidies", while the payment for on-call duties of doctors were transferred to "operating and other expenses". Also, since January 2017, the monthly budget data include, for the first time, debt assumptions of General Government bodies (Table 2.10).

Among the primary expenditure categories, year-on-year growth was recorded in the first four months of 2016 in wages (+2.1%), grants to social security fund (+58.1%), due to the transfer of public sector pensions to EFKA, as well as to social protection expenditure (+8.1%). The payments for guarantees called to

⁶ For reasons of comparability, the expenditure for guarantees called to bodies classified outside GG is reported on a net basis, as was the case until the end of 2016.

⁷ For more details on the changes in the composition of expenditure, see the IOBE report on the Greek economy, vol. 01/17 (p. 52) and the footnotes of Table 2.8 of the same report.

bodies classified inside General Government also increased year on year.

In contrast, a significant year-on-year decline is recorded in the transfers to other entities (-7.1%), the debt assumptions⁸ of GG bodies (-64.7%), and the payments from earmarked revenues (-11.6%).

As with the revenue, there do not seem to be a clear trend in the OB expenditure. For this reason, it is not possible to provide at present reliable assessment on how expenditure will evolve over the remainder of the year.

Table 2.10

State Budget expenditure (€ million)

| Expenditure category | January – April | | | % change | |
|---------------------------------------|-----------------|---------------|---------------|-------------|--------------|
| | 2015 | 2016 | 2017 | 2016/15 | 2017/16 |
| 1. State Budget Expenditure | 16,324 | 16,713 | 16,432 | 2.4 | -1.7 |
| 2. Ordinary Budget Expenditure | 15,503 | 15,794 | 15,897 | 1.9 | 0.7 |
| Interest | 2,612 | 2,878 | 2,868 | 10.2 | -0.3 |
| Primary expenditure | 12,890 | 12,916 | 13,029 | 0.2 | 0.9 |
| --Salaries & pensions | 6,152 | 5,970 | 3,974 | -3.0 | -33.4 |
| Wages | 3,943 | 3,797 | 3,876 | -3.7 | 2.1 |
| Other allowances | 71 | 68 | 56 | -4.2 | -17.6 |
| Pensions | 2,138 | 2,105 | 41 | -1.5 | -98.1 |
| --Social expenditure | 3,899 | 3,822 | 5,825 | -2.0 | 52.4 |
| Grants to Social Security Funds | 3,554 | 3,415 | 5,398 | -3.9 | 58.1 |
| Social protection | 240 | 235 | 254 | -2.1 | 8.1 |
| Grants to OAED | 95 | 160 | 160 | 68.4 | 0.0 |
| Other | 10 | 12 | 13 | 20.0 | 8.3 |
| --Operational and other | 2,040 | 2,253 | 2,459 | 10.4 | 9.1 |
| Transfers | 290 | 295 | 274 | 1.7 | -7.1 |
| Consumption | 182 | 235 | 248 | 29.1 | 5.5 |
| Conditional | 983 | 807 | 853 | -17.9 | 6.4 |
| Other* | 585 | 916 | 1,084 | -56.6 | 18.3 |
| Of which: debt assumption | ---- | 544 | 192 | --- | -64.7 |
| --Earmarked revenue | 799 | 871 | 770 | 9.0 | -11.6 |
| | | | | | |
| 3. PIP expenditures | 821 | 919 | 535 | 11.9 | -41.8 |

Source: State Budget Monthly Execution Bulletin, April 2017, Ministry of Finance, May 2017

* Includes transfers to cover deficits and arrears of hospitals, military procurement, EFSF disbursement fee and called guarantees and debt assumption.

⁸ Note that no debt assumptions are envisaged in the 2017 Budget, yet they have reached €192 million by the end of the first four months.

➤ *Public Investment Programme*

During the examined period, the PIP presented a surplus of €207 million, against a projection in the budget for a deficit of €2,595 million on an annual basis (Table 2.8). This development is mainly due to the strong restraint of payments, both year on year (-41.8%), and in relation to the four-month target (-51.5%). As a result, the PIP payments are at their lowest level for the first four months of the year since 2006.

The PIP revenue also recorded a very large decrease year on year, by 61.2%, and was

limited to €742 million (see Tables 2.8 and 2.9), due to the low level of withdrawals from EU Funds (-67.6%), while the receipts from own resources increased compared to the previous year.

The developments in the PIP figures suggest that the trends that occurred last year (low take-ups and restrained expenditure), which eventually led to the cut in grants in 2016, have carried over to 2017. The continuation of this tactic is particularly worrying as investment is a prerequisite for the exit of the economy from the recession.

3. PERFORMANCE AND OUTLOOK

3.1 Macroeconomic Developments

Recent macroeconomic developments in Greece

A marginal increase in the Greek economy's GDP was recorded in the first quarter of 2017, with its trend changing direction again for a third consecutive quarter, as in the last quarter of 2016 a decline superseded the growth recorded in the preceding quarter. **GDP increased by 0.4% in the first quarter**, after declining by 2.0% in the fourth quarter of last year and by 0.8% in the first quarter of 2016.⁹ The weak output growth came mainly from the expansion of household consumption expenditure, despite the impact of fiscal measures, phased into effect since the third quarter of last year, as well as from stronger investment, from stronger fixed capital formation, but also, to a lesser extent, from inventory accumulation. The widening of public consumption also had a small contribution to GDP growth. In contrast, the deterioration of the external sector's balance prevented a further increase, despite stronger exports, as imports increased at a higher rate.

In greater detail with regards to the trends in the GDP components in the first quarter of 2017, **domestic consumption expanded by 1.7% compared to a year earlier, when it had declined by 1.3%**. Its rise came mainly from private

consumption growth of the same rate, which had fallen by 0.7% in the corresponding quarter of 2016. Public consumption expenditure increased by 1.0%, while in the same period of last year they had declined by 3.5%.

Investment increased by 13.6% in the first quarter, following their rise in the same period of 2016 by 15.2%. Their new growth was mainly driven, by about 71%, by higher fixed capital formation, which strengthened by 11.2%, more than offsetting last year's decline by 10.1%. Larger compared to a year ago was the accumulation of inventories, reaching €959 million.

Regarding the trends in the fixed capital categories, **it appears that the rise in investment came almost exclusively from Transport Equipment, which more than doubled compared to the first quarter of 2016 (+155%), when they had recorded the strongest decline among the fixed capital categories (-43.7%)**. An increase was only recorded in Other Products, only by 1.5%, following their marginal increase a year earlier (+0.2%). Among the other categories of fixed capital, the spending did not decline only in Agricultural Machinery, which remained unchanged for the third consecutive year. As in 2016, the weakest decline occurred in Mechanical Equipment

⁹ All changes in the data in the current subsection are expressed in terms of year-on-year differences. The

National Accounts data refer to seasonally adjusted data at constant 2010 prices.

(-0.7%, from -1.3%). A similar decline of investment activity was recorded in Other Construction and Information and Communication Technology (10.2% and 10.4% respectively), compared with growth in the first quarter of last year, the strongest among the categories of fixed capital (by 46.4% and 10.6%). The strongest decline occurred in housing construction, of the order of 11.2%, keeping them on a downward path in that quarter for the ninth consecutive year. Last year they were down by 17.1%.

In the external sector of the economy, **exports** grew by 4.8% in the first three months of the year, compared with a strong decline by 10.4% in the corresponding period of 2016. However, as reported in previous IOBE reports on the Greek economy, the change in the trend of exports from decline to growth from the third quarter of the previous year came from the completion of one year from the imposition of the capital controls at the end of the second quarter of last year, which have had an adverse effect on export activity since the third quarter of 2015. This effect was technically neutralised one year after their implementation. An alternative assessment of the level of export activity at the beginning of 2017 could be done by comparing it with that of the corresponding period of 2015, when the capital controls were not yet imposed. Following this approach, the exports this year were 6.2% down on their level from two years ago.

Both key components of exports increased year on year in the first quarter. The increase in the exports of services was

stronger, at 8.0%. However, the relatively low base level in the initial quarter of 2016, when they had shrunk by 22.0%, contributed to this rise. The exports of goods expanded by 4.4%, stronger than a year ago (+1.9%). According to the balance of payments data of the Bank of Greece, most exports of services came from strong demand for other services and international transport. Tourism receipts do not seem to have contributed to the rise in the exports of services, as they declined in the initial quarter. On the side of the exports of goods, the largest increase was recorded in Fuels and Goods except Fuel and Ships.

The relaxation of the capital controls related to **imports** last July, together with the strong domestic demand in the first quarter of this year, was conducive to their increase during that period. Their expansion reached 10.9% over the same quarter of 2016, a change that almost offset their decline a year ago (-10.1%). The growth rate in the two main components of imports, imports of goods and imports of services, was similar, 11.6% and 10.5% respectively, against a decrease of 3.7% and 32% a year earlier. However, as the imports of goods accounted for 83.5% of total imports in the first half of the year, their contribution to this year's rise was much higher than that of the imports of services.

Similar to the export trends in the categories of goods, the widening of imports came mainly from Fuel and Goods other than ships. **The stronger growth of imports compared to exports exacerbated the balance of the external sector in national accounting terms by 77.0%,**

resulting in a deficit of €2.2 billion or 4.8% of GDP.

On the supply side, the domestic gross value added exceeded its level from last year by 1.0%, an increase that more than offset its decline a year ago by 0.9%. The stronger growth of value added compared to GDP came from the significant increase in subsidies by 2.2% which are deducted from the value added in order to calculate GDP. **Output increased in six sectors, marginally in some cases, while in four sectors it declined. In particular, the strongest year-on-year growth in the first quarter of this year was recorded in Industry, in the range of 7.7%, against a stagnation that occurred at the same period of 2016.** Wholesale-Retail Trade and Agriculture-Forestry-Fishing followed with a significantly weaker growth, by 2.8% and 1.7% respectively. A marginal increase was recorded in Information-Communication (+0.3%), Real Estate Activities (+0.2%) and Arts-Entertainment (+0.2%). In the first two sectors, similar growth was recorded in early 2016. In contrast, activity in Arts-Entertainment substantially strengthened then, by 5.2%, which was the second strongest growth among the 10 key sectors of the Greek economy.

Conversely, the Construction sector experienced the largest product decline, of the order of 20.5%, more than offsetting last year's increase of 6.7%, which was the highest among the key sectors of the Greek economy. Financial and insurance activities declined by 5.2%, continuing stronger the downward trend from the same quarter of

last year (-3.4%). The fall in Professional-Scientific-Technical-Administrative Activities was similar to that recorded a year earlier (3.1% against 3.8%). Public Administration-Defence had the weakest downturn, by 0.2%, of a similar size to that experienced one year earlier (-0.7%).

The small GDP growth in the first three months of 2017 seems to have had a positive impact on the labour market. The unemployment rate declined during that period, both year on year (-1.6 percentage units), and quarter on quarter (-0.3%), although unemployment usually increases quarter on quarter in the first quarter. This provides forebodes very positive developments in the labour market in the current year. As a result, the unemployment rate stood at 23.3% in the first quarter of this year, a level that is the lowest in the last five years for the specified period of the year.

The fall in unemployment came by 2/3 from higher employment and by 1/3 from a labour force contraction. In branch level, most jobs were created in Manufacturing (+10,900 people or +3.2%), in Public Administration-Defence-Compulsory Social Security (+9,800 or +3.2%) and human health and social care activities (+8,100 or +3.8%). Professional-Scientific-Technical Activities experienced the strongest employment contraction (-5.4% or -11,400), followed by Real Estate Activities (-2,100 or -32.5%) and Mines-Quarries (-1,200 or -9%). In other sectors contributing to the reduction of unemployment in recent years, such as Tourism and Wholesale-Retail Trade, employment marginally strengthened, by

0.2% (+500 people) and 0.9% (+6,000) respectively.

Regarding prices, the slowdown in deflation in the final quarter of 2016 was followed by a rise in the Consumer Price Index (CPI) in the first quarter of 2017. In particular, CPI increased by 1.4% on average in this period, compared with a decline by 0.4% in the preceding quarter and by 0.9% in the corresponding quarter of last year. Inflation was thus recorded in a quarter for the first time since the second quarter of 2013, that is after almost four years. It was caused by the rise in the international oil price, the increase in the excise duty on heating oil, as well as the excise duty on petroleum and liquefied petroleum gas. Their impact is reflected in the higher prices in the categories of goods – services "Housing" and "Transport", which recorded the largest price increases among the categories constituting the CPI (+6.8%, and +3.8% respectively). The increase in the excise duty on tobacco products and the imposition of duties on fixed telephony subscriptions and coffee imports has also generated inflationary pressures since January. Prices in "Alcoholic Beverages – Tobacco", "Communications" and "Hotels – Cafe – Restaurants" increased by 2.6%, 2.1% and 1.6%, at rates immediately higher than those in housing and transport. Apart from these groups of products and services, the only other category where prices increased was "Food – Non-Alcoholic Beverages", by 1.3%, probably because of the increase in VAT in June 2016. In the remaining six groups that compose the CPI, which were not affected

by increases in indirect taxes, the price decline continued.

Summing up, the small recovery of the Greek economy at the beginning of 2017 came about, as in the third quarter of 2016 and in the first half of 2015, mainly due to strong domestic consumption demand. The increase in investment in the first quarter of this year is almost exclusively due to transport equipment and not to more "productive" investment categories, such as mechanical equipment, other constructions (consisting mainly of public works and the construction of production units), and computer and communication technology equipment.

On the supply side, this development is reflected in the new, larger than in any other industry, activity contraction in Construction. Returning to the demand side, the significant increase in consumption has had an impact in the external sector of the Greek economy. Although exports grew by around 5%, the rise in imports exceeded 10%, exacerbating the external balance and inhibiting the growth of GDP. This development confirms the assessment in previous IOBE reports on the Greek economy that a strengthening of domestic demand has a high correlation with the demand for products and services from abroad. Note that in the first quarter, the expansion of imports slightly exceeded the rise in domestic demand (total consumption and investment), with their ratio being set at 1.07. This fact once again highlights the focus of investment on goods and services which are not produced in Greece, as well as the inability of domestic production to meet the needs of households and businesses.

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 | | € million | Annual rate of change | € million | Annual rate of change |
| 2000 | 189,939 | 4.1% | 165,194 | 2.8% | 43,082 | 12.4% | 43,475 | 23.2% | 62,881 | 22.4% |
| 2001 | 197,900 | 4.2% | 171,610 | 3.9% | 44,988 | 4.4% | 42,934 | -1.2% | 62,128 | -1.2% |
| 2002 | 205,775 | 4.0% | 179,618 | 4.7% | 45,982 | 2.2% | 39,834 | -7.2% | 59,990 | -3.4% |
| 2003 | 217,720 | 5.8% | 187,088 | 4.2% | 54,538 | 18.6% | 39,530 | -0.8% | 64,442 | 7.4% |
| 2004 | 228,136 | 4.8% | 193,973 | 3.7% | 54,182 | -0.7% | 46,681 | 18.1% | 67,069 | 4.1% |
| 2005 | 229,943 | 0.8% | 200,678 | 3.5% | 48,435 | -10.6% | 48,689 | 4.3% | 68,668 | 2.4% |
| 2006 | 242,775 | 5.6% | 208,001 | 3.6% | 59,922 | 23.7% | 51,201 | 5.2% | 77,729 | 13.2% |
| 2007 | 250,471 | 3.2% | 216,981 | 4.3% | 64,995 | 8.5% | 56,327 | 10.0% | 88,891 | 14.4% |
| 2008 | 249,878 | -0.2% | 221,550 | 2.1% | 59,019 | -9.2% | 58,339 | 3.6% | 89,842 | 1.1% |
| 2009 | 239,119 | -4.3% | 219,961 | -0.7% | 43,182 | -26.8% | 47,711 | -18.2% | 71,697 | -20.2% |
| 2010 | 226,073 | -5.5% | 207,101 | -5.8% | 38,604 | -10.6% | 49,852 | 4.5% | 69,230 | -3.4% |
| Q1 2011 | 53,008 | -10.2% | 47,824 | -12.0% | 9,124 | -5.5% | 12,454 | 0.0% | 16,104 | -12.3% |
| Q2 2011 | 52,104 | -9.0% | 47,567 | -9.9% | 8,183 | -17.6% | 12,561 | -0.3% | 16,275 | -6.1% |
| Q3 2011 | 51,105 | -7.5% | 47,244 | -6.5% | 7,281 | -22.3% | 12,585 | 5.2% | 16,236 | -2.0% |
| Q4 2011 | 49,097 | -10.0% | 45,491 | -8.0% | 5,611 | -41.9% | 12,591 | -2.0% | 14,884 | -12.2% |
| 2011 | 205,314 | -9.2% | 188,127 | -9.2% | 30,200 | -21.8% | 50,192 | 0.7% | 63,499 | -8.3% |
| Q1 2012 | 48,499 | -8.5% | 45,249 | -5.4% | 5,499 | -39.7% | 12,735 | 2.3% | 14,598 | -9.4% |
| Q2 2012 | 47,739 | -8.4% | 43,665 | -8.2% | 5,900 | -27.9% | 12,356 | -1.6% | 14,216 | -12.7% |
| Q3 2012 | 47,073 | -7.9% | 42,795 | -9.4% | 5,266 | -27.7% | 12,566 | -0.2% | 14,371 | -11.5% |
| Q4 2012 | 46,964 | -4.3% | 42,254 | -7.1% | 6,295 | 12.2% | 13,063 | 3.7% | 14,352 | -3.6% |
| 2012 | 190,276 | -7.3% | 173,963 | -7.5% | 22,960 | -24.0% | 50,720 | 1.1% | 57,536 | -9.4% |
| Q1 2013 | 46,006 | -5.1% | 41,652 | -7.9% | 5,901 | 7.3% | 12,614 | -1.0% | 14,161 | -3.0% |
| Q2 2013 | 46,071 | -3.5% | 41,739 | -4.4% | 5,009 | -15.1% | 12,895 | 4.4% | 13,742 | -3.3% |
| Q3 2013 | 46,230 | -1.8% | 42,190 | -1.4% | 5,308 | 0.8% | 13,127 | 4.5% | 14,385 | 0.1% |
| Q4 2013 | 45,949 | -2.2% | 42,223 | -0.1% | 4,473 | -28.9% | 12,675 | -3.0% | 13,278 | -7.5% |
| 2013 | 184,257 | -3.2% | 167,804 | -3.5% | 20,691 | -9.9% | 51,311 | 1.2% | 55,565 | -3.4% |
| Q1 2014 | 46,272 | 0.6% | 42,031 | 0.9% | 4,926 | -16.5% | 13,315 | 5.6% | 14,162 | 0.0% |
| Q2 2014 | 46,082 | 0.0% | 41,978 | 0.6% | 5,284 | 5.5% | 13,477 | 4.5% | 14,974 | 9.0% |
| Q3 2014 | 46,591 | 0.8% | 42,067 | -0.3% | 5,678 | 7.0% | 14,357 | 9.4% | 15,164 | 5.4% |
| Q4 2014 | 46,049 | 0.2% | 41,964 | -0.6% | 5,671 | 26.8% | 14,102 | 11.3% | 15,484 | 16.6% |
| 2014 | 184,993 | 0.4% | 168,041 | 0.1% | 21,559 | 4.2% | 55,250 | 7.7% | 59,783 | 7.6% |
| Q1 2015 | 46,308 | 0.1% | 42,274 | 0.6% | 4,872 | -1.1% | 14,981 | 12.5% | 16,300 | 15.1% |
| Q2 2015 | 46,276 | 0.4% | 42,285 | 0.7% | 4,112 | -22.2% | 15,003 | 11.3% | 15,577 | 4.0% |
| Q3 2015 | 45,480 | -2.4% | 41,066 | -2.4% | 4,746 | -16.4% | 13,250 | -7.7% | 13,028 | -14.1% |
| Q4 2015 | 46,376 | 0.7% | 41,991 | 0.1% | 5,969 | 5.3% | 13,706 | -2.8% | 15,062 | -2.7% |
| 2015* | 184,439 | -0.3% | 167,616 | -0.3% | 19,699 | -8.6% | 56,941 | 3.1% | 59,967 | 0.3% |
| Q1 2016 | 45,928 | -0.8% | 41,717 | -1.3% | 5,612 | 15.2% | 13,417 | -10.4% | 14,657 | -10.1% |
| Q2 2016 | 46,092 | -0.4% | 41,918 | -0.9% | 5,601 | 36.2% | 13,517 | -9.9% | 15,249 | -2.1% |
| Q3 2016 | 46,429 | 2.1% | 42,718 | 4.0% | 4,022 | -15.2% | 14,682 | 10.8% | 14,831 | 13.8% |
| Q4 2016 | 45,924 | -1.0% | 42,261 | 0.6% | 4,298 | -28.0% | 14,382 | 4.9% | 15,566 | 3.3% |
| 2016* | 184,373 | 0.0% | 168,614 | 0.6% | 19,533 | -0.8% | 55,997 | -1.7% | 60,303 | 0.6% |
| Q1 2017 | 46,128 | 0.4% | 42,446 | 1.7% | 6,375 | 13.6% | 14,056 | 4.8% | 16,260 | 10.9% |

* Provisional data

Source: Quarterly National Accounts, June 2017, ELSTAT

The productivity lags and shortcomings that have remained after the prolonged adjustment of the Greek economy are going to be the main factor that will hinder its high-rate growth this year, despite the improvement of the economic climate after the recent completion of the second review of the third economic adjustment programme, as shown in the next subsection of the report on the medium-term outlook.

Medium-term outlook

The successful completion of the second implementation review of the third Economic Adjustment Programme with the Eurogroup decision of 15 June 2017 eased the uncertainty on reaching an agreement acceptable to all parties involved in the negotiations. As the pre-requisite fiscal measures for 2019 and 2020 and the structural changes were gradually legislated, the divergence between the European Commission, the International Monetary Fund and the Greek government concerned the extent to which medium-terms actions to facilitate the service of the Greek public debt should be specified further and, if that happens, if this would be sufficient to ensure debt sustainability from the current period, with any effects this event might have (e.g. entry into the European Central Bank's quantitative easing programme).

Regarding the planned mid-term measures on public debt, the recent Eurogroup decision reiterated what had already been mentioned in the decision of 25 May 2016, without further deliberation. Three of the

four measures are going to be implemented if deemed necessary to ensure the sustainability of public debt from the relevant analysis that will take place at the end of this programme, in August 2018. Yet, for the implementation of the fourth measure (expansion of the average maturity of the EFSF bonds from the second programme and further postponement of payment of interest and principal on these bonds), with the new decision the final debt sustainability analysis need not be taken into account. Therefore, this measure may be implemented in the near future, enhancing the sustainability of public debt.

This can be done again after the end of the third programme, whenever necessary, taking into account possible differences between the growth assumptions in the debt sustainability analysis and the actual trends in economic activity, through an adjustment mechanism which will be identified along with the other medium-term measures in 2018. This possibility was included in the Eurogroup decision of 25 May 2016, as an indicative long-term debt measure, depending on the trend of economic activity, without specifying a particular instrument.

The recent Eurogroup decision does not specify other medium and long-term debt measures. However, there is a commitment for the first time from the Greek government on the size of the primary surplus in the period 2023-2060, which will be of the order of 2% or slightly higher. This commitment, in conjunction with the redefinition of EFSF loan's

servicing in the near term and the provision for its restructuring (recalibration of reprofiling) in the post-programme period, whenever deemed necessary, are considered by the International Monetary Fund as an important step towards achieving the sustainability of Greece's public debt, as also mentioned in the recent Eurogroup decision. Additionally, this allows the IMF board to examine soon Greece's application for short-term funding, with 14-month duration.

Provided that, firstly, the terms of the loan granted by the EFSF under the second programme are redefined and, secondly, the financing by the IMF is approved, Greece might join the quantitative easing mechanism of the ECB. Regardless of whether and when this will happen, the international confidence in the sustainability of Greek public finances and in the prospects for recovery of its economy will gradually strengthen, due to forthcoming developments related to the revision of the EFSF loan terms and the new financing by the IMF. That said, as the first half of 2017 has already passed and any action on the above issues will be implemented gradually from its third quarter, the positive effects of the boost of the credibility of the Greek government and the domestic economy due to developments in the above issues are expected to be felt towards the end of this year.

The availability of capital in the banking system is not expected to increase significantly until the procedures for settling non-performing loans followed by

the banks and their effects on the assets of businesses and households transpire. As long as these procedures do not significantly affect their property, the return of deposits will accelerate, favoured by the general confidence boost from the events mentioned above, particularly in the case that Greece joins the ECB's quantitative easing program. The depositors will determine their response once the banks' procedures for the loans are finalised, which is expected to take place in the final quarter of 2017. Until then, the easing of the uncertainty will curb the decline in business and household deposits and will lead to their gradual, mild expansion.

The decisions adopted as prior measures for the second review that are expected to gradually start to have an effect on the operation of the Greek economy from the current period concern legislated reforms. The most important of these are the facilitation of licensing for investment, structural changes in the labour market (extension of the provision that business-level contracts override collective agreements and mass redundancy facilitation), changes in the bankruptcy code and measures for the management of non-performing loans, including the out-of-court settlement procedure. The positive effects of other reforms, such as the adoption of the OECD recommendations to remove rigidities in specific professional services and regulatory changes in three sectors (food - drinks, tourist accommodation, and restaurants - theatres - cinema) and the

new spatial planning, are going to be felt in the upward phase of the economic cycle. With regard to the measures to make the new privatisation body, the Hellenic Corporation of Assets and Participations (HACP), operational, according to the preamble of the 2017 budget, all relevant actions are going to be implemented by the HRADF, implying that HACP is expected to become active in 2018.

As repeatedly pointed out in previous IOBE reports on the Greek economy, the reforms in the labour market are not expected to have a significant impact on existing employment, as it was possible for the companies already in operation to make the necessary adjustments with the gradual lifting of rigidities over the past few years. But the new regulations are expected to contribute to the setting-up of new businesses and the realisation of expansionary investments by existing businesses, as they facilitate the management of new staff.

The choice of how the banks will manage their non-performing loans, selecting among available alternatives, will determine the response of borrowers, businesses and households, most probably from the fourth quarter of this year. Until then, the relative stagnation of deposits, at their level from the end of the first half of this year, would not allow for a significant change in the credit policy of the banking institutions. According to the latest data, private sector deposits (households and non-financial corporations) did not exceed €116.0 billion in April, just €450 million higher than in July 2015, the month when

the capital controls were imposed. In particular, household deposits were down by €3.8 billion on their level when capital controls were imposed.

On the funding side, the outstanding balance of loans to the private sector was falling steadily during the first four months of this year, at about 5.0%. The decline in credit was more pronounced in households than in enterprises (-7.4% against -2.2%). Another reason why the banks are not expected to change significantly their restrictive credit policy in 2017 is the need to secure as large capital reserves as possible in view of the regular ECB stress test for all Euro area banks in January 2018. If the entry into the ECB's quantitative easing mechanism is achieved, any benefits are likely to be used mainly to strengthen the capital adequacy of the banks. Therefore, despite the completion of the second review and the relevant Eurogroup decision, which ensures the banks continue to have access to all regular ECB funding mechanisms and enables their integration into the quantitative easing mechanism under certain conditions, such as a positive debt sustainability analysis by the IMF, a milder (on average) credit contraction is now considered as the most likely development regarding the credit policy of the banks for the remainder of 2017. The credit to households will continue to decline in the coming months, while the loans to businesses may grow slightly, approaching their last year's level by the end of this year. Hence, the flow of financing from the banking system is not expected to boost

household spending, while its impact on investment is going to be weak.

With regards to the fiscal measures taken in the context of the second review as part of the Medium-term Fiscal Strategy Framework 2018-2021 (MFSF 2018 - 2021), most of which concern 2019 and 2020, no additional taxes are envisaged for 2017. Although no fiscal measures were taken as a part of the second review of the current programme for the current year, the households and businesses suffer the effects of the fiscal measures which were decided during the first review, phased in since June last year to early 2017. As mentioned in previous IOBE reports for the Greek economy, the households are affected by a reduction of the tax allowance, supplementary pension cuts, increases in indirect taxes (VAT and excise duties on heating oil, LPG and tobacco), but also by imposing new indirect taxes (fixed telephony, imported coffee). The increase in VAT also affects freelancers, some of whom are impacted also by changes in the calculation of insurance contributions and the greater progressivity of the income tax rate for those with an income of more than €20,000. New profit tax rates apply from the 2016 fiscal year for all legal entities with single-entry bookkeeping. The impact of the tax changes that concern freelancers, together with the prolonged uncertainty on how to calculate their contributions, are reflected in the decline of their output in the first quarter of this year by 3.1%, following the decline of 4.8% in the last quarter of last year. In addition, according to the Labour

Force Survey, the professional, scientific and technical activities saw the greatest reduction of jobs among all branches of the Greek economy during these two quarters (11,400 and 10,600 respectively).

However, as the fiscal measures imposed on the incomes of individuals have come in force since the third quarter of 2016 (lower tax allowance, higher employer contributions, and further pension cuts), their year-on-year impact on macroeconomic variables will gradually fizzle out from the third quarter of 2017.

Apart from the developments in the second half of this year, stemming from the interventions to alleviate public debt and the reforms undertaken in the context of the second review, regarding the developments in other fields which may affect the momentum of the Greek economy in 2017, the investment activity is not expected to strengthen from privatisations and concessions, even though the implementation of the programme accelerated in the second quarter of 2017. In particular, a new offer was submitted by "Athens International Airport SA" on 31 May for a 20-year extension of the Athens Airport concession agreement, to the amount of €600 million, which was accepted by the HRADF. On 19 June, the HRADF announced the winning bid for the acquisition of 67% of the Thessaloniki Port Authority for €231.9 million. Together with the sum for the concession of 14 regional airports to Fraport, amounting to €1.23 billion, most of the revenue target for 2017 is reached, as set out in the Budget (€2.59 billion).

With regard to competitions scheduled to take place in the remainder of this year, Law 4472/2017 provides for the sale of 66% of the shares of the Hellenic Gas Transmission System Operator DESFA. An extension until 3 November 2017 was granted for the tender for the acquisition of 100% of the share capital of the Hellenic Company for Rolling Stock Maintenance EESSTY. Provided that these tenders are completed within the year and in conjunction with online real estate auctions, the revenue target would likely be achieved.

Even if the revenue programmed for 2017 is collected, the effect of concessions and privatisations that will be completed this year on investment is going to be felt gradually from next year, as it takes time to design the associated investment plans and obtain the relevant licences. As an example of the process of how investments connected to concessions – privatisations “mature”, consider the submission of the Integrated Development Plan (IDP) of the Hellinikon – Agios Kosmas Metropolitan Pole to HRADF on 15 June, so that it can be submitted further by Hellinikon SA to the Hellinikon office. The submission is the first development around this investment, one year after the revision of the purchase agreement of “Hellinikon SA”.

The difficulties of businesses to obtain capital from the banking system were moderated in early 2017 by the significant acceleration of payments of arrears to

public sector suppliers in the second half of last year, from the allocation of €3.5 billion for this purpose from the two loan sub-tranches, linked to the first review of the current programme. This amount has already been made available in total to central and general government bodies. From July to December 2016, payments of €3.13 billion were made, yet the arrears were reduced by €2.46 billion, to €4.58 billion. Therefore, despite the faster payment of arrears, new obligations of €670 million were created. In the first four months of 2017, the payments of arrears amounted to €320 million, yet total arrears increased to €4.96 billion, which entails a further increase in government obligations by approximately €700 million. Overall since last July, new arrears amounted to €1.37 billion.

The generation of new arrears is probably linked to the delay in completing the second review and thus to the disbursement of the accompanying tranche. Besides, in the preamble of the budget for the current year it was stated that the disbursements¹⁰ that had started in July 2016 would be adjusted according to the ESM funding schedule. Thus, the provision of credit for this purpose will depend heavily on the flow of loan tranches from the ESM. This approach to resolving the arrears of the state is confirmed by a section of the Eurogroup decision of 15/6/2017, which states that in future tranches provision will be made for the reduction of arrears. Therefore, given the recent completion of the review and

¹⁰ Credits to public entities for the settlement of arrears.

the approval of the loan tranche associated with it, the settlement of arrears will probably speed up. That said, as there is no plan to allocate a specific amount of the tranche to cover arrears, most probably their payment in the coming months will grow mildly and will probably result in a stabilisation of their balance at their May level or a bit lower, at least until the next tranche of the third programme loan. In each case, this schedule of payments to businesses weakens the improvement of liquidity and the availability of funds after the arrear payments in the second half of 2016.

Subdued support for the availability of funds and for the investment activity is provided in the initial five months of 2017 from the implementation of the Public Investment Program (PIP), which lagged strongly compared to the same period of last year. However, the new target for this period, set in the MFSF 2018 – 2021, was met. In particular, €755 million investment grants were disbursed between January and April, 32.2% less than those paid in the same period of last year.¹¹ The provision of less stimulus than in 2016 is partly due to the protracted negotiations for the second review, which delayed the payment of the second tranche of the loan. The slower PIP implementation this year probably comes from the much weaker inflow of EU funds, which did not exceed €618 million, which corresponds to about 1/3 of the inflows a year ago (€1.86 billion). The national funding for the PIP is

higher year on year (€149 million against €85 million) and is approaching the target for the whole year (€180 million), but it is not sufficient to offset the low EU absorption rate of this year.

From the above data for the implementation of the PIP it is clear that the achievement of the targets for this year requires an escalation in the absorption of EU investment funds. Besides, their total amount foreseen in the 2017 Budget, as well as its downward revision in the MFSF 2018 – 2021 (€ 3.98 billion and €3.44 billion) is several times higher than the inflow received between January and May. The provision of an additional €970 million for the years 2017 – 2020, following the review of the financing of national cohesion policy, under the Partnership Agreement 2014 – 2020, can also help speed up EU inflows. Even if additional funding becomes available in the coming months, the year-on-year back-loaded PIP implementation, together with its total budget for this year being the same as for 2016 (€6.75 billion), implies that its contribution to investment is likely to fall short compared with last year.

Regarding the external sector of the economy, the impact of the latest changes in the capital controls related to international transactions in July 2016, which favoured imports, is reflected in the balance of payments data, available so far for this year and covering the first four

¹¹ State Budget Execution Bulletin – May 2017 (provisional data), GAO, June 2017

months of 2017. This effect results in a deterioration in the account for goods and services, for the first time since 2010. In detail, based on the relevant data of the Bank of Greece, the exports of goods and services at current prices were 19.2% higher year on year between January and April of this year. Their growth came almost equally from an increase in the exports of goods (+18.9%) and the exports of services (+19.8%). Regarding the exports of goods, almost $\frac{3}{4}$ of the rise came from stronger exports of petroleum products, by 64.8%. The sharp rise is largely due to higher international oil prices, following the decision last September at the International Energy Forum in Algeria to reduce global oil production. Therefore, the growth in the value of petroleum product exports is probably not due to larger volume. The rest of the increase in exports stems from exports of goods other than ships and fuels, which increased by 5.6%. Among the individual categories of services, transport services had the strongest contribution to export growth (more than half of the exports of services), as their receipts increased by 18.9%. A slightly smaller part of the rise (46.4%) came from exports of other services, which strengthened by 38.3%. The trend of revenues from international tourism sharply changed from negative to positive in April, with the two-digit growth rate (11.3%) offsetting the decline in the previous quarter. The trend inversion may be an indication of the overall trend for 2017.

On the other side of the external balance, imports, the growth rate was slightly lower than in exports, of the order of 16.0%. However, the change in their absolute size exceeded the increase in exports, broadening the external account deficit by 7.1%. The year-on-year growth of imports came mostly from goods (+€2.17 billion or +16.6%) and to a lesser extent from services (+€403 million or +13.3%). As on the export side, the value of imports primarily strengthened by petroleum products. The imports of goods other than fuel and ships and other services came next with lower growth rates.

Excluding the exports of petroleum products, whose growth is mainly linked to the increase in their price, which most probably is going to be transient, as argued in the macroeconomic forecasts below, the trend of exports is positive and is mainly supported by the exports of services, as assessed in the previous IOBE report on the Greek economy, when the available data only concerned January. But the stronger rise in imports, due to the needs of businesses and households primarily for non-domestically produced goods, accumulated after the imposition of the capital controls, will continue to exacerbate the balance of the external sector.

Regarding the trends in key dimensions of the world economy that affect the prospects of all national economies, the Brent oil price, after its rise last autumn and its fluctuation around \$55 between January and March, has been falling almost constantly since mid-April, to reach

about \$45 in late June. It began its growth eight months ago from this level, following the decision at the International Energy Forum at the end of September 2016 to limit global production. The fall in the price of oil is due to the belief that the fallout between Qatar and the rest of the Arab countries that are also members of OPEC will lead *inter alia* to an end to their agreement to reduce production, despite its extension for nine months on 25 May, a few days before their relationship was disrupted. As claimed in earlier IOBE reports on the Greek economy, the earlier rise in oil prices stemmed from the reduction in production and did not reflect an increase in international demand, which explains the small extent of the price growth. Hence, a strong shift in its trend is not expected, even if the relations between the Arab states return to normal relatively soon. Consequently, the international cost competitiveness of the Greek products, which has improved in recent years to some extent due to lower oil prices, is not going to be affected by oil price movements in the coming months.

The exchange rate of the euro against the dollar fluctuates in the 1.12 region in the current period, its highest level in nine months. Its gradual, steady rise since the end of last December was originally due to the decline in expectations about the extent of the expansionary fiscal policy announced by the new administration in the United States, and on the measures to be pursued. Since mid-March, the strengthening of the exchange rate reflects the weakening of the political

uncertainty regarding the results of the tight elections that took place in some of the Eurozone countries (Netherlands, France), but also of the early elections in the United Kingdom. The recent completion of the review of the third Greek programme closed another concern for the Eurozone. Of course, the Brexit process and its possible effects remain a factor of concern for prospects of the EU economy. The lingering doubt about the robustness of the banking system in some EU countries, which is going to be assessed soon with the ECB's regular stress test in January, hampers the attractiveness of the European economy. A critical factor for attracting funds is extension of the quantitative easing mechanism beyond this year. That said, the implementation of expansionary fiscal policy in the US, whenever it would take place, is expected to boost the demand for European products and increase the exchange rate of the euro against the dollar.

Under the above multifaceted effects, the euro – dollar exchange rate is not expected to decline over most of the second half of 2017. Its relative stability at moderate levels, coupled with the decline in oil prices, will hold back the energy costs of European businesses, supporting their price competitiveness. However, towards the end of this year, expected developments (Q-E, ECB stress test) will weaken the investors' euro demand.

Moving from international developments to the latest trends in components of domestic economic activity and in short-term economic indicators, a slowdown in

the positive growth momentum is observed since early 2017. An exception is building activity, whose rise seems to be accelerating. In greater detail, based on the latest data, the increase in industrial production slowed sharply in April, after the strong growth in the previous quarter from January to March. Specifically, its growth rate stood at 1.0%, from 9.4% in the first quarter of this year and 3.4% in the same month of last year. Its moderate growth in the same month a year ago shows that the significant slowdown this year is not due to a base effect.¹² The weaker growth of industrial production came mainly from the trend inversion in Manufacturing from growth in the first quarter (+6.0%) to stagnation in April (+0.1%). The sudden slowdown in Electricity, from 22.6% to 3.7% also contributed to the weaker growth of industrial production. Among the other key industrial sectors, the trend in Water Supply changed from moderately positive (1.2%) to negative (-3.7%). Mining - Quarrying was the only industrial sector whose production trend did not change in April, remaining strongly positive (+13.2%, after +12.5%).

The latest data on building activity concern March. It indicates strong growth, both in terms of volume (+63.4%) and surface (+49.1%) of new buildings, following changes in the same direction but of much lower rate in the two previous months of 2017. However, these data contradict the dynamics of the Production Index of

Building Construction, calculated by the same agency (ELSTAT), which fell sharply in the first quarter of 2017 (-12.3%). Production in the construction sector as a whole expanded by 8.6%, coming exclusively from civil engineering (+27.7%).

Regarding the indicators that reflect the sentiment on the demand side of the economy, the seasonally adjusted volume index in Retail Trade grew by 2.9% in April. However, since the beginning of the year it has fluctuated widely (+0.1% in January, +9.5% in February and +1.0% in March), thus it does not indicate a particular steady trend.

The momentum of consumption demand can also be assessed by examining the trend in the prices of consumption goods and services. In April and May, they increased on average by 1.4%, at the same rate as in the first quarter of 2017. In the corresponding period of 2016, there was a deflation of 1.1%. The increase in the recent two months came from higher year on year international oil prices, higher excise duty on heating oil since last October and higher excise duty on motor diesel and LPG from the start of this year. Their effect continues to be reflected in the rise in prices in the categories of goods and services «Housing» and «Transport», with the first and third largest inflation among the CPI categories (+6.8% and 3.3% respectively). The second highest rise in prices in April and May (+6.6%) was

¹² All data on short-term indicators come either from ELSTAT or the Bank of Greece. All variations are expressed in terms of year-on-year changes.

recorded in "Alcoholic Beverages – Tobacco", coming from the January increase in the excise duty on tobacco products. Yet, as the weight of this category in the overall CPI is much smaller than the previous two, its impact is less significant. The effects of the duty on fixed telephony and the tax on coffee imports affected the prices in "Communications" and "Hotels – Café – Restaurants", which came next in the inflation ranking of the CPI categories, with 2.1% and 2.0% respectively. The only other category with rising prices in April and May was "Food – Non-alcoholic Beverages" (+0.9%), probably because of the increase in VAT last June. In the other six categories of goods – services that are included in the CPI and which were not affected by increases in indirect taxes, prices dropped in April and May, as in the first quarter of this year. In view of the above recent price changes in the CPI categories of goods and services, we can conclude that the rebound in inflation is primarily due to higher and additional indirect taxes and secondarily to the effect of international trends on prices. The analysis of the consumer price trend does not show signs of substantial increase in household consumption.

Taking into account the above trends in economic indicators, the latest politico-economic events (mainly those linked to the completion of the second review of the economic adjustment programme) and the anticipated developments for the forecasting of the GDP components and other macroeconomic indicators, the

household consumption growth will carry over from the first quarter of 2017 to the following quarters of the year, albeit at a weakening rate. The boost of private consumption expenditure in the first quarter and for the remainder of this year stems mainly from a further decline in unemployment, due to the increase in employment in export-oriented manufacturing industries, Tourism and in the core public sector (Public Administration – Defence – Compulsory Social Security). However, the weakening of unemployment is likely to be milder than in 2016, due to increased social security contributions and higher income tax. Its relatively low level in the first quarter of last year, compared with the other quarters of 2016, favoured the rise in private consumption in the same period of this year. More generally in the current year, the expanding electronic transactions, boosted by the relevant income tax deduction, will expand the formal economic activity and stimulate private sector consumption.

Fiscal measures, taken as part of the first review, that cause a reduction in disposable income, notably the cuts in the tax allowance and the supplementary pensions will prevent a larger growth of private consumption in the current year. However, as most measures have been in force already since the third quarter of last year, their effect on year-on-year changes in household disposable income will weaken from the third quarter of this year.

Taking into account the factors that will act on private consumption in the

current year, it is projected to grow slightly by about 1.4%.

Concerning the other strand of domestic consumption spending, **public consumption** increased in the first four months of this year, as reflected in the latest available data, despite the prolonged second review of the programme and the delay in disbursing the associated loan tranche. In particular, General Government expenditure on staff remuneration, which are the main component of the consumer spending of the state, increased at current prices by 2.6% in the first quarter of this year, from €5.1 billion to €5.24 billion. The increase in payments for purchases of goods and services was stronger, from €1.4 billion to €1.53 billion (+9.0%). The disbursement of the tranche will facilitate payments for consumer spending in the second half of 2017. Given that in the same period of last year, the consumer spending of the state was restrained, it is quite likely that they will expand a year later. **Subsequently, public consumption is projected to be slightly higher this year than in 2016, by almost 1.0%.**

The availability of investment funds from the banking system, but also from business owners, will remain low after the recent completion of the second review of the third programme, acting as a deterrent to the implementation of **business investment**. The credit policy of the banks will not change significantly, as it remains uncertain whether the Greek sovereign bonds will join ECB's quantitative easing mechanism, despite

the recent Eurogroup decision highlighting the progress in strengthening the sustainability of Greek public debt, while the settlement of non-performing loans is ongoing and the ECB's next stress test comes in early 2018. A small increase in the provision of credit to businesses in the current half of 2017 is the most likely outcome. As predicted in the current subsection of the report on the Greek economy, if Greece joins the QE mechanism, the banks will use the additional funds mainly to boost their capital reserves in view of the forthcoming stress test. This priority is also driven by the current low level of deposits of the domestic private sector.

However, if Greece joins the QE mechanism in 2018, accelerates the process of settling non-performing loans and achieves satisfactory results in the ECB stress test, the confidence of depositors and capital market investors in the domestic banking system will strengthen. Once these developments have taken place, the deposits are likely to return, at an accelerating pace. In addition, and perhaps more importantly, the capacity of larger banks to borrow from the international capital markets will improve significantly. Indeed, given recent, successful corporate bond issues, in the Greek and foreign capital markets (OPAP, Motor Oil, Sunlight, Mytilineos Group) and provided that the support from the ECB's quantitative easing mechanism is received, in the event that the stress test carried out at the beginning of next year will generate the need for small capital

increase, it will probably be possible to cover this need from international capital markets, e.g. with bond issues. Any excess coverage of the bond issues would provide a strong confirmation of the confidence in the capital adequacy and the prospects of the banking system in Greece. At the same time, provided that the developments move greatly within the scope just described, there will be a possibility of a steady increase in lending, contributing to the recovery of the Greek economy.

In addition to the overall financing conditions in 2017 and 2018, the fund-raising opportunities for the large enterprises of the Greek economy, especially those listed on the stock markets, from the capital markets in Greece and abroad, have improved significantly since the start of this year. Irrespective of the financial results and the prospects of each of these companies, this development has also contributed to the decline of uncertainty for the Greek state, due to its very good fiscal performance, overshooting the 2016 target, which became evident almost immediately since the start of this year. It is now expected that other businesses, with similar financial performance and prospects, are already preparing to finance their operation and investments in the same way and will soon take action, taking advantage of the favourable environment which has been formed with the completion of the second review. If the processes related to this goal are successful, they will constitute the most important development this year in the field of business financing, as for the

first time since the start of the domestic fiscal consolidation an alternative to bank lending route to access funds would have opened.

The weakening of the uncertainty for the Greek economy and the improving of the domestic economic environment after the completion of the second review are not only expected to facilitate the financing of the country's largest businesses. They will have a catalytic effect on the implementation of investment plans whose preparation had either begun or was completed and the businesses were anticipating the outcome of the negotiations in order to decide if and when they will start the execution of these plans. In addition to the general effects from the moderation of the political and economic environment after an agreement was reached with the official lenders from the Eurozone and indirectly with the International Monetary Fund, a number of structural changes included among the prior actions, such as easier licencing of investment, labour market reforms, changes to the bankruptcy code and the new spatial plan, will contribute to risk-taking.

That said, changes in the taxation and the social security contributions of businesses and freelancers in the last two years and, more broadly, the sense of volatility of the tax and social security system will continue to deter investment. The recent omnibus bill (Law 4472/2017) included a reduction in the rate of tax on profits from business activities of legal entities with double-entry books from 29% to 26%, from the fiscal

year 2019. Taking into account the frequent changes of recent years, the medium to long-term timeline for implementation of this measure makes it likely that it will not be implemented at the end, so it is not expected to affect investment decisions this year, but rather from the second half of next year, if it is still in place until then.

In addition to the developments and the events related to the completion of the second review that affect the investment environment, there are certain conditions in branches or group of branches, which relate to investment, as noted in previous IOBE reports on the Greek economy as well. Specifically, the expected continued growth in export demand in the current year and the low energy cost due to the relatively low level of oil prices, encourage investment in some Manufacturing industries and in Tourism. In Construction, the expansion of activity in public works from last year seems to have carried over to this year. Furthermore, as the taxation of real estate of households and businesses is also about to change, the long-term contraction of building activity is likely to end, to be replaced by growth. This trend is reflected in the data available so far.

Regarding the investment funded by the public sector or dependent on its actions (concessions – privatisation of assets), the more back-loaded PIP implementation compared to last year, as evident by data on the first five months of the year, will provide less impetus to investment. As the vast majority of investments in integrated

privatisations and concessions, such as Hellinikon, the regional airports and Asteras, are in their planning or licencing phase, they are anticipated to have a small contribution to investment activity in 2017, towards the end of the year. Yet, they are expected to significantly boost investment from next year.

The changes in inventories constitute an artificial factor, expected to have a positive, possibly significant, impact on investment activity in 2017. Their extensive decline in 2016, which reached €1.55 billion, the highest since 2010, the sole cause of investment contraction last year, is predicted to be much less pronounced this year, while their mild expansion cannot be ruled out. Already in the first quarter, inventories increased by €215 million year on year. Indicatively, with fixed capital formation unchanged, as last year, a fall of inventories, by €400 million to €1.1 billion, will increase investment by 5.9%. **Taking into account the various effects of the factors affecting investment, it is projected to grow by 13% to 15%. The new rise will come mainly from investment in manufacturing and in Tourism, from the recovery of building activity and from a positive change in inventories.**

In the external sector of the Greek economy, the exports of services are expected to dominate the trend in **exports** this year. In the first four months of 2017, the categories of transport and other services, continuing their robust rise from the second half of 2016 (35.6% and

32.5% respectively), contributed most to the expanding exports excluding petroleum products in current prices. The receipts from tourism also have grown at a two-digit rate since last April. Taking into account the escalation of the conflicts in the Arab countries and the turbulence in Turkey, which dampens tourist interest there, tourism receipts in Greece will most likely increase, provided that the data on international tourist bookings is confirmed.

The exports of goods are anticipated to have a milder increase than the exports of services, close to their 2016 growth rate (3.0%), mainly from the exports of goods excluding fuels and ships. Still, their trend in the current year fluctuates, with more characteristic change from upward, as their strong growth by 15% in current prices in March was superseded by a marginal decline in the following month (-0.6%). The increase in exports excluding fuels and ships will come from a slightly faster year-on-year increase in final demand in the EU, which is their main destination, according to the latest European Commission forecasts.¹³ The steep increase in the value of fuel exports comes largely from higher oil prices year on year and does not reflect changes in their volume. **The expansion of the exports of goods excluding fuels and ships, but above all the higher demand for domestically produced services (transport and other), will**

drive the growth of total exports, at a rate of about 5.5%.

Regarding **imports**, the retention of domestic demand on a growth path in the coming quarters of 2017, probably at a slightly lower speed than in the first quarter, will continue to drive the demand for imports, especially for internationally produced goods. The relaxation of the capital controls on import transactions in July 2016 favoured the year-on-year rise in imports in the first half of this year. This change will continue to have an effect during the current half of the year, until one year has elapsed since its entry into force and its effect on annual changes in imports is eliminated. The appreciating exchange rate of the euro against the dollar since the beginning of the year, which is not expected to change soon, will reinforce the increase in imports. The increase in the excise duty on petroleum products will inhibit a larger increase in imports. **Under the above, mostly positive, effects on imports, they are projected to increase by about 8.5% in 2017.**

Summing up the projections on the trends in key components of GDP in 2017, private consumption will increase, due to further, slower than last year, decline in unemployment, as a result of employment growth in export-oriented industries (e.g. Manufacturing, Tourism) and in the public sector. Expanding digital payments will also contribute to the growth of private

¹³ European Economic Forecast, spring 2017, European Commission, May 2017

consumption, the effect of which has already been felt since last year. The fiscal measures taken as part of the first review will inhibit a stronger rise in private consumption. The vast majority of measures taken under the second review will come into effect in 2019 and 2020, so they will not put pressure on the disposable income of households this year. Public consumption expanded in the first quarter of this year, despite the prolonged second review of the programme and the delay in the disbursement of the loan tranche. The disbursement of the tranche will facilitate payments for consumption spending in the second half of 2017. Given that in the same period of last year, the consumption spending of the public sector was restrained, public consumption is projected to be slightly higher this year than in 2016.

In the field of investment, the low availability of funds is going to be the major impediment for yet another year. Whether Greece will join the ECB's quantitative easing mechanism remains uncertain, while the settlement of non-performing loans is about to start in earnest. Together with the upcoming stress test, this implies that the credit policy of the banks will not change significantly in 2017. If Greece joins the QE programme, the banks will use the additional funds mainly to strengthen their capital reserves in view of the stress test. Hence, the provision of credit to the enterprises will most likely increase only slightly in the current half of the year. Beyond the general financing conditions,

the possibilities to raise capital through the financial markets have significantly improved since the beginning of the year for large enterprises, in particular those listed on stock markets. Other companies are also preparing to finance their operations and investments in the same way, taking advantage of the favourable environment created by the completion of the second review.

The weakening of the uncertainty about the Greek economy after the completion of the second review will facilitate the implementation of investment plans, whose preparation has either begun or has been completed, yet their execution has been delayed in anticipation of the outcome of the negotiations. Some structural changes, implemented as prior actions, will also contribute to the decision to implement these plans. That said, the successive changes in the taxation of businesses and freelancers and the overall sense of volatility of the regulatory framework in Greece will continue to be one of the major deterring factors in making the risk to invest in the country. On a sector level, the continued growth in the demand for exports encourages investment in some branches of Manufacturing and in Tourism. In terms of investment co-funded by the public sector or dependant on its actions, the more back-loaded implementation of the PIP compared to 2016 implies that there is going to be a weaker impetus for investment activity. As the vast majority of investments in integrated privatisations and concessions, such as Hellinikon, is in

the planning or licencing phase, they will have a limited contribution to investment in the current year, towards its end.

In the external sector of the Greek economy, the exports of services and transport, in particular, are expected to dominate the trend in exports this year, while tourism receipts will probably return to a moderate growth throughout the year. The exports of goods are anticipated to have a milder increase than the exports of services, close to their 2016 growth rate. On the side of imports, the retention of domestic demand on a growth path in the coming quarters of 2017, probably at a slightly lower speed than in the first quarter, will continue to drive the demand for imports, especially for internationally produced goods. The appreciating exchange rate of the euro against the dollar since the beginning of the year, which is not expected to change soon, will reinforce the increase in imports. **Taking into account the above trends in factors that affect the GDP components, the Greek economy is projected to grow at around 1.5%, or perhaps slightly lower, in 2017.**

The commencement of the execution of investment plans after the completion of the second review, together with the labour market reforms that took place as part of it, will contribute to better conditions in the **labour market**. Nevertheless, job creation this year will mainly come from the strengthening of export demand and thus the activity of export-oriented sectors, such as some manufacturing industries and Tourism.

The public sector will continue to contribute to employment mainly through programmes of the Manpower Employment Organization OAED, but also with stronger recruitment, e.g. in health activities. Positive effects on employment are also expected to come from the construction industry, as civil engineering, including public works, significantly strengthened for a second year in a row, while building activity is expanding. That said, the changes in direct taxation and social security contributions of freelancers since the beginning of 2017 are likely to reduce employment in certain sectors. **Overall, the effects that are expected to be exerted on the labour market are, for the most part, positive. Hence, unemployment is going to decrease once more in 2017, to a lesser extent than last year, to 22.2%.**

Concluding with the **price** forecasts, the increases in indirect taxes, particularly those on motor diesel and LPG, together with the levy of new indirect taxes (fixed telephony, coffee imports), already been reflected in the inflation figures for the first five months of the year, will continue to have an impact in the second half of the year. After all, almost all recent changes in indirect taxation, with the exception of the increase in the excise duty on heating oil, came into effect on 01/01/2017, so the price boost they cause will last throughout 2017. The rise in prices this year due to the growth in the international oil price, following the decision at the International Energy Forum to reduce petroleum

production last September, will probably weaken significantly over the rest of 2017, as the oil prices have steadily declined since the beginning of April and now range at the same level as last year. As the fall in oil prices began almost two months before the fallout among the Arab member countries of OPEC, its main driver is low demand. Therefore, it is likely to continue at least in the coming months, until the

beginning of the autumn, weakening the inflationary pressures. Given the above effects, **the impact of higher and new indirect taxes will be the main reason for the increase in CPI in 2017 by 1.5%, after four years of continuous reduction.**

Table 3.2

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

| | 2015 | 2016 | 2017 | 2018 |
|--|-------|-------|-------|-------|
| <i>Annual percentage changes</i> | | | | |
| GDP | -0.2 | 0.0 | 2.1 | 2.5 |
| Private Consumption | -0.2 | 1.4 | 1.4 | 1.4 |
| Public Consumption | 0.0 | -2.1 | 0.5 | 0.1 |
| Gross Fixed Capital Formation | -0.2 | 0.1 | 6.3 | 10.8 |
| Exports of Goods and Services | 3.4 | -2.0 | 3.8 | 4.2 |
| Imports of Goods and Services | 0.3 | -0.4 | 3.0 | 3.8 |
| Employment | 0.5 | 1.3 | 1.4 | 1.7 |
| Compensation of Employees per capita | -2.9 | 0.8 | 1.5 | 2.1 |
| Real Unit Labour Cost | -1.2 | 2.0 | -0.3 | 0.2 |
| Harmonised Index of Consumer Prices | -1.1 | 0.0 | 1.2 | 1.1 |
| <i>Contribution to real GDP growth</i> | | | | |
| Final Domestic Demand | -0.2 | 0.5 | 1.8 | 2.3 |
| Net Exports | 1.0 | -0.5 | 0.2 | 0.1 |
| Inventories | -1.0 | 0.0 | 0.0 | 0.0 |
| <i>As a percentage of GDP</i> | | | | |
| General Government Balance | -5.9 | 0.7 | -1.2 | 0.6 |
| Current Account Balance | 0.0 | -0.5 | -0.5 | -0.3 |
| General Government Gross Debt | 177.4 | 179.0 | 178.8 | 174.6 |
| <i>In percentage terms</i> | | | | |
| Unemployment (% of labour force) | 24.9 | 23.6 | 22.8 | 21.6 |

Source: European Economic Forecast, spring 2017, European Commission, May 2017

Table 3.3

Comparison of forecasts for selected economic indicators for the years 2015 - 2018
(at constant 2010 market prices, annual % changes)

| | MinFin | | | EC | | | OECD | | | IMF | | |
|---|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 2015 | 2016 | 2017 | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 |
| GDP | -0.2 | -0.3 | 2.7 | 0.0 | 2.1 | 2.5 | -0.1 | 1.1 | 2.5 | 0.0 | 2.2 | 2.7 |
| Final Demand | : | : | : | -0.1 | 2.3 | 2.7 | 0.4 | 0.7 | 2.1 | : | : | : |
| Private Consumption | -0.2 | -0.6 | 1.8 | 1.4 | 1.4 | 1.4 | 1.4 | 1.7 | 1.5 | : | : | : |
| Harmonised Index of Consumer Prices (%) | -1.1 | 0.0 | 0.6 | 0.0 | 1.2 | 1.1 | 0.0 | 1.4 | 1.8 | 0.0 | 1.3 | 1.4 |
| Gross Fixed Capital Formation | -0.2 | 3.3 | 9.1 | 0.1 | 6.3 | 10.8 | 0.0 | 7.7 | 5.3 | : | : | : |
| Unemployment (%)* | 24.9 | 23.7 | 22.6 | 23.6 | 22.8 | 21.6 | 23.5 | 22.2 | 20.1 | 23.8 | 21.9 | 21.0 |
| General Government Balance (% GDP) | -7.5 | -2.2 | -0.8 | 0.7 | -1.2 | 0.6 | 0.7 | -0.2 | -0.2 | 0.0 | -1.5 | -1.0 |
| Current Account Balance (% GDP) | : | : | : | -0.5 | -0.5 | -0.3 | -0.6 | -1.9 | -2.3 | -0.6 | -0.3 | 0.0 |
| Gross Public Debt (% GDP) | 177.4 | 180.3 | 176.5 | 179.0 | 178.8 | 174.6 | 179.4 | 174.7 | 170.5 | 181.3 | 180.7 | 181.5 |

* Based on the Labour Force Survey methodology

Sources: Introductory Report 2017 Budget, Ministry of Finance, November 2016 – European Economic Forecast, spring 2017, European Commission, May 2017 - OECD Economic Outlook No. 101, June 2017 – World Economic Outlook, IMF, April 2017 - Fiscal Monitor, IMF, April 2017

3.2 Developments and prospects in key areas of the economy

Industry

In the first four months of 2017 industrial production in Greece grew at a rate of 7.2% over the corresponding period of 2016, when the index increased marginally by 0.2%. At the same time, industrial production in the Eurozone continued to grow at the same rate as in 2016 (+1.4% against +1.5%).

The prices of industrial products increased during the same period of 2017 by 9.1%, against a 9.8% drop in 2016. The prices increased both for products sold on the Greek market (+7.0%) and for those exported to other countries (+16.4%). The rise in production volume, combined with increased prices, led to a strong increase in turnover, by 20.7% compared with the

first four months of 2016, when turnover was down 13.5%.

In greater detail regarding the trend of industrial production in Greece, the rise of the index in the first quarter of 2017 continued in April, albeit at a significantly lower rate (1.0%) than the average of the preceding three months (9.4%).

Production increased in most major branches of industry in the first four months of 2017. In particular, Mining and Quarrying increased by 12.7%, against a sharp drop by 17.0% last year. The corresponding indicator in the Manufacturing sector increased by 4.4%, more than a year ago (2.8%), while Electricity generation grew at 18.4%, against 4.2% in 2016. In contrast, Water Production declined marginally, less than last year (-0.2% against -0.9%).

In greater detail, in Mining, production increased significantly only in the Mining of Coal-Lignite, which grew by 33.4%, offsetting last year's decline by 34.3%. In contrast, contraction of production was recorded in the Mining of Metal Ores (-12.1% against +11.0%), the Extraction of Crude Petroleum (-6.9% against +96.2%) and Other Mining (-6.1% against +5.4%).

In Manufacturing, production declined in the first four months of 2017 in 9 of its 24 branches. Among the branches with special significance for the Greek economy, production increased in Basic Metals by 27.3% (from +0.9% in 2016) and in Basic Pharmaceuticals by 11.5% (from +5.7%). Production also increased in Food Products, yet at a lower rate than a year ago (+1.1% against +2.5%).

Among the remaining branches of Manufacturing, the largest decline in the first four months of 2017 was recorded in Tobacco Products (-31.2% against +23.0% in 2016), Printing (-13.7% against -3.0%), Beverages (-11.7% against

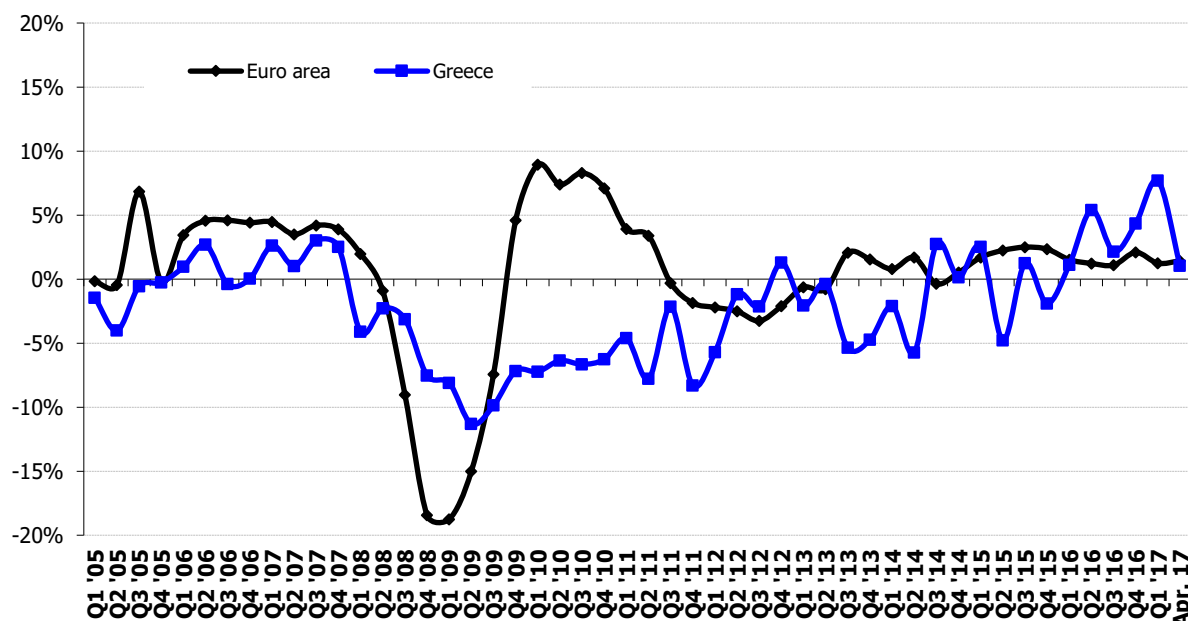
+5.9%) and Other Transport Equipment (-10.6% compared to +4.2% last year). Production decreased less in Furniture, by 7.4%, against +11.7% a year earlier, in Footwear (-5.0% against +7.9%) and in Chemicals (-0.8% against +7.8%).

Regarding the sectors with growing output during that period, the production of Motor Vehicles increased by 153%, against a 55.1% drop in the corresponding period of the previous year. Computers came next (+18.7% against -30.0%), followed by Metal Products (+11.9% against 0.9%) and Electrical equipment (+14.3% against -3.6%).

Among the main groups of industrial products, output declined only in non-durable consumer goods (-2.6%, against an increase of 4.9% in 2016). In the energy sector, production increased by 14.0%, as opposed to a 3.8% decline last year. Capital goods came next (+11.1% against a decline of 11.6%), followed by Intermediate Goods (+7.4% against +4.1%) and Durable Consumer Goods (+4.3% against -3.1%).

Figure 3.1

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



Sources: ELSTAT, Eurostat

Construction

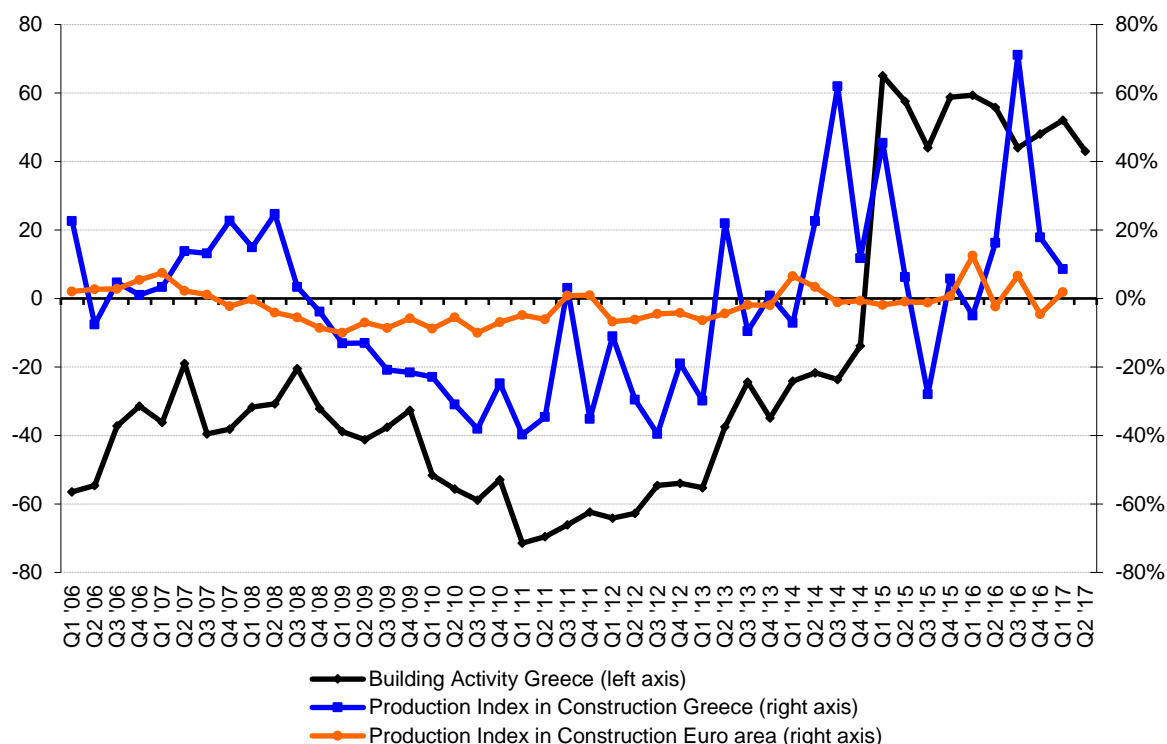
In the first quarter of 2017, the production index in Construction increased by 8.6% compared to the first quarter of 2016, when it decreased by 8.1%. In the Euro area, production in Construction expanded by 1.9% in the first quarter of 2017, compared with an increase of 12.5% a year ago.

In the sub-indices, the Construction of Buildings declined by 10.0%, following a more modest decrease of 3.1% last year, while on the other hand, an increase of 28.0% was recorded in Civil Engineering,

after a decline of 12.3% in the corresponding quarter of 2016. However, of the monthly data on building activity, from the same source as the production index in Construction (ELSTAT), the new private and public building activity, in terms of the number of licences, increased by 11.6% year on year in the first quarter of this year, compared with a contraction by 14.1% in the same period of last year. Furthermore, growth was recorded both in the surface (by 22.8%, against a 20.6% drop in 2016) and in the volume of new buildings (+15.6%, against -13.9%).

Figure 3.2

Production Index in Construction and Building Activity Index

**Source:** ELSTAT – Eurostat**Retail Trade**

In the first four months of 2017, the volume index in retail trade grew by 2.8%, offsetting the decline by 2.9% in the corresponding period of 2016.

Turnover increased in 5 of the 8 branches of Retail Trade. The strongest growth was recorded in Books-Stationery (+11.3%, against -2.1% a year ago) Clothing-Footwear (+3.6% against 4.8%), Supermarkets (+3.2% against -1.9%) and Pharmaceuticals-Cosmetics (+0.9% against losses of 3.9%). In contrast, the largest decline was recorded in Food-Beverages (-4.6% against +2.4%) and in Department Stores (-2.1% against +12.0%). Finally, turnover decreased in

the first quarter of the year of 1.0% in Fuel and Car Lubricants as well, yet in the same period of last year the relative index was down by 6.7%.

The sentiment in the retail sector became more pessimistic in the first half of 2017, according to **the leading indicators of the Business Surveys conducted by IOBE**. The relative index for total retail trade fell by 3.5 points, against an increase of 8 points in the corresponding period of 2016. The pessimism is more intense in Food-Beverages (-20, against +24 last year), Household Appliances (-4.5, against +10.5 in 2016) and Department Stores (-3.6 points, against +7.0). The representatives of the Clothing-Footwear branch appeared less pessimistic, as the relative index increased by 8.1 points,

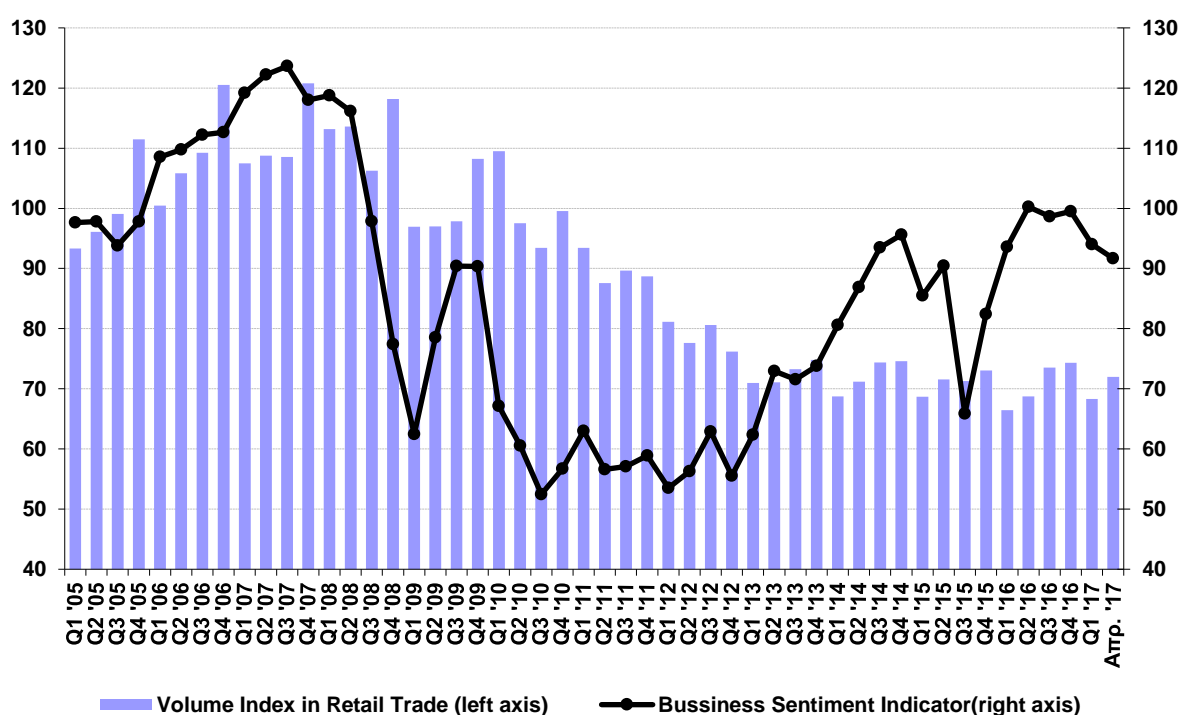
following an increase of 4.4 points a year ago.

The Business Climate Indicator for Motor Vehicles stood at 112.9 points in the second quarter of 2017, from 92.9 points in 2016, reaching its highest level since 2007. Among the constituent elements of the index, the current sales balance remained at 14 points in the second quarter of 2017, as in the first quarter of the year, yet it notable improved compared to last year when it stood at -15 points. This development is linked to the growing share of enterprises which reported an increase in sales in the second quarter, while the proportion of businesses with falling sales declined. The balance of

inventories stood at -2 points, while most enterprises considered once more their stock to be at normal levels. The sales prospects over the coming quarter and the order book recorded a significant improvement, as the index on future sales was boosted by the rise in the share of enterprises expecting growth of sales, with a corresponding decline in the share of enterprises anticipating reduced sales. A similar trend was recorded in the orders. Finally, the employment indicator is weakening, despite the improvement in the remaining indicators, as the number of businesses anticipating employment growth declined, even though 75% of the enterprises were expecting no change in employment.

Figure 3.3

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



Source: IOBE

Table 3.4

Annual Changes in the Volume Index in Retail Trade

| Category of Retail Trade Stores | Volume Index (2010=100) | | | | |
|---|-------------------------|--------------|--------------|------------------|---------------------|
| | Jan-Apr 2015 | Jan-Apr 2016 | Jan-Apr 2017 | Change 2016/2015 | Change Jan. '17/'16 |
| Overall Index | 69.4 | 67.3 | 69.2 | -2.9% | 2.8% |
| Overall Index (excluding automotive fuels and lubricants) | 70.6 | 69.5 | 71.2 | -2.9% | 2.8% |
| Store Categories | | | | | |
| Supermarkets | 77.6 | 76.1 | 78.6 | -1.9% | 3.2% |
| Department Stores | 72.5 | 81.2 | 79.5 | 12.0% | -2.1% |
| Automotive Fuels | 67.1 | 62.7 | 62.1 | -6.7% | -0.9% |
| Food – Drink – Tobacco | 61.4 | 62.9 | 60.0 | 2.4% | -4.6% |
| Pharmaceuticals – Cosmetics | 66.9 | 64.3 | 64.9 | -3.9% | 0.9% |
| Clothing – Footwear | 70.8 | 74.2 | 76.9 | 4.8% | 3.6% |
| Furniture – Electric Equipment – H. Appliances | 58.8 | 55.4 | 56.6 | -5.7% | 2.2% |
| Books – Stationary | 90.8 | 88.9 | 98.9 | -2.1% | 11.3% |

Source: ELSTAT

Table 3.5

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

| | H1 2015 | H1 2016 | H1 2017 | 2016/2015 | 2017/2016 |
|--------------------------------|-------------|-------------|-------------|--------------|--------------|
| Food-Drinks-Tobacco | 89.0 | 113.3 | 94.2 | 27.3% | -16.9% |
| Textiles - Clothing – Footwear | 84.3 | 88.7 | 96.8 | 5.2% | 9.1% |
| Household Appliances | 73.3 | 83.8 | 79.3 | 14.3% | -5.4% |
| Vehicles-Spare Parts | 104.5 | 99.7 | 108.1 | -4.6% | 8.4% |
| Department Stores | 87.0 | 94.9 | 91.3 | 9.1% | -3.8% |
| Total Retail Trade | 88.0 | 96.9 | 93.4 | 10.1% | -3.6% |

Source: IOBE

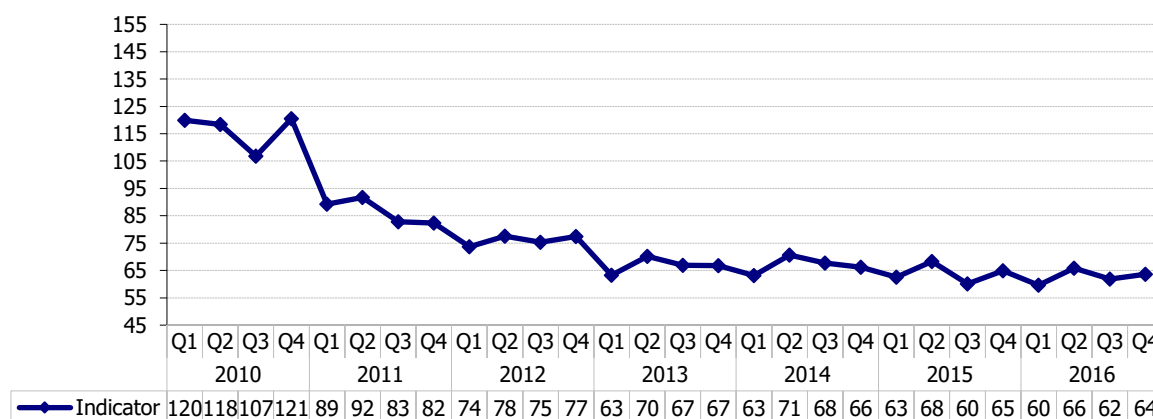
Wholesale Trade

In the first quarter of 2017, turnover in wholesale trade increased, as the corresponding index strengthened by 7.4%, as opposed to a 4.6% decline in the corresponding quarter of 2016. The index

increased year on year in the first quarter for the first time since 2010, yet it continues to lag by about 35% compared with its 2010 level.

Figure 3.4

Turnover Index in Wholesale Trade



Source: ELSTAT

Services

Turnover fell in the first quarter of 2017 in six of the fifteen branches of Services. The largest decline was recorded in Water Transport, where turnover was down by 13.2%, standing at 36.7 points, from 42.3 points in the first quarter of 2016. The turnover of Information Service Activities narrowed by 9.9%, against an increase of 28.3% in 2016, while a similar decline, yet with notable deceleration tendency, was recorded in Legal, Management Consultancy and Accounting Activities (-7.0% against -14.9% in 2016). Advertising came next (-6.1% against +2.5%), followed by Architectural Activities (-0.9% against +0.3% last year).

In contrast, activity growth in the first quarter of 2017 was recorded in Office Administrative Activities (+27.4% against +63.0%) and Computer Activities (+15.6% against +11.0%). A slower increase was recorded in Air Transport (+3.5% against +6.3% last year), Support Activities to Transportation (+1.6%

compared to +6.5%) and Telecommunications, where turnover remained virtually unchanged (+0.1%) against a 0.6% decline in the corresponding quarter of 2016.

According to the **leading indicators of the Business Surveys conducted by IOBE** in the first half of 2017, the sentiment improved year on year in most branches of Services. The overall indicator for Services rose by 10.6 points compared to the first half of 2016, when it lost 3.2 points. In individual branches, the representatives of Financial Intermediaries (+23.9 points instead of -4.1 points last year) held the most optimistic expectations. Optimism also prevailed in Tourism, where the index increased by 23.1 points, offsetting last year's strong losses (-16.4 points). In contrast, the representatives of Computer Activities were slightly more pessimistic than a year ago, as the relevant indicator marginally declined, by 1.3 points, against an increase by 11 points in the first half of 2016.

Table 3.6

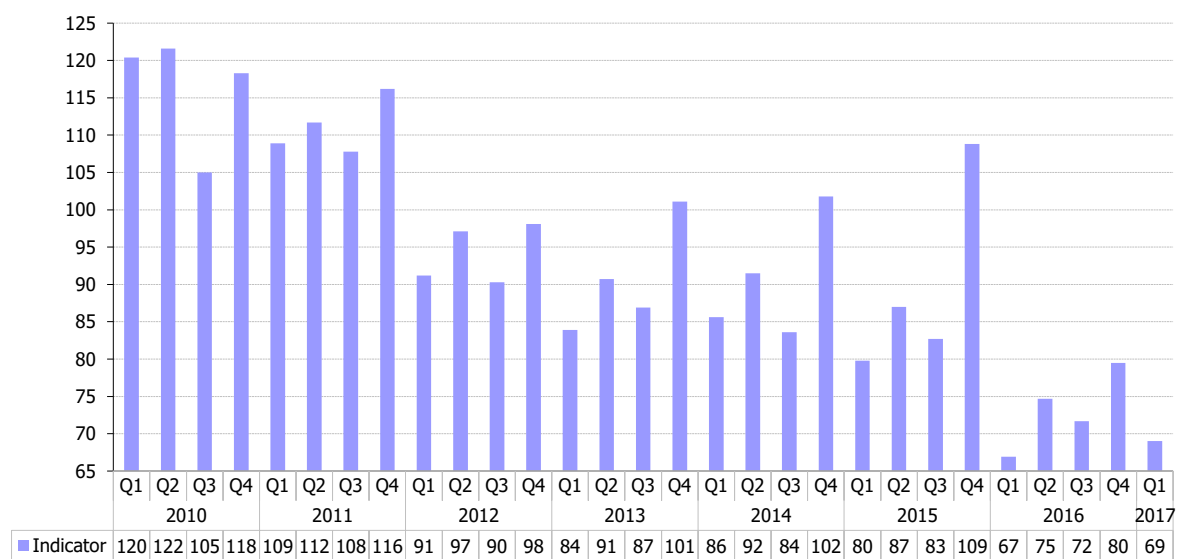
Turnover Indices (annual change, 2010=100)

| | Q1 2015 | Q1 2016 | Q1 2017 | %Δ '16/'15 | %Δ '17/'16 |
|--|---------|---------|---------|---------------|---------------|
| Trade of motor vehicles | 60.4 | 59.2 | 68.7 | -2.0% | 16.0% |
| Land transport and transport via pipelines | 78.1 | 75.5 | 81.9 | -3.3% | 8.5% |
| Water transport | 42.3 | 42.3 | 36.7 | 0.0% | -13.2% |
| Air transport | 67.1 | 71.3 | 73.8 | 6.3% | 3.5% |
| Warehousing and support activities for transportation | 81.2 | 86.5 | 87.9 | 6.5% | 1.6% |
| Postal and courier activities | 68.6 | 66.9 | 69.0 | -5.7% | 0.9% |
| Publishing activities | 50.5 | 42.4 | 32.8 | -17.4% | -6.1% |
| Telecommunications | 71.9 | 70.6 | 71.1 | -0.6% | 0.1% |
| Computer programming. consultancy and related activities | 74.4 | 80.1 | 86.5 | 11.0% | 15.6% |
| Information service activities | 114.8 | 104.9 | 85.1 | 28.3% | -9.9% |
| Legal, accounting and management consultancy activities | 78.7 | 66.4 | 68.0 | -14.9% | -7.0% |
| Architectural and engineering activities | 35.4 | 37.1 | 35.9 | 0.3% | -0.9% |
| Advertising and market research | 41.8 | 37.4 | 36.5 | 2.5% | -6.1% |
| Office administrative activities | 118.7 | 123.5 | 132.4 | 63.0% | 27.4% |
| Tourism | 48.1 | 42.8 | 43.2 | -11.0% | 0.9% |

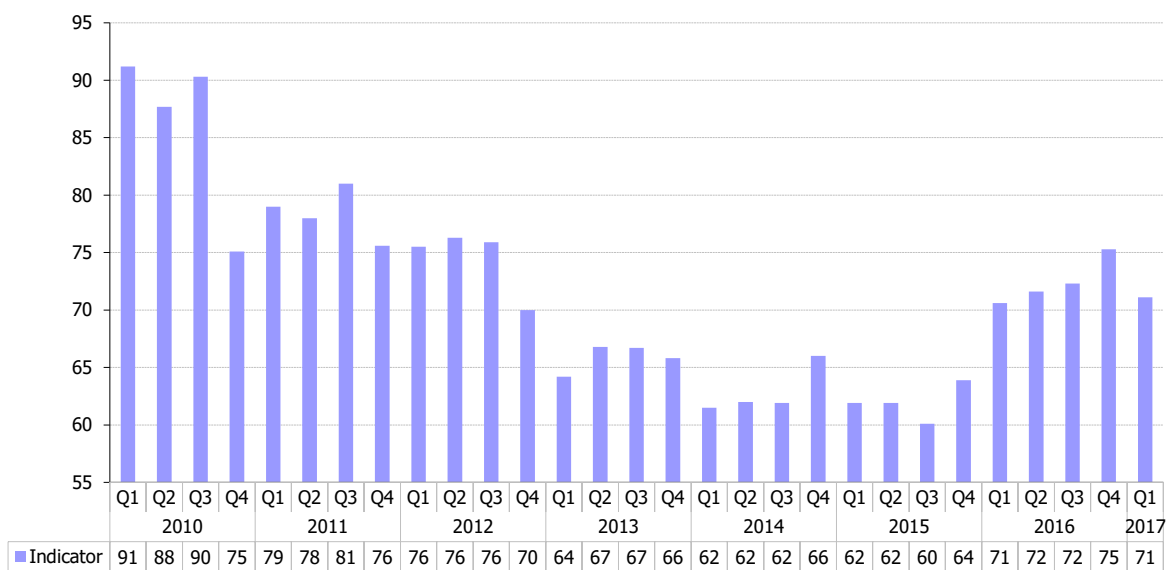
Source: ELSTAT

Figure 3.5

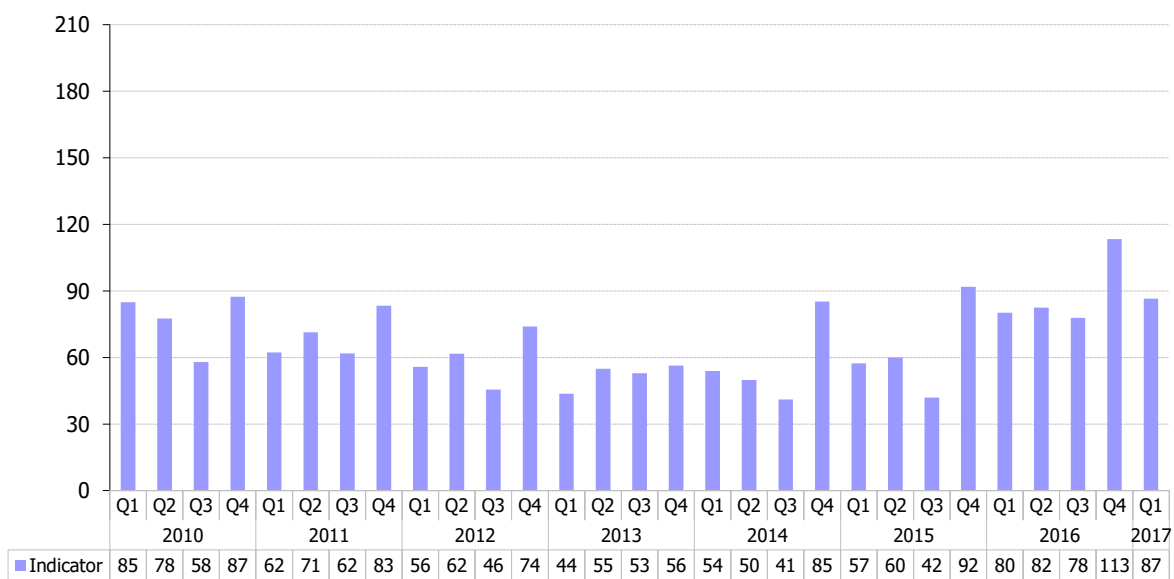
Turnover Index in the Postal and Courier sector (branch 53)



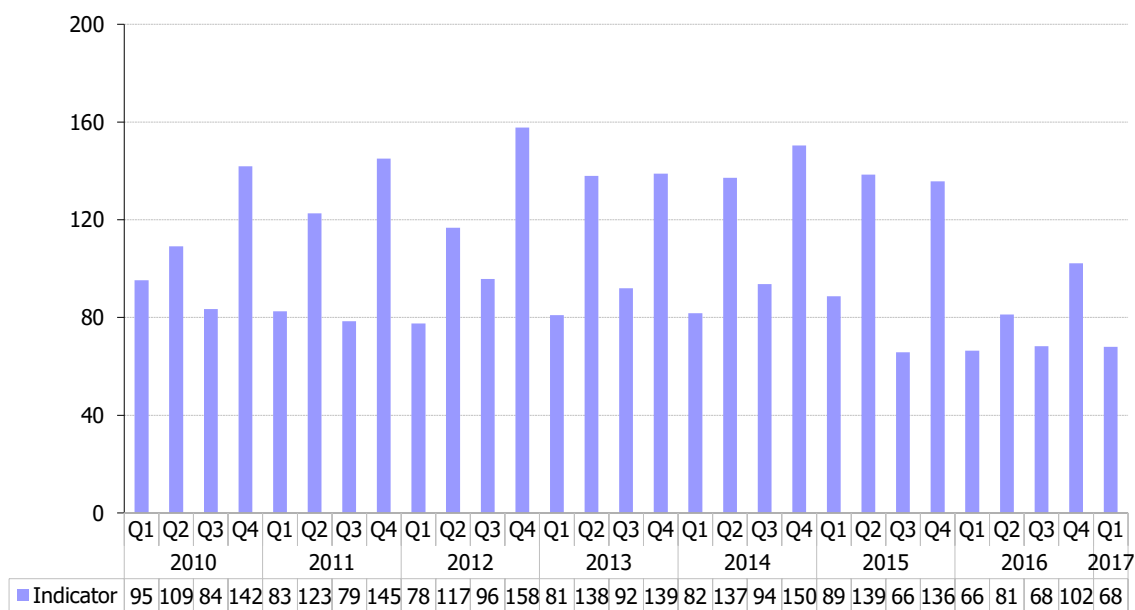
Source: ELSTAT

Figure 3.6**Turnover Index in Telecommunications Services (branch 61)**

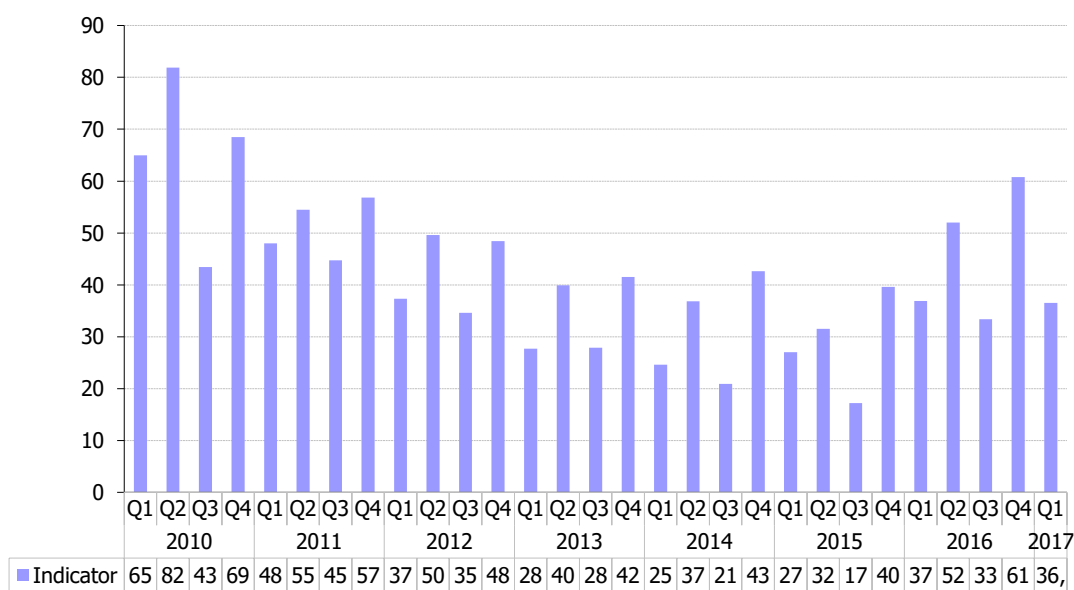
Source: ELSTAT

Figure 3.7**Turnover Index in Information Services (branch 62)**

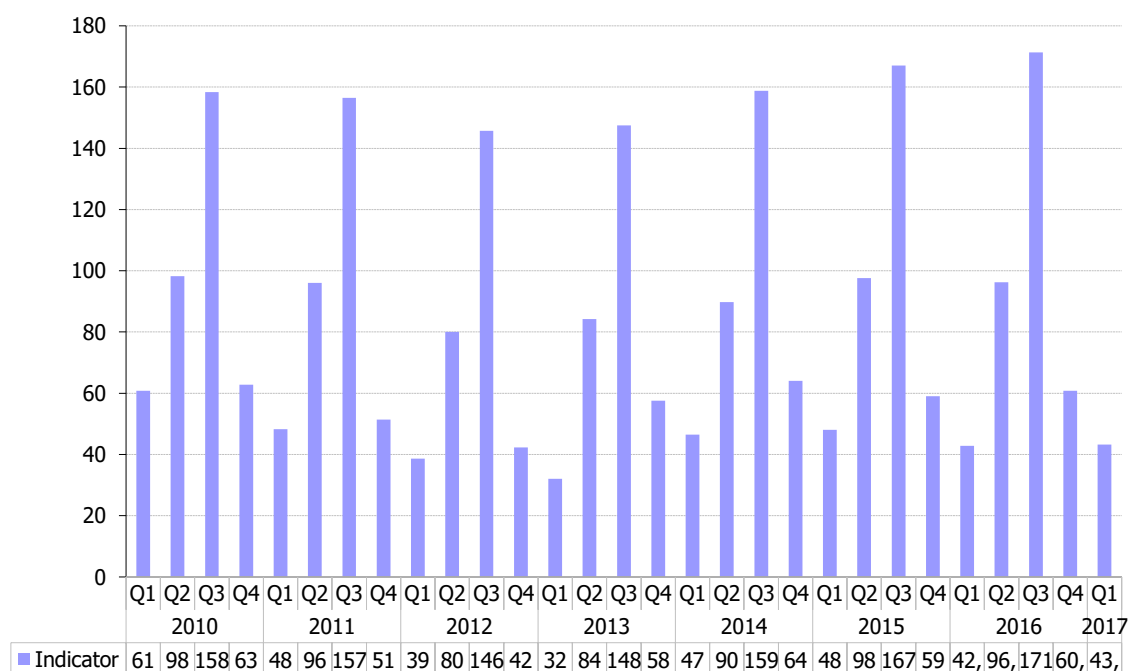
Source: ELSTAT

Figure 3.8Turnover Index in Legal, Accounting and Management Consultancy Services (**branches 69+70.2**)

Source: ELSTAT

Figure 3.9Turnover Index in Advertising and Market Research (**branch 73**)

Source: ELSTAT

Figure 3.10Turnover Index in Tourism (Accommodation and Food Services Activities, **branches 55 & 56**)

Source: ELSTAT

Table 3.7

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

| | H1 2015 | H1 2016 | H1 2017 | %Δ '16-'15 | %Δ '17-'16 |
|--|-------------|-------------|-------------|--------------|-------------|
| Hotels – Restaurants – Travel Agencies | 96.6 | 80.2 | 103.3 | -17.0% | 28.8% |
| Other Business Services | 54.9 | 51.6 | 59.5 | -6.0% | 15.3% |
| Financial Intermediation | 60.1 | 56 | 79.9 | -6.8% | 42.7% |
| Information Services | 60.5 | 71.7 | 70.4 | 18.5% | -1.8% |
| Total Services | 74.8 | 71.6 | 82.2 | -4.3% | 2.0% |

Source: IOBE

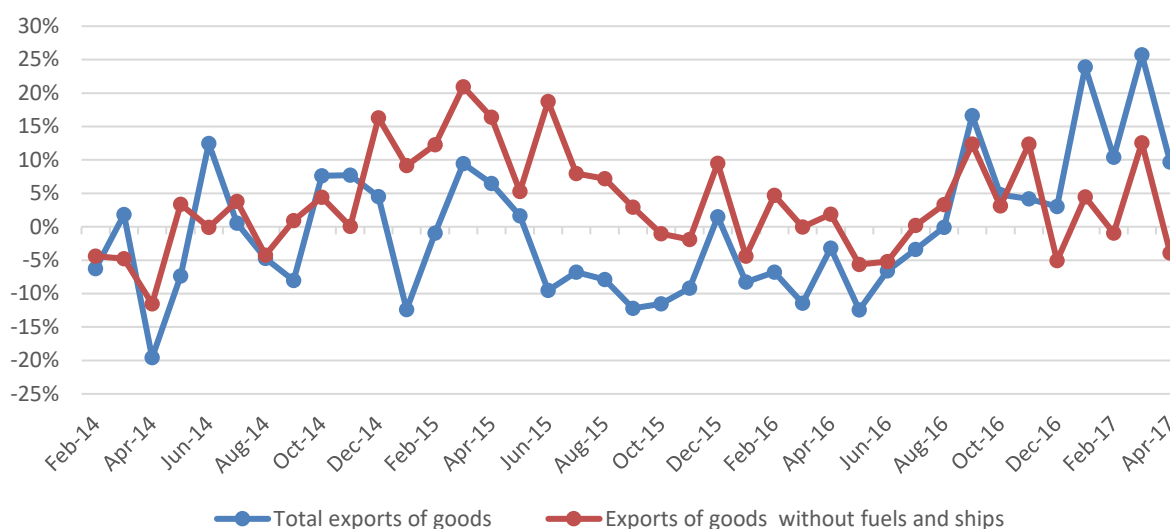
3.3 Export performance of the Greek economy

The exports of goods stood at €9.1 billion in the first four months of 2017, from €7.7 billion in 2016, recording **an increase of 17.5%**. However, **if petroleum and ship exports are not taken into account, the remaining exports increased by 3.1%**, to reach €6.2 billion this year, from €6 billion in 2016 (Figure 3.11). The strong growth in the total exports of goods largely came from the exports of petroleum products, due to the higher global oil prices, following the

decision at the International Energy Forum at the end of September 2016 to limit oil production. Imports increased by 21.9% in the first four months of 2017, to reach €17.2 billion, from €14 billion a year ago. As a result of the above trends in the main components of the external balance, the **trade deficit** increased by €1.7 billion year on year, to €8 billion, from €6.3 billion. Subsequently, the **value of the exports of goods** of the Greek economy **accounted for 53% of its imports**, lower than last year (54.9%).

Figure 3.11

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 declined by 4.6% in the first four months of 2017, to reach €1.7 billion, from €1.8 billion in the corresponding period of the previous year, while the exports of Fuel increased significantly, by 67.1%, totalling €3 billion, from €1.8 billion in 2016 (Table 3.7). Note that the exports of these product categories account for 51.5% of Greek exports (from 46.2% last year). The decline in Agricultural Products was mainly due to the 26.0% drop in the exports of Oils and Fats of Animal or Plant Origin, to €198.4 million from €268.1 million in 2016, which represent 11.6% of the exports of Agricultural Products. Beverages – Tobacco came next, with a decline by 11.5%, with the value of their exports totalling €202.4 million, from €228.6 million a year ago. As a result, their share in total exports shrank, from 3% in the first four months of 2016 to 2.2% this year. Food – Live Animals, which accounts for approximately 76.6% of the exports of Agricultural Products, was the

only one in which exports increased, in the order of 1.1%, from €1.29 billion in 2016 to €1.31 billion in 2017.

The exports of Industrial Products increased by 4.1% in the first four months of 2017, with their value reaching €3.8 billion, from €3.7 billion a year ago. This rise is explained by the strengthening of international demand for Manufactured Goods Classified Chiefly by Raw Material, by 10.5%, with their value reaching €1.4 billion, from €1.3 billion in 2016, while the exports of Chemical and Related Products also rose, by 8.1%, to €966.8 million, from €894.7 million a year ago. On the contrary, deterioration in the export performance was recorded in Miscellaneous Manufactured Articles, by 1.7%, as they dropped to €622 million, from €632.9 million in 2016, while the exports of Machinery and Transport Equipment declined by 5% to €830.9 million in the first four months of the current year, from €874.3 million a year earlier.

Finally, the exports of Raw Materials increased by 34.6%, from €303.1 million in the first four months to €408 million in the same period of this year, while the exports of Commodities and Transactions Not Classified by Category declined by 5.6%, from €171.2 million last year to €161.5 million in the current year.

Regarding the export trends by geographical area, the exports to the euro area countries expanded by 7.6%, reaching €3.5 billion in the first four months of 2017, from €3.2 billion the corresponding period in 2016, absorbing 38.3% of the Greek exports of goods in the current year. There was a similar increase in the EU-28, by 7.3%, or €333 million. Among the Eurozone countries with the largest share of Greek exports, an increase was recorded in Italy, of the order of 12.9% (from €966.4 million in 2016 to around €1.1 billion in 2017) and in Germany, by 5% (from €630.1 million last year to €661.6 million this year). The exports to France also increased, by 13.6%, from €217.5 million the first four months of 2016 to €247.2 million this year. In contrast, a decline in exports was recorded in Spain and the Netherlands by 3.1%, to €244.3 million (from €252 million in 2016) and 4.4%, to €187.6 million (from €196.1 million) respectively. Note that the largest percentage contraction in exports in the first four months of 2017 in the Eurozone was recorded in Finland, where it reached 31.3% or €18.5 million (from €59 million a year ago to €40.6 million this year), while the highest percentage increase was recorded in Estonia (+71.3%).

Among the other countries of the European Union, where total exports grew by 6.7% or

€87.9 million (from €1.30 billion in the first four months of 2016 to €1.39 billion in the same period of this year), Bulgaria continues to be the main export destination, with an increase in outflows relative to 2016 by 9.4% or €35 million. The exports to two other countries which also absorb a significant share of Greek exports from this group of countries, the UK and Romania, also increase, by 5.4% or €17.1 million, to €331.9 million, and by 1.3% or 3.3 million, to €264.7 million, respectively. The largest increase, of 74.2%, was recorded in Denmark, where Greek exports increased from €38 million to €66.2 million.

The Greek exports to other European countries increased by 24.5%, from €1.1 billion last year, to €1.4 billion in the current year. In Turkey, one of the major export destinations, the growth of exports was significant (+45%), from €407.9 million in January – April last year to €591.3 million this year.

The exports to the North American countries increased by only 0.4%, from €410.8 million last year to €412.5 million in 2017, due to the increase in exports to the US by 3.3%, from €309.5 million to €319.5 million. In contrast, the exports to Canada and Mexico fell by 2.9% and 11.8% respectively.

Exports saw a significant growth in the Middle East and North Africa, by 48% (from €1 billion in 2016 to €1.5 billion this year), mainly due to an increase in exports to Lebanon (+67.5%), from €260.1 million in the first four months of 2016 to €435.7 million in the same period of this year, and to Saudi Arabia, where they reached €231.2 million, from €140.4 million in 2016

(+64.7%). The exports to Tunisia increased proportionally more than to Lebanon and the United Arab Emirates, by 376.1%, but their growth was milder in absolute terms, as they reached €83.2 million this year, from €17.5 million last year. The exports to Algeria declined by 26.2%, from €59.6 million to €44 million. The exports to another major export destination in the Middle East, the United Arab Emirates, increased by 2.6%, to €66.4 million.

The flow of exports of Greek products to Oceania increased by 10.4%, with their value reaching €48 million in the first four months of 2017, against €43.4 million in the same period a year earlier. The exports to Australia expanded by 9.9% (from €39.4 million the previous year, to €43.3 million in

2017), while in New Zealand, which has a small share of the exports to this geographical region, they increased by 21.6% (€3.7 million in 2016 and €3.9 million this year).

The exports to the markets of Central and Latin America declined by 11.4% in the first four months of 2017, with their value reduced to €61.5 million, from €69.5 million during the same period a year ago. The deterioration in export performance to these countries came mainly from the sharp fall in the demand for Greek products from Brazil, by 51.4%, with their value at €8.6 million this year, from €17.8 million in 2016.

Table 3.8

Exports per category at current prices (million €)

| PRODUCT | VALUE | | % CHANGE 17*/16* | % COMPOSITION | |
|---|---------|---------|---------------------|---------------|--------|
| | 2017* | 2016* | | 2017* | 2016* |
| AGRICULTURAL PRODUCTS | 1,714.1 | 1,796.2 | -4.6% | 18.9% | 23.2% |
| Food and Live Animals | 1,313.3 | 1,299.5 | 1.1% | 14.4% | 16.8% |
| Drinks and Tobacco | 202.4 | 228.6 | -11.5% | 2.2% | 3.0% |
| Oils and Fats of animal or plant origin | 198.4 | 268.1 | -26.0% | 2.2% | 3.5% |
| RAW MATERIALS | 408.0 | 303.1 | 34.6% | 4.5% | 3.9% |
| Non-edible Raw Materials excluding Fuels | 408.0 | 303.1 | 34.6% | 4.5% | 3.9% |
| FUELS | 2,966.5 | 1,775.4 | 67.1% | 32.6% | 23.0% |
| Minerals, Fuels, Lubricants etc. | 2,966.5 | 1,775.4 | 67.1% | 32.6% | 23.0% |
| INDUSTRIAL PRODUCTS | 3,840.8 | 3,688.2 | 4.1% | 42.2% | 47.7% |
| Chemicals and Related Products | 966.8 | 894.7 | 8.1% | 10.6% | 11.6% |
| Industrial Products Sorted by Raw Material | 1,421.0 | 1,286.3 | 10.5% | 15.6% | 16.6% |
| Transport Equipment | 830.9 | 874.3 | -5.0% | 9.1% | 11.3% |
| Various Manufactured Goods | 622.0 | 632.9 | -1.7% | 6.8% | 8.2% |
| OTHER | 161.5 | 171.2 | -5.6% | 1.8% | 2.2% |
| Goods and Transactions not sorted by Category | 161.5 | 171.2 | -5.6% | 1.8% | 2.2% |
| TOTAL EXPORTS | 9,090.9 | 7,734.0 | 17.5% | 100.0% | 100.0% |

* Provisional data

Source: ELSTAT, PSE-KEEM

In contrast, the demand for Greek goods increased in the Asian countries, where exports increased by 67.3% in the first four months of 2017, to €533.5 million from €318.9 million a year earlier. This development came mainly from the strengthening of exports to South Korea

(+209.9%, to €94.4 million this year from €30.5 million in 2016), and Singapore (+81.5%, to €118.8 million from €65.5 million a year ago). Similarly, a significant expansion of Greek products, by 54.8%, was recorded in China, from €87.7 million last year, to €135.7 million a year later.

Table 3.9

Exports by destination, January-April 2017 and 2016*

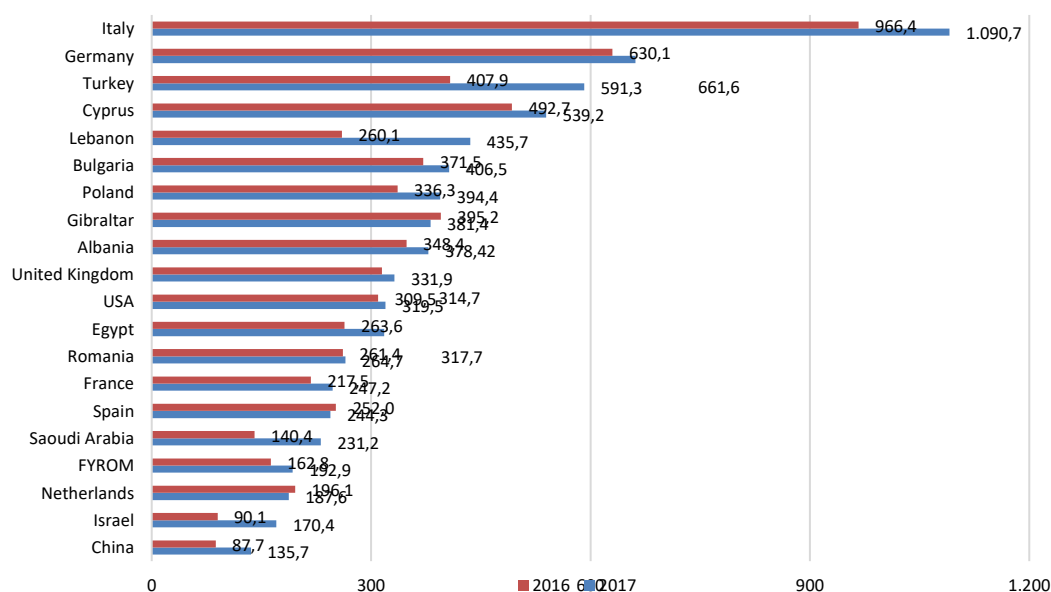
| ECONOMIC UNION – GEOGRAPHIC REGION | EXPORTS | | % CHANGE 17/16 | % COMPOSITION | |
|------------------------------------|---------|---------|-------------------|---------------|--------|
| | 2017 | 2016 | | 2017 | 2016 |
| World | 9,090.9 | 7,734.0 | 17.5% | 100.0% | 100.0% |
| OECD | 4,984.6 | 4,398.3 | 13.3% | 54.8% | 56.9% |
| EU | 4,873.1 | 4,540.1 | 7.3% | 53.6% | 58.7% |
| Euro Area | 3,480.1 | 3,235.0 | 7.6% | 38.3% | 41.8% |
| G7 | 2,711.6 | 2,499.0 | 8.5% | 29.8% | 32.3% |
| North America | 412.5 | 410.8 | 0.4% | 4.5% | 5.3% |
| BRICS | 232.0 | 181.3 | 27.9% | 2.6% | 2.3% |
| Middle East & North Africa | 1,545.4 | 1,044.5 | 48.0% | 17.0% | 13.5% |
| Rest of Africa | 582.7 | 424.3 | 37.3% | 6.4% | 5.5% |
| Oceania | 48.1 | 43.4 | 10.9% | 0.5% | 0.6% |
| Latin America | 61.5 | 69.5 | -11.4% | 0.7% | 0.9% |
| Rest of Asia | 533.5 | 318.9 | 67.3% | 5.9% | 4.1% |
| OPEC | 483.9 | 391.0 | 23.7% | 5.3% | 5.1% |

* Data for both years is provisional

Source: ELSTAT, KEEM

Figure 3.12

Countries with the largest share in the exports of Greek products (in million €), January-April 2017 and 2016



Source: KEEM Processing: IOBE

Summing up, the significant increase in the total exports of goods in the first four months of 2017, by 17.5% or €1.36 billion, came largely from the growth of the exports of petroleum products, by €1.19 billion. As already mentioned, the rise in their value is explained by higher year on year global oil prices, following the decision at the International Energy Forum in late September 2016 to limit oil production. That said, despite this decision, the price of oil has steadily declined since the beginning of April and now varies close to its level from last year. The price fall continued despite the extension of the decision to limit production at the end of May for another nine months, until March 2018. Hence, the decline in prices is thought to reflect the low demand for oil and its products, which is anticipated to carry over in the coming months, until the beginning of autumn, when the energy needs for the upcoming winter will be determined. As the price of oil is already at its last year's level, its effect on the value of oil exports will ease considerably from July onwards and is likely to disappear, as the price decline continues. Therefore, the boost of oil to total exports is likely to fall sharply in the second half of the year, when the other products, except for ships, whose exports grew by 3.1% in the first four months of 2017, will shape the overall trend in exports.

Taking into account the upward momentum of exports except petroleum and ships and the expected weakening of the increase in exports of petroleum products, total exports of goods are envisaged to increase by 9% to 11%, to €27.3 billion - €28 billion. Excluding petroleum products,

exports are projected to reach €19.0 billion, about 5% higher than last year.

3.4 Employment – Unemployment

According to the last data of the Labour Force Survey of ELSTAT, the unemployment rate in Greece stood at 23.3% in the first quarter of 2017, i.e. 1.6 percentage points down compared to the first quarter of 2016 (24.9%) and 0.3 percentage points lower than in the previous quarter (23.6%). The number of unemployed amounted to 1,114,700, from 1,195,100 a year earlier, down by 80,400 or 6.7%. Correspondingly, the number of employees increased by 53,000 during the same period, from 3,606,300 in the first quarter of 2016 to 3,659,300 a year later.

In comparison with the other member countries of the Euro area, Greece continued, for 19th consecutive quarter, to show the highest unemployment rate, despite the fact that it has followed a downward year-on-year trend for 12th consecutive quarter (from the 2nd quarter of 2014). Spain followed, with its unemployment rate falling for the 14th consecutive quarter (from the 4th quarter of 2013), to reach 18.8% in the first quarter of 2017, from 21% the year before. Cyprus came next, with its unemployment rate on a downward trend from the 2nd quarter of 2015, to reach 13.6% in the first quarter in this year, from 14.1% in the corresponding quarter of 2016. In Portugal, the unemployment rate stood at 10.2%, from 12.6% a year earlier, while in Ireland the rate totalled 6.7% and 8.4% respectively.

Among the major economies in the Euro area, the unemployment rate in Germany has steadily declined since the 2nd quarter of 2010, falling to 4.1% in the 1st quarter of this year, from 4.5% a year earlier. In France, the unemployment rate decreased to 10%, down by 0.7 percentage points year on year. Overall in the Euro area, the unemployment rate declined for the 13th consecutive quarter (from the 1st quarter of 2014), as in the 1st quarter of this year it decreased to 9.8%, from 10.7% in the 1st quarter of the previous year.

Regarding the **gender** differences in unemployment, the unemployment rate among women in Greece fell to 27.9% in the 1st quarter of 2017 from 29.5% in the same quarter of 2016. It stood 7.9 percentage points higher than the unemployment among men (20% from 21.2% a year earlier). In the Euro area, the unemployment among men stood at 9.6% in the first quarter of this year, down by 0.9 percentage points from the 1st quarter of last year, while for women it fell to 10.2% from 10.9% a year earlier.

Regarding the **age structure**, unemployment decreased in all age groups. The decline in unemployment is highest for ages 20-24 (from 49.6% to 45%). In most of the remaining age groups, unemployment declined at a similar rate. The unemployment rate dropped by 2.2 percentage points in the 15-19 age group (from 62.4% to 60.2%), 2.3-2.0 p.p. among those aged 25-29 (from 35.9% to 33.6%) and by 1.6 p.p. among the 45-64 years old (from 20.4% to 18.8%). The lowest drop was recorded in the 30-44 age group, from 23.4% to 22.5%.

The percentage of **long-term unemployed** in the first quarter of this year fell for the first time since the third quarter of 2013 to below 70%, standing at 69.9% from 70.3% in the first quarter of last year. The number of long-term unemployed has decreased since the last quarter of 2014, totalling 779,200 in the 1st quarter of 2017, from 839,800 last year (down by 60,600 or 7.2%).

With regard to the **education level**, as in the age groups, unemployment declined year on year in the first quarter of this year at all levels of education. Meanwhile, the unemployment rates decrease as the level of education rises. The lowest unemployment rate was recorded for those with doctorate or master degrees, dropping slightly to 11% from 11.3%, having declined for the fifth consecutive quarter. University graduates came next, with the unemployment rate dropping for the eighth consecutive quarter to 16.9%, compared with 18.4% a year earlier. People with a higher technical vocational education diploma and those with completed secondary education came next, with unemployment rates at 24.7% and 25.3%, from 25.6% and 27.1% respectively. Finally, the highest rate of unemployment was recorded among those who received but did not finish primary education, at 39.9%, from 46.2% last year.

Regarding the **regional structure** of unemployment, in four of the 13 regions of the country, unemployment increased (Epirus, the Ionian Islands, the North Aegean and the South Aegean). The highest unemployment rate was recorded in Western Macedonia, 30.8%, from 33.3% in

the 1st quarter of last year. Western Greece and the Ionian Islands (with the strongest increase in unemployment) followed with almost the same rates, where unemployment stood at 27.3% and 27.2% respectively, from 30% and 19.6%. In Attica, the unemployment rate decreased for the 13th consecutive quarter, to 22% from 23.4% a year earlier, while in Central Greece – a major manufacturing centre – the unemployment rate has declined since early 2014, to reach 22.9% in the first quarter, from 27.7% last year. The lowest unemployment rate occurred in the Peloponnese, where it stood at 19.2%, from 20.6% in the first quarter of 2016.

Employment increased in all three **basic economic sectors** in the first quarter of 2017. In the Primary sector, it strengthened for the first time since the fourth quarter of 2014, to 450,900 people, from 445,300 in the first quarter of 2016 (1.3% increase or +5,600 people). In the Secondary Sector, employment has grown since the first quarter of 2015, totalling 565,700 people in the first quarter of this year, from 548,600 people last year (3.1% increase or 17,100 people). Finally, in Tertiary sector, the most populous sector in the country, the number of employees increased by 30,300 (or 1.2%) from 2,612,400 in the first quarter of last year, to 2,642,700 this year.

Employment declined in six **branches of economic activity** (Mining-Quarrying, Real Estate Activities, Professional-Scientific-Technical Activities, Other Service Activities, Activities of Households as Employers, and Activities of Extraterritorial Organisations and Bodies). The largest decrease in the number of employed people

took place in Professional-Scientific-Technical Activities, where it declined by 11,400 persons, from 210,100 to 198,700. In contrast, the greatest increase in employment was recorded in Manufacturing, totalling 349,600 people in the 1st quarter of 2017, from 338,700 a year earlier. In Wholesale and Retail Trade, employment increased, after three consecutive quarters of decline, by 0.9% or 6,000, to 661,200 people, whereas in Tourism employment has increased since the first quarter of 2014, totalling 303,500 people in the first quarter of this year, from 303,000 people in the same period of last year. In Public Administration-Defence, employment increased by 3% or 9,800 persons, to 335,400 people, while employment in Construction, after two consecutive quarters of contraction, expanded by 1.4% or 2,000 persons in the first quarter of 2017, from 146,400 to 148,400 people.

In conclusion, the employment figures at sector level show that the increase in employment in the first quarter of 2017 originated mainly from:

- an increase of employment in Manufacturing (+10,900 persons or +3.2%), in congruence with the year-on-year increase in the Industrial Production Index in the first quarter of 2017 by 8.9%,
- an increase of employment in Public Administration-Defence (+9,800 or +3%), mainly as a result of the gradual implementation of community-based work programmes for 23,000 beneficiaries,

- an increase in Human Health and Social Care Activities (+8,100 or +3.8%) mainly due to the recruitment through programmes of the Manpower Employment Organisation OAED for 3,200 unemployed in the health sector as nurses and other paramedical staff,

and despite declining employment in Professional, Scientific and Technical Activities (-11,400 persons or -5.4%) and in the Activities of Households as Employers (-5,500 persons or -13.1%).

Regarding the recent trend in labour costs, **the seasonally adjusted labour cost indices for the economy as a whole** rose year on year by 1% in the first quarter of this year, from 87.1 points to 88 (Figure 3.11).

Medium-term outlook

The recent completion of the second review of the current Economic Adjustment Programme is expected to substantially reduce the uncertainty about the prospects of the Greek economy. Subsequently, the implementation of investments that were put on hold for as long as the review lasted might start, creating jobs in the process. The fairly solid growth from the beginning of this year of export demand and then of the activity in export-oriented sectors, such as certain branches of Manufacturing, Tourism and Transport, will stimulate their

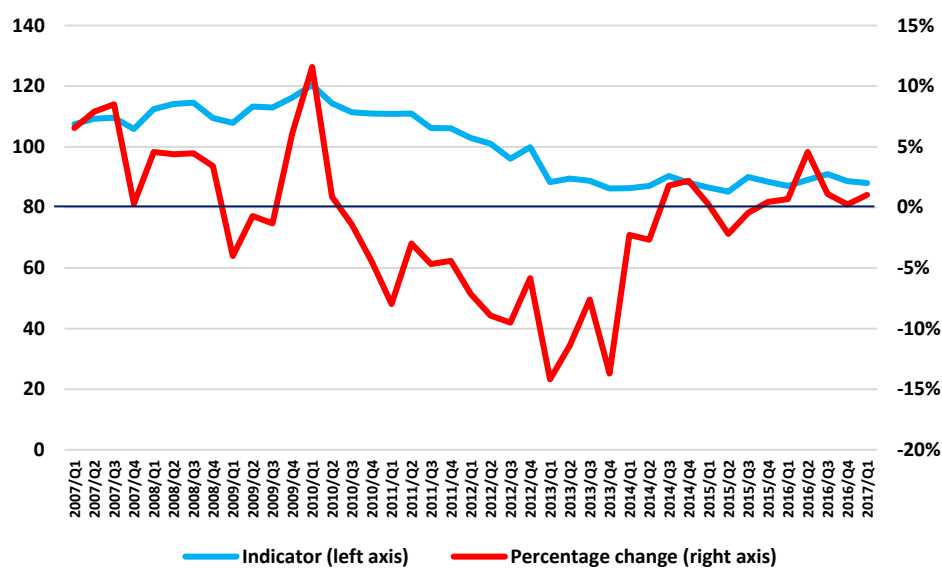
employment. The public sector will continue to support employment.

In detail, the public sector will continue to have positive effects on employment, mainly through a programme of the Manpower Employment Organisation OAED. Besides, a programme of employment for public benefit has been implemented in the municipalities of the country since the beginning of the second quarter, with 24,200 beneficiaries. At the same time, apart from the temporary employment of 3,200 people in the health sector as nurses and other paramedical personnel under another OAED programme, about 3,000 doctors and nurses are expected to be hired with three-year contracts to staff the first local health units, as part of the primary health care system of the urban population.

In the Tourism sector, the forecasts point to a further increase in international arrivals to 28-30 million people. Already, according to the SETE data, in the first five months of this year, the international arrivals in major airports in the country were up by 10.1% compared to the first five months of 2016 (+346,000 from 3.43 million to 3.77 million). However, the growth in turnover in Tourism was clearly lower in the first quarter, only 1%, yet in the same period of last year it declined by 7.2%. The higher activity and the expected continuation and strengthening of its growth favour the employment growth in the tourism sector.

Figure 3.13

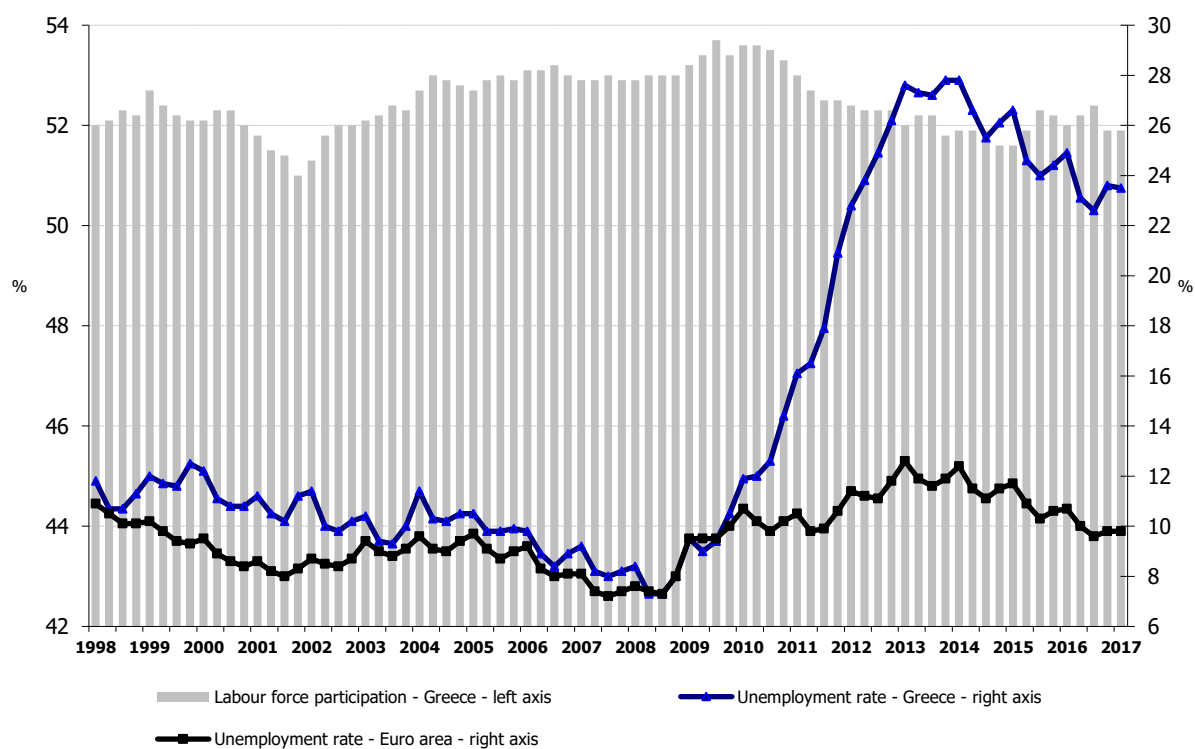
Seasonally adjusted wage cost index (Q1/2006-Q1/2017)



Source: ELSTAT, Data Processing: IOBE

Figure 3.14

Labour force participation and unemployment rates



Source: ELSTAT, Labour Force Survey, Eurostat

Table 3.9

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

| Quarter/Year | Total | % of Population | Employed | Percentage (%) of the labour force | Unemployed | Percentage (%) of the labour force |
|--------------|----------------|-----------------|----------------|------------------------------------|----------------|------------------------------------|
| 1998 | 8,680.4 | 52.1 | 4,017.9 | 88.8 | 507.9 | 11.2 |
| 1999 | 8,764.5 | 52.3 | 4,031.4 | 87.9 | 554.7 | 12.1 |
| 2000 | 8,839.8 | 52.2 | 4,088.5 | 88.6 | 523.5 | 11.4 |
| 2001 | 9,156.0 | 51.4 | 4,202.1 | 89.2 | 508.4 | 10.8 |
| 2002 | 9,188.3 | 51.8 | 4,265.0 | 89.7 | 492.7 | 10.4 |
| 2003 | 9,234.9 | 52.3 | 4,353.2 | 90.2 | 472.7 | 9.8 |
| 2004 | 9,285.3 | 52.9 | 4,389.5 | 89.4 | 520.0 | 10.6 |
| 2005 | 9,332.4 | 52.9 | 4,443.6 | 90.0 | 493.6 | 10.0 |
| 2006 | 9,374.1 | 53.1 | 4,527.5 | 91.0 | 448.2 | 9.0 |
| 2007 | 9,412.3 | 52.9 | 4,564.1 | 91.6 | 418.4 | 8.4 |
| 2008 | 9,435.1 | 53.0 | 4,610.5 | 92.3 | 387.9 | 7.8 |
| 2009 | 9,431.1 | 53.4 | 4,556.0 | 90.4 | 484.7 | 9.6 |
| 2010 | 9,399.4 | 53.5 | 4,389.8 | 87.3 | 639.4 | 12.7 |
| Q1 2011 | 9,374.4 | 53.0 | 4,165.5 | 83.9 | 799.6 | 16.1 |
| Q2 2011 | 9,373.1 | 52.7 | 4,124.2 | 83.5 | 815.6 | 16.5 |
| Q3 2011 | 9,372.2 | 52.5 | 4,040.8 | 82.1 | 883.5 | 17.9 |
| Q4 2011 | 9,371.7 | 52.5 | 3,886.9 | 79.1 | 1,028.6 | 20.9 |
| 2011 | 9,372.9 | 52.7 | 4,054.4 | 82.2 | 881.8 | 17.9 |
| Q1 2012 | 9,364.7 | 52.4 | 3,785.0 | 77.2 | 1,119.1 | 22.8 |
| Q2 2012 | 9,351.2 | 52.3 | 3,729.9 | 76.2 | 1,163.0 | 23.8 |
| Q3 2012 | 9,338.0 | 52.3 | 3,668.0 | 75.1 | 1,218.4 | 24.9 |
| Q4 2012 | 9,325.3 | 52.3 | 3,597.0 | 73.8 | 1,279.9 | 26.2 |
| 2012 | 9,344.8 | 52.3 | 3,695.0 | 75.6 | 1,195.1 | 24.4 |
| Q1 2013 | 9,316.5 | 52.0 | 3,504.2 | 72.4 | 1,336.0 | 27.6 |
| Q2 2013 | 9,311.7 | 52.2 | 3,535.0 | 72.7 | 1,327.9 | 27.3 |
| Q3 2013 | 9,307.1 | 52.2 | 3,533.7 | 72.8 | 1,320.3 | 27.2 |
| Q4 2013 | 9,302.7 | 51.8 | 3,479.9 | 72.2 | 1,337.2 | 27.8 |
| 2013 | 9,309.5 | 52.1 | 3,513.2 | 72.5 | 1,330.4 | 27.5 |
| Q1 2014 | 9,295.8 | 51.9 | 3,483.7 | 72.2 | 1,342.3 | 27.8 |
| Q2 2014 | 9,286.6 | 51.9 | 3,539.1 | 73.4 | 1,280.1 | 26.6 |
| Q3 2014 | 9,277.5 | 51.9 | 3,586.9 | 74.5 | 1,229.4 | 25.5 |
| Q4 2014 | 9,268.5 | 51.6 | 3,535.3 | 73.9 | 1,245.9 | 26.1 |
| 2014 | 9,282.1 | 51.8 | 3,536.3 | 73.5 | 1,274.4 | 26.5 |
| Q1 2015 | 9,259.1 | 51.6 | 3,504.4 | 73.4 | 1,272.5 | 26.6 |
| Q2 2015 | 9,250.7 | 51.9 | 3,625.5 | 75.4 | 1,180.1 | 24.6 |
| Q3 2015 | 9,242.3 | 52.3 | 3,671.1 | 76.0 | 1,160.5 | 24.0 |
| Q4 2015 | 9,234.1 | 52.2 | 3,641.7 | 75.6 | 1,174.7 | 24.4 |
| 2015 | 9,246.6 | 52.0 | 3,610.7 | 75.1 | 1,197.0 | 24.9 |
| Q1 2016 | 9,226.3 | 52.0 | 3,606.3 | 75.1 | 1,195.1 | 24.9 |
| Q2 2016 | 9,217.2 | 52.2 | 3,702.6 | 76.9 | 1,112.1 | 23.1 |
| Q3 2016 | 9,208.3 | 52.4 | 3,736.7 | 77.4 | 1,092.6 | 22.6 |
| Q4 2016 | 9,199.4 | 51.9 | 3,648.6 | 76.4 | 1,124.0 | 23.6 |
| 2016 | 9,212.8 | 52.1 | 3,673.6 | 76.5 | 1,130.9 | 23.5 |
| Q1 2017 | 9,190.7 | 51.9 | 3,659.3 | 76.7 | 1,114.7 | 23.3 |

Source: ELSTAT, Labour Force Survey

Positive effects on employment are also expected from the construction sector, as civil engineering projects, including public works, considerably strengthened in the first quarter (+27.7%), while building activity, in

terms of surface area and volume, has been steadily growing since the beginning of the year until March. The lack of changes in the property tax ENFIA in 2017 is also considered to contribute to the second development,

hence its impact will continue throughout the year.

That said, the increase in indirect taxes (e.g. excise duty on fuel and cigarettes) and the implementation of the fiscal measures of the first review will have a negative impact on the disposable income of the households, with corresponding effects on consumer demand and the activity of the Retail and Wholesale Trade sectors, which absorb most of the domestic workforce.

Taking into account the above effects, IOBE's forecast for the annual rate of unemployment is kept unchanged at 22.2%.

According to the latest IOBE business surveys, **the short-term employment expectations improved quarter on quarter in the second quarter in Industry and Retail and remained stable in Construction and Services.**

Compared to the same period last year, the expectations improved in Industry and Services, yet they deteriorated significantly in Construction and to a lesser extent in Retail Trade. In greater detail:

In Industry, the +2 points average balance of the previous quarter improved by 4 points in the second quarter of the year. Compared to last year's performance, the average quarterly index was higher by 8 percentage points. In the quarter under review, the percentage of industrial firms that expected a drop in employment in the next period stood again at 7-8%, while the percentage of those expecting employment growth slightly rose to 12% from 10%. The vast majority of

businesses in the sector (81-82%) were expecting employment to remain unchanged.

In Construction, the expectations indicate stability at a markedly low level, which remained set at -51 points, 35 points lower compared to the same period of 2016. In the second quarter of 2017, 59% of the businesses in the sector were anticipating further job losses, as once more 8% of the respondents were expecting employment growth.

At the sub-sector level, the growth of the index in Public Works (to -64 from -66 points on average) compensated for the decline in Private Construction (to -32 from -18 the balance).

In Services, the employment expectations gained ground compared to the previous quarter, while they also improved over the same period of last year. Thus, the relative balance of -6 percentage points of the previous quarter became +3 points in the quarter under review (from -6 points on average in the corresponding quarter of 2016). About 12% (from 17%) of the companies in the sector were expecting a drop in employment, with the percentage predicting an increase growing to 15% (from 11%).

At the branch level, the trend is mainly positive, with the exception of Financial Intermediaries, where the corresponding balance remained stable in the second quarter of the year.

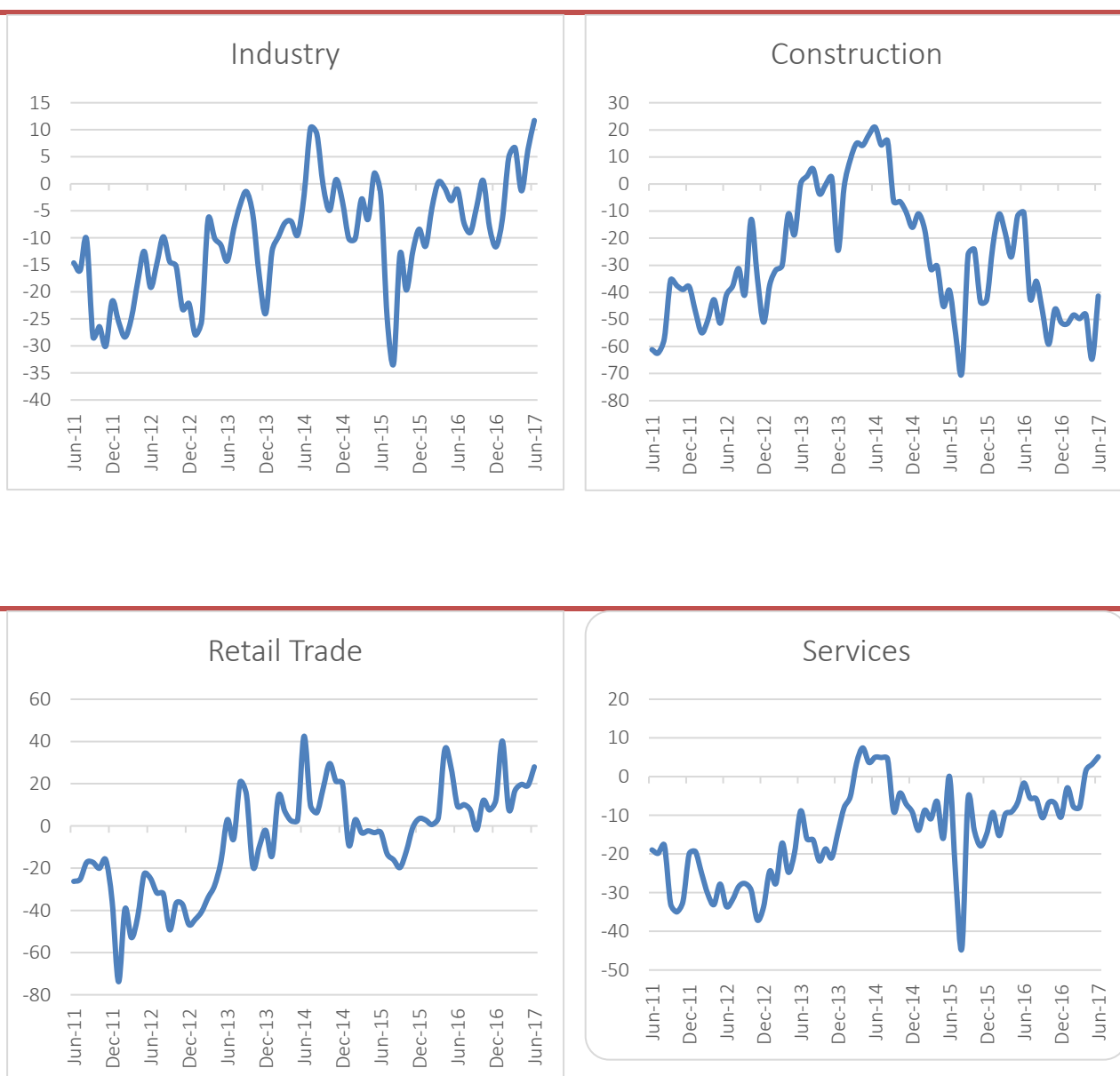
The employment outlook indicator in Retail Trade remained unchanged quarter on quarter in the second

quarter of the year, at +22 points. This performance is marginally lower compared to last year (+24 points). About 3% (from 6%) of the firms in the sector were expecting job cuts, while 25% (from 27%) were anticipating employment growth, with those who expect stability taking up 72% (from 67%) of the sample.

At the branch level, the employment expectations weakened in the second quarter of 2017 in Food-Beverages-Tobacco and Motor Vehicles-Spare Parts and strengthened in Textiles-Clothing-Footwear, Household Appliances and Department Stores.

Figure 3.15

Employment expectations (difference of positive – negative responses)



Source: IOBE

3.5 Consumer Prices

Recent Developments

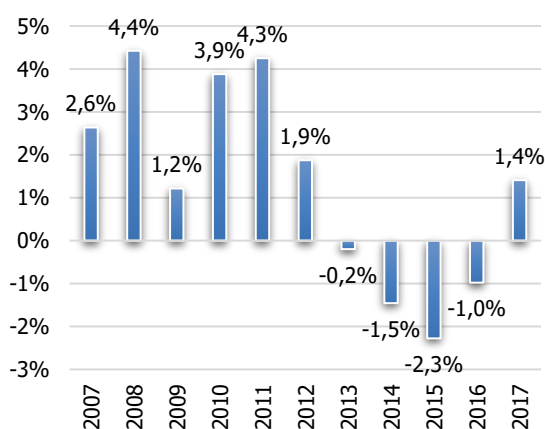
The Greek economy experienced a 1.4% inflation rate in the first five months of this year, after four years of consecutive deflation. The corresponding change at the Consumer Price Index (CPI) in 2016 was negative by 1.0%. The rise in the international oil prices, the increase in indirect taxes (oil, gas, tobacco and cigarettes) and the imposition of new taxes (fixed telephony, coffee imports) were the main drivers of the upward trend in prices since the beginning of the year.

The inflationary effects of the oil prices and the raised and new indirect taxes are reflected in the changes in individual categories of goods and services in the first five months of 2017.

The largest increase in prices was recorded in Transport (+6.8%, compared to -3.9% in 2016) and the third largest in Housing (+3.6%, from -4.6% last year), which are most affected by energy cost variations.

Figure 3.16

Average CPI changes in Greece (January - May, 2007-2017)



Source: ELSTAT, data processing IOBE

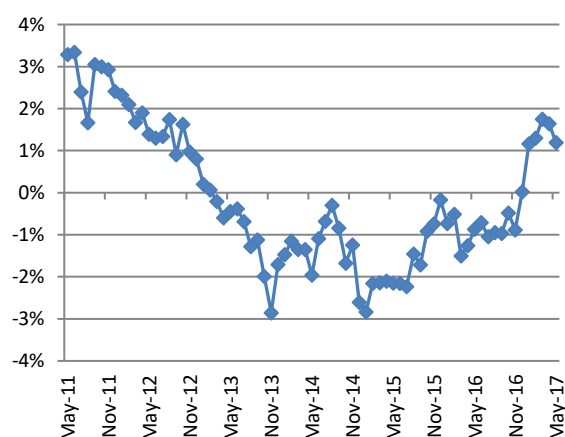
Alcoholic Beverages - Tobacco recorded the second highest rise (+4.2% against +1.3% in 2016), reflecting the increases in indirect taxes on tobacco and cigarettes since the start of this year. Telecommunications (+2.1%, from stability in 2016) and Hotels-Cafe-Restaurants (+1.7%, from 2.7% last year) followed, as a result of new taxes on landline telephony and coffee imports. The lowest price increase was reported for Food-Non-Alcoholic Beverages, probably coming from higher VAT since last July (+1.2%, from 0.3% in 2016).

Negative price changes occurred during the same period in Education, by -0.3% (from -1.3% in 2016), Recreation, by -1.4% (against -1.6% a year ago), Other Commodities, by -1.9% (against -2.3% in 2016), Health and Clothing-Footwear, 2.2% in both (from 2.8% and -2.6% respectively in 2016) and in Durables (-2.9% from -0.5% last year).

The Harmonized Index of Consumer Prices (HICP) in Greece increased in the first quarter of 2017 by 1.6%, compared with a decline of 0.3% in the same period of last year.

Figure 3.17

CPI in Greece (annual percentage change)



Source: ELSTAT, data processing IOBE

In the Euro area, HICP moved up in all countries in the first five months of 2017. Greece is ranked close to the median, in terms of its HICP change.

Greater inflation than in Greece was recorded in Estonia (+3.3%), Lithuania (+3.1%), Latvia (+3.1%), Belgium (+2.7%), Spain (+2.5%), Luxemburg (+2.5%), Austria (+2.2%), Slovenia (+1.9%), Germany (+1.8%) and Portugal (+1.7%).

Lower prices increases in comparison with Greece were observed in Italy (+1.5%), France (+1.3%), Cyprus (+1.3%), Malta (+1.2%), The Netherlands (+1.2%), Finland (+1.0%), Slovakia (+1%) and Ireland (+0.4%).

According to latest data, Producer Price Index (PPI) of the domestic and foreign markets as a whole increased by 9.1% in the first five months of the current year, in contrast to its strong decline in the same period of 2016 (-9.8%). The large fluctuation of the PPI reflects corresponding changes in the prices of energy products due to fluctuations in the price of oil, as analysed further below. The index recorded its second highest increase in the last decade for this period of the year, coming after the 2008 increase.

In greater detail, the strongest inflation in the first five months of 2017 was recorded in Energy goods excluding electricity (+43%, compared to -30% in 2016), Energy goods (+23%, versus -21% last year), Mining-Quarrying-Manufacturing (+11%, -10% a year ago). Slight positive changes were recorded, inter alia, in Intermediate Goods (capital and non-capital), Durables and lastly in Consumer Goods.

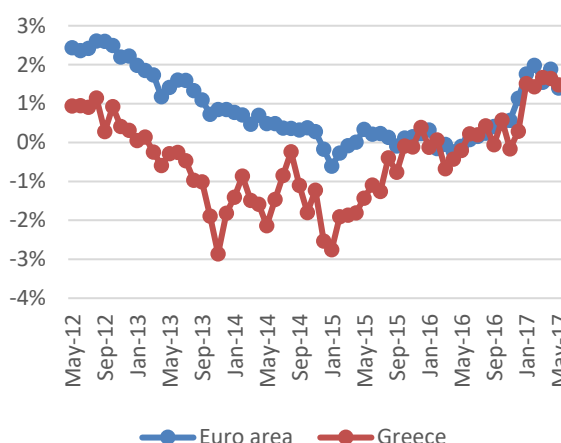
Based on the latest available data (April 2017), Greece reported the largest increase in the import price index among the Euro area countries since the beginning of the year, by 9.9%.

The index increased in all the countries in the Euro area with available data.

In greater detail, the import price index increased in the Netherlands (9.4%), Spain (8.7%), Lithuania (+7.2%), Estonia (+6.2%), Germany (+6.2%), France (+5.4%), Latvia (+5.2%), Italy and Slovenia (+4.9% both), Slovakia (+2.4%) and Denmark (2.3%).

Figure 3.18

HICP in Greece and the Euro area
(annual percentage change)

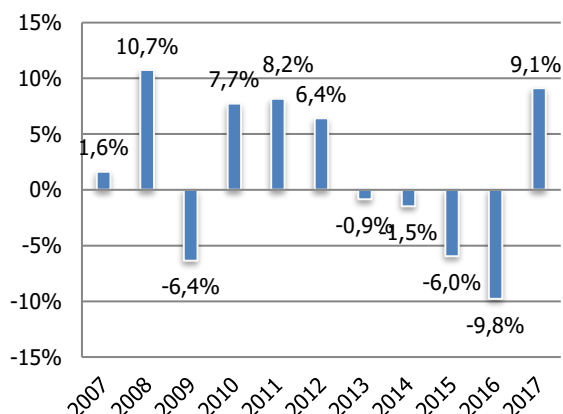


Source: Eurostat, data processing IOBE

The simultaneous, high rise in import prices came from much higher oil price compared to the corresponding period of 2016 while the differences among the countries reflect the varying degree of use of oil-based energy products.

Figure 3.19

Average change of PPI in Greece (January - May, 2007-2017)

**Source:** ELSTAT, data processing IOBE**Medium-term outlook**

The indirect tax increases, especially those on petroleum and liquefied petroleum gas, as well as the new indirect taxes (landline telephony, coffee imports), which has already been reflected in the inflation figures for the first five months of the year, will continue to affect prices in the second half of the year. Besides, almost all recent changes to indirect taxation, with the exception of heating oil, have been in force since 01/01/2017, so the price boost they cause will last throughout 2017. The rise in prices this year due to the rise in the international oil price, following the decision at the International Energy Forum to limit petroleum production last September, will probably weaken significantly in the remainder of 2017, as it has been declining steadily since the beginning of April and now hovers at about the same level as last year. The fall in oil prices is thought to come from low demand and not from the fallout between the Arab member countries of OPEC, which took place almost two months after the start of the price fall. It is therefore

likely that the oil price will continue to decline at least in the coming months, until the beginning of autumn, when the energy needs for next winter will be determined, thus weakening the inflationary pressures until then. Given the above effects, **the impact of higher and new indirect taxes will be the main cause of an increase in CPI by 1.5% in 2017, after four years of continuous reduction.**

Valuable information 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 quarter-on-quarter changes in the price expectations vary across the sectors, as the corresponding indicators in Private Construction, Industry and Services took negative values in the second quarter. In particular, quarter-on-quarter the price expectations indicator remains unchanged in Industry and Private Construction and decreased in Services and Retail Trade. Year on year, the expectations for price changes marginal strengthened in Services and Industry, remained stable in Private Construction and weakened slightly in Retail Trade. In greater detail:

In Industry, the price expectations indicator was down by 5 percentage points quarter on quarter in the second quarter, to reach -2 points, marginally higher year on year. Of the companies in the sector, 8-9% on average predicted a further fall in prices in the upcoming period, with 87% (from 79%) expecting stability and a 6% increase (from 12%).

In Retail Trade, the index for price expectations in the sector moved from +6 in the previous quarter to +3 points in the second quarter (from +16 to the corresponding quarter last year). Of the companies in the sector, 5% (from 7%) were expecting a fall in prices in the short term, while the percentage of those who forecasted price growth dropped to 8% (from 13%), with the remaining 80% of the businesses once more expecting price stability.

In sub-sectors of Retail Trade, the price expectations strengthened quarter on quarter in the second quarter of the year in Food-Alcoholic Beverages-Tobacco, Fabrics-Clothing-Footwear and Household Appliances, and weakened in Motor Vehicles-Spare Parts and Department Stores.

The average index for the anticipated change in prices in Services in the quarter in question remained broadly unchanged compared to the previous

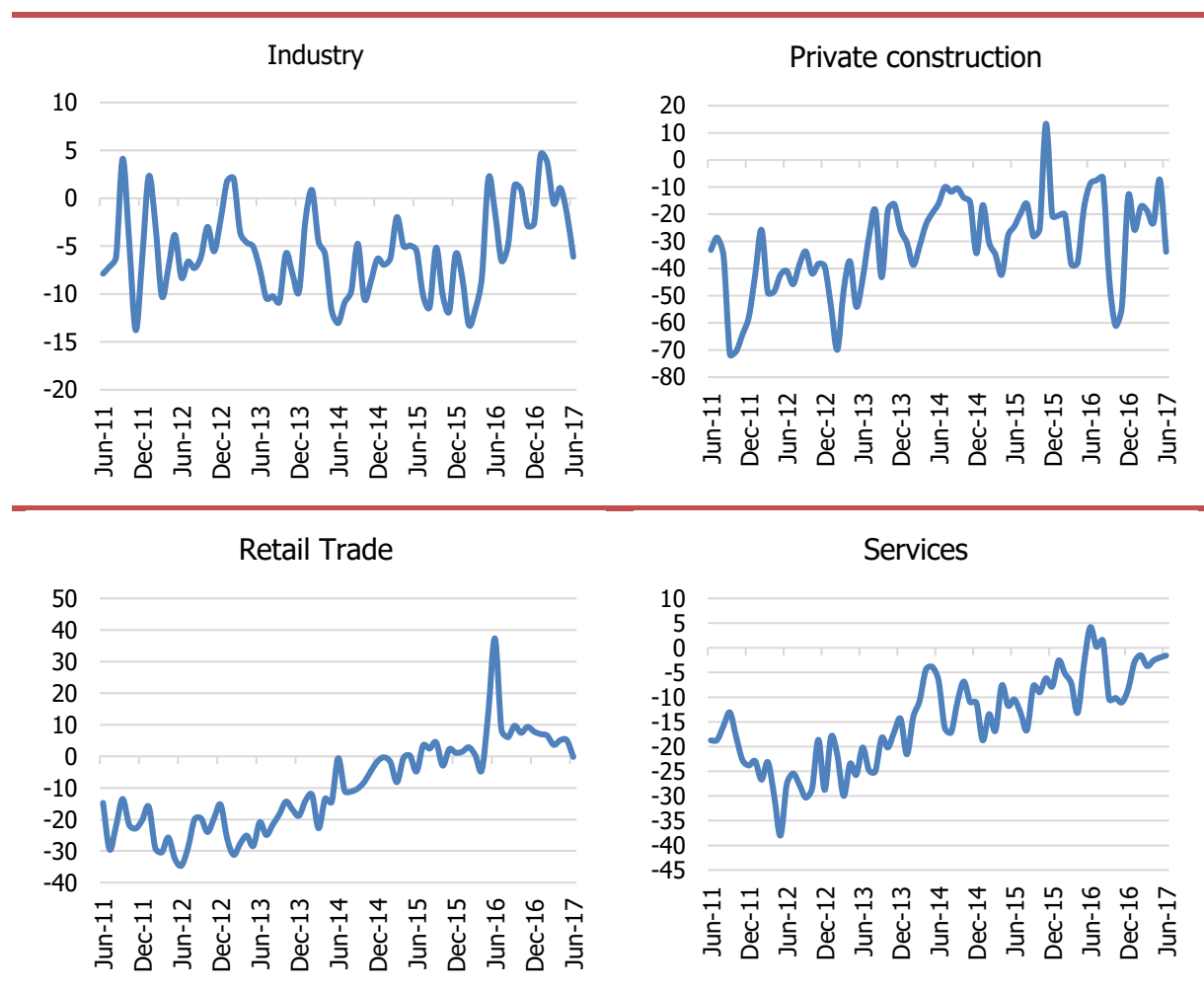
quarter, moving to -2 percentage points, at a marginally higher level than its performance last year (-4 points on average). In the current quarter, 13% (from 11%) of the companies in the sector were expecting a fall in prices and an 11% (from 9%) rise.

At the branch level, the relative index increased in Hotels-Restaurants-Travel Agencies, decreased in Information Technology and remained stable in the remaining branches.

Finally, in Private Construction, the negative balance of -21 points remained unchanged from the previous quarter and from the same period of last year as well. About 23% of the businesses in the sector were anticipating their prices to decline, while the percentage of those expecting inflation is once more only marginally higher than zero.

Figure 3.20

Price expectations (% difference between positive and negative answers)



Source: IOBE

3.6 Balance of Payments

Current Account

January-April 2017

In the first four months of 2017, the Current Account deficit fell to €3.0 billion, compared to €3.2 billion in the corresponding period of 2016. The narrowing of the deficit stemmed from an increase in the surpluses in the Services, Primary Income and Secondary

Income Accounts, which was partly offset by the surge in the trade deficit.

In particular, the deficit of the **Goods Account** totalled €6.2 billion in the first four months of 2017, as it worsened by 13.5% or €742 million, compared with a €1.1 billion reduction in 2016. Exports amounted to €9.0 billion, significantly strengthened by 18.9% (€1.4 billion),¹⁴ as the exports of fuels, ships and other goods increased. Imports stood at €15.2 billion, up by 16.6% (€2.2 billion). The

¹⁴ The figures in brackets represent an absolute change compared with the corresponding period of the previous year, unless stated otherwise.

deficit of the **Goods Account excluding fuel and ships** increased in the first four months of 2017 by 4,1%, as alongside the boost of exports by €328 million, imports increased by €520 million. A significant increase (€1.0 billion) was recorded in fuel exports, yet fuel imports increased even further (€1.7 billion), resulting in a €596 million increase in the deficit of the fuel account.

The surplus in the **Services Account** increased in the first four months of 2017 to €1.7 billion, from €1.2 billion in 2016, with a simultaneous increase in receipts and payments. Total receipts amounted to €5.1 billion, up by 19.8% (€845 million), while payments stood at €3.4 billion, up by 13.3% (€403 million). In the first four months of 2017, the revenue from tourism stood at €997 million, having slightly increased by €23 million, while the receipts from transport increased significantly by €430 million year on year to €2.7 billion. Finally, the receipts from other services increased by 38.3% (€392 million), to €1.4 billion. The payments for travel declined slightly by 3.8% to €610 million, while the payments for transport increased by 12.2% to €1.6 billion. The payments for other services increased by 25.6% to €1.2 billion.

The surplus of the **Primary Income Account** increased to €1.3 billion in the first

four months of this year, from €980 million in 2016. Revenues amounted to €3.1 billion, up by 8.7%, while payments declined by 6.4% to €1.8 billion. In greater detail, income from labour increased marginally, to €43 million, from investments increased by 14% to €1.3 billion, while other primary income (subsidies and taxes on production) increased by 4.9%, to €1.7 billion. Payments for labour income increased to €91 million, for investment income fell by 7.5% to €1.6 billion, and those for other primary income decreased by 11.7%, to €91 million.

The surplus of the **Secondary Income Account** increased to €216 million, from €32 million in 2016. Receipts totalled €948 million, from €783 million in 2016, while payments amounted to €732 million, with a slight decline compared to 2016.

Capital Account

The surplus of the **Capital Account**¹⁵ stood at €233 million, from €675 million in the same period of 2016. Receipts declined significantly by €480 million, while payments decreased by €37 million.

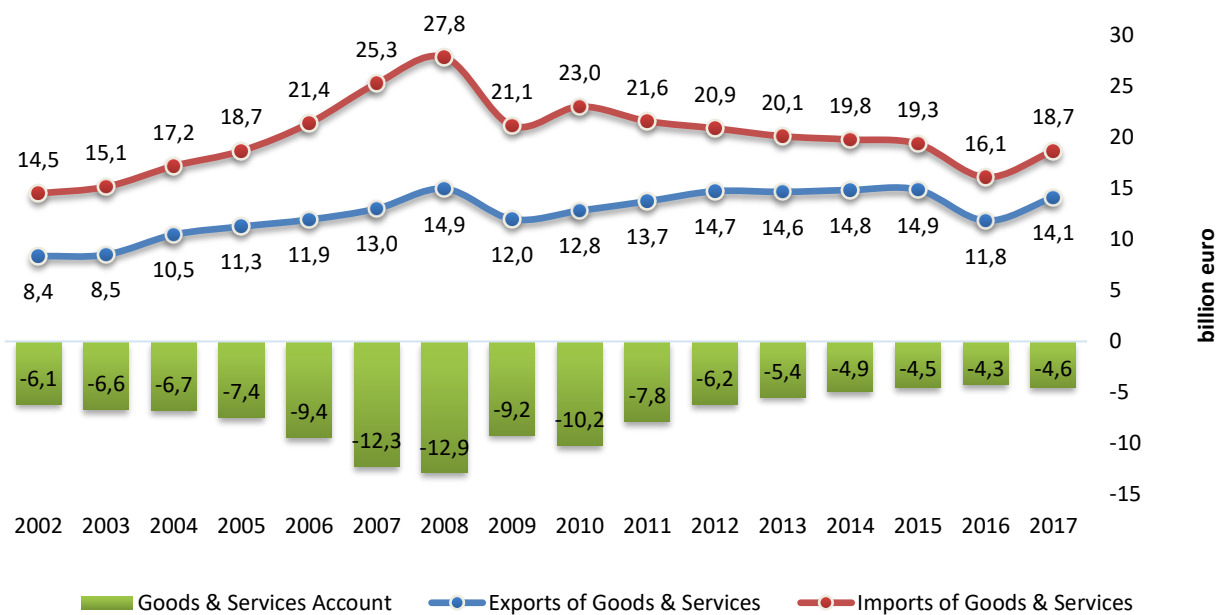
Finally, the **Current and Capital Account**, indicative of an economy's position as a lender or a borrower with respect to the rest of the world, recorded a deficit of €2.8 billion, compared with a deficit of €2.6 billion in 2016.

¹⁵ 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

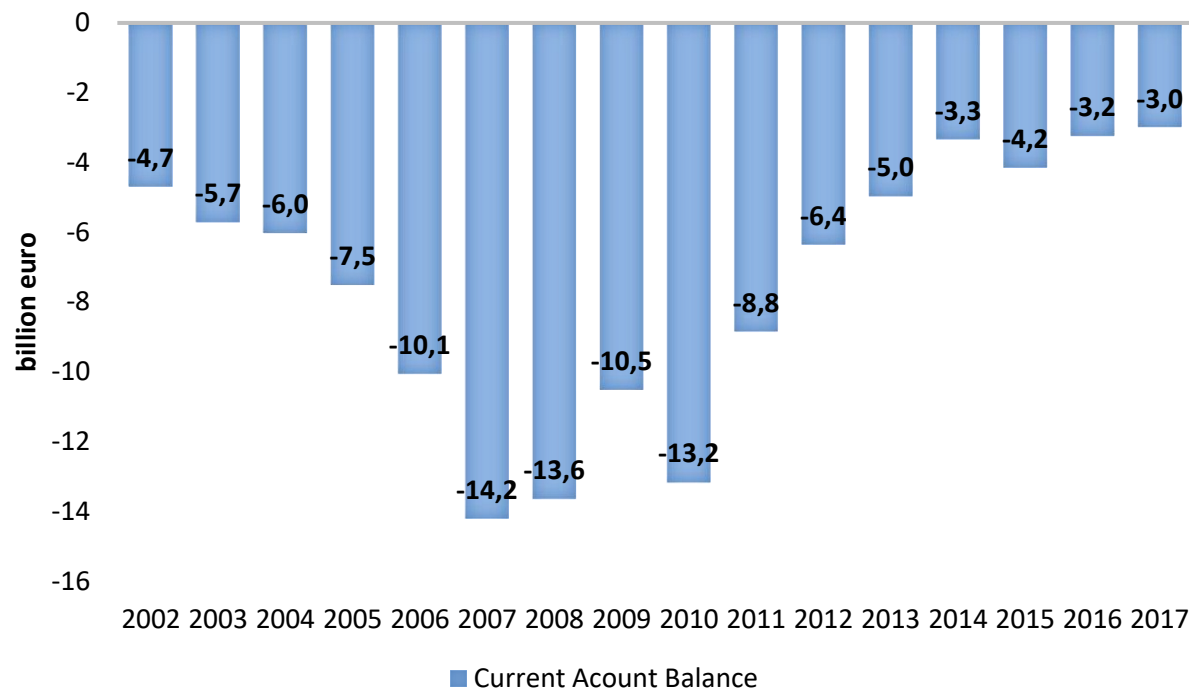
EU to the General Government (receipts from the Structural Funds – excluding the European Social Fund - and the Cohesion Fund under the Community Support Framework).

Figure 3.21

Imports-Exports of Goods and Services (January – April) 2002-2017

**Source:** Bank of Greece – Data processing IOBE**Figure 3.22**

Current Account (January – April) 2002-2017

**Source:** Bank of Greece – Data processing IOBE

Financial Account

The deficit of the **Financial Account** reached €2.6 billion in the first four months this year, compared to a deficit of €1.8 billion in 2016.

In greater detail, the net receivables of the residents from **direct investment** abroad increased by €908 million, while the net liabilities to non-residents increased significantly by €1.3 billion.

In the category of **portfolio investments**, the claims of the residents to non-residents increased by €297 million, as according to the Bank of Greece, the placements of residents in financial derivatives abroad increased. The liabilities to non-residents declined by €1.3 billion, mainly driven by holdings of Greek sovereign bonds and treasury bills by non-residents.

In the category of **other investments**, the claims of residents to non-residents declined by €3.6 billion in 2017, with a net decrease of €1.9 billion in the deposits and repos of residents (credit institutions and institutional investors) abroad. The liabilities declined by €108 million, mainly reflecting the decline in public and private sector debt obligations to non-residents by €2.8 billion.

Finally, the **Reserve Assets** of the country totalled €6.5 billion at the end of April 2017, from €6.8 billion in 2016.

Assessment

The fragmentation of the production structure of the Greek economy has been

highlighted in many studies, as the greatest part of production is undertaken by companies with a small number of workers. The small size of the companies may contribute to flexibility in response to changes in the market conditions. However, it may hinder exports and the adoption of innovation, as micro-enterprises often do not have the resources to create or adopt innovative solutions, but also to promote their products abroad, tasks that require financial and human resources.

In Greece, the exports of the manufacturing industries as a percentage of GDP are at a lower level than in the EU, as shown in Figure 3.24. In particular, Manufacturing exports accounted for 13.3% of GDP in 2014, compared with 29.7% in the EU. However, note that the share increased by 5.4 percentage points in Greece between 2010 and 2014, against an increase in the same period by 2.5 percentage points in the EU. The continuous improvement recorded in Greece, which is probably due to the structural reforms implemented between 2010 and 2014 to boost the export performance and the competitiveness of the economy, highlights the existence of a positive trend, which is likely to continue in the coming years. However, its intensity may not be sufficient to cover the existing lag in the export performance of Manufacturing between Greece and the EU, which remains significant.

In any case, there are a number of factors in the current period that make the export activity of the Greek manufacturing companies lag behind the EU average.

Possibly, one of the factors that keeps the export performance of Greek manufacturing at a comparatively low level is the smaller average size of exporting firms for the reasons outlined above at the beginning of this subsection. Other factors may include the difficulty of withdrawing liquidity from the banking system, the delays in refunding VAT on exported products, and the high taxation of businesses in Greece. The effect of business size on export activity of Greek manufacturing enterprises is examined below.

The breakdown of exports per manufacturing sector, based on the composition of enterprises by number of employees, is shown in figures 3.25-3.26. The enterprises were divided into very small, with up to 10 employees, and large, with more than 250 employees in Greece and the EU in 2014. There is also data for Greece for 2015, but without significant difference compared with 2014. The data show that in Greece, in almost all manufacturing sectors, the share of micro-enterprises in the exports of each sector is higher than in the EU. In Beverages (11) and Repair and Installation of Machinery and Equipment (33), Greece has the highest export share of micro-enterprises, yet these sectors also have a relatively small share of total manufacturing. Clothing (14) comes next, with 23.3% of the industry's exports coming from very small businesses. In the major branches of

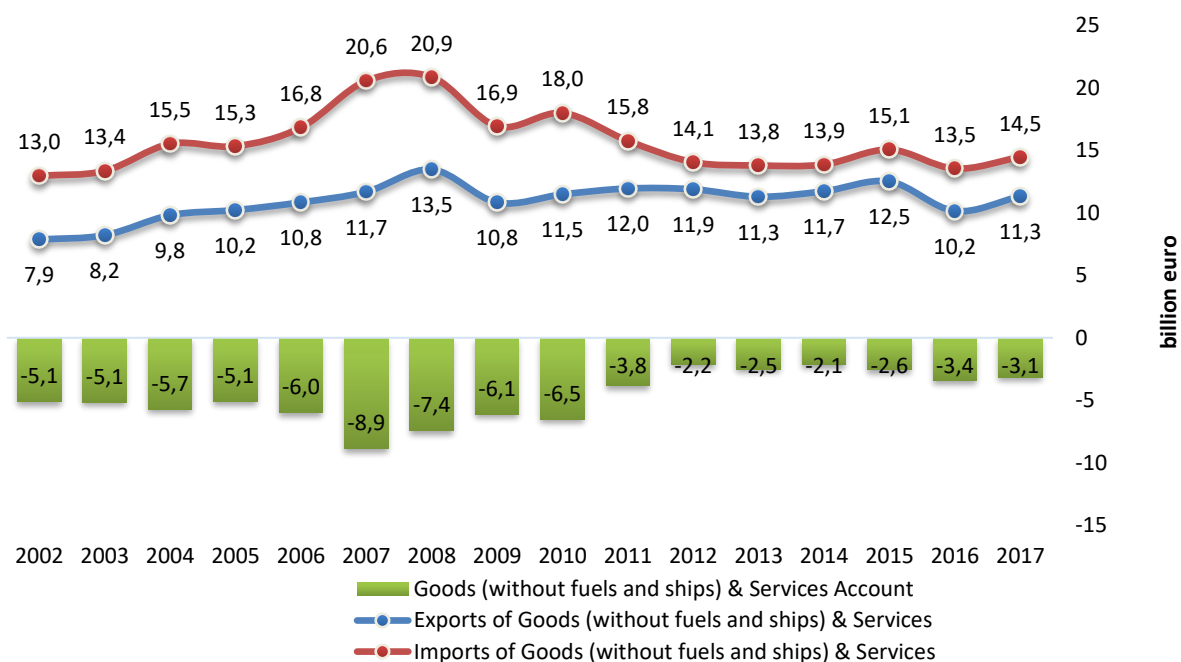
Manufacturing in terms of Greek exports, such as Coke and Petroleum Refining (19), Basic Metals (24), Food (10) and Metal Products (25), the share of exports of micro-enterprises are under 3%, with the exception of the Food sector, where the exports of micro-enterprises account for 8% of the total exports of the industry, compared with 2.6% in the EU28 average.

Meanwhile, the share of exports from large enterprises with more than 250 employees is lower in Greece in all Manufacturing sectors except for Coke and Petroleum Refining (19), with a 97.6% share, and Manufacturing of Metal Products (25) with a share of 65.4%, compared with 40.9% in the EU. In the other sectors, the share of large enterprises in exports is significantly higher on average in the EU. The above confirms that fragmentation does not favour exports, as in Greece, in the sectors with the highest share of exports in Manufacturing, relatively large enterprises account for the bulk of exports, while compared to the EU, the export activity of most manufacturing sectors in Greece relies on small businesses.

Certainly, as mentioned above, the relatively weak export performance of Manufacturing in Greece may also be due to other factors (difficulties in obtaining liquidity from the banking system, delays in VAT refunds, high direct taxation of businesses).

Figure 3.23

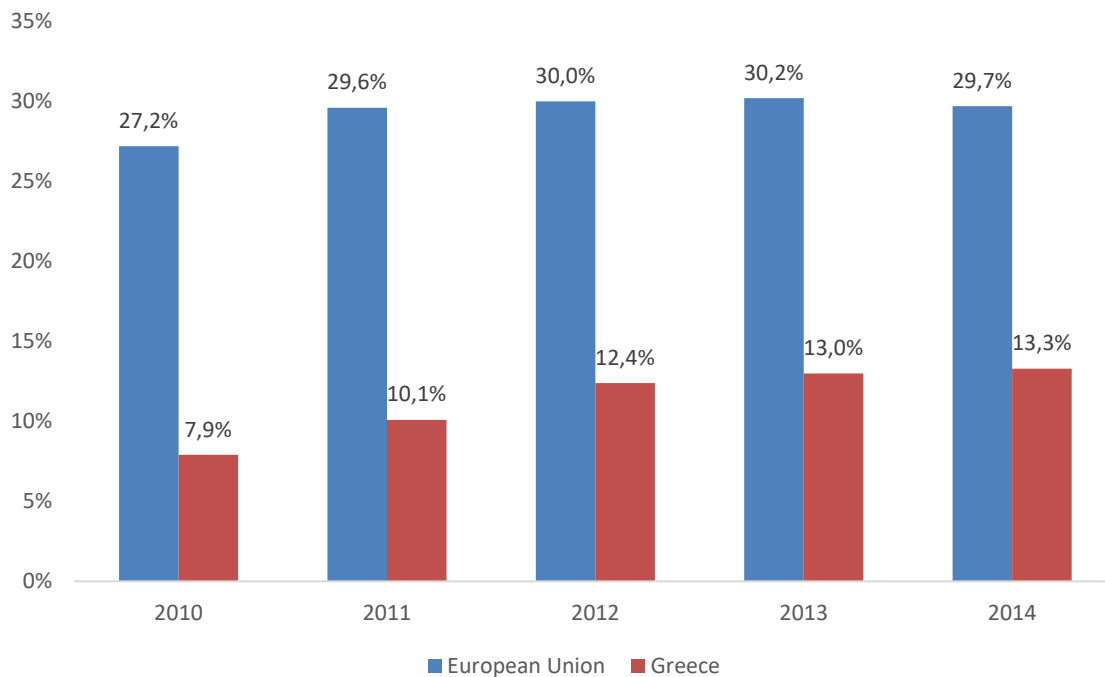
Imports-Exports of Goods and Services excluding fuels and ships (January – April) 2002-2017



Source: Bank of Greece – Data Processing IOBE

Figure 3.24

Exports share of Manufacturing as % of GDP 2010-2014



Source: Eurostat- Data Processing IOBE

Figure 3.25

Export share by industry, by size of enterprises (number of employees), micro enterprises (2014)

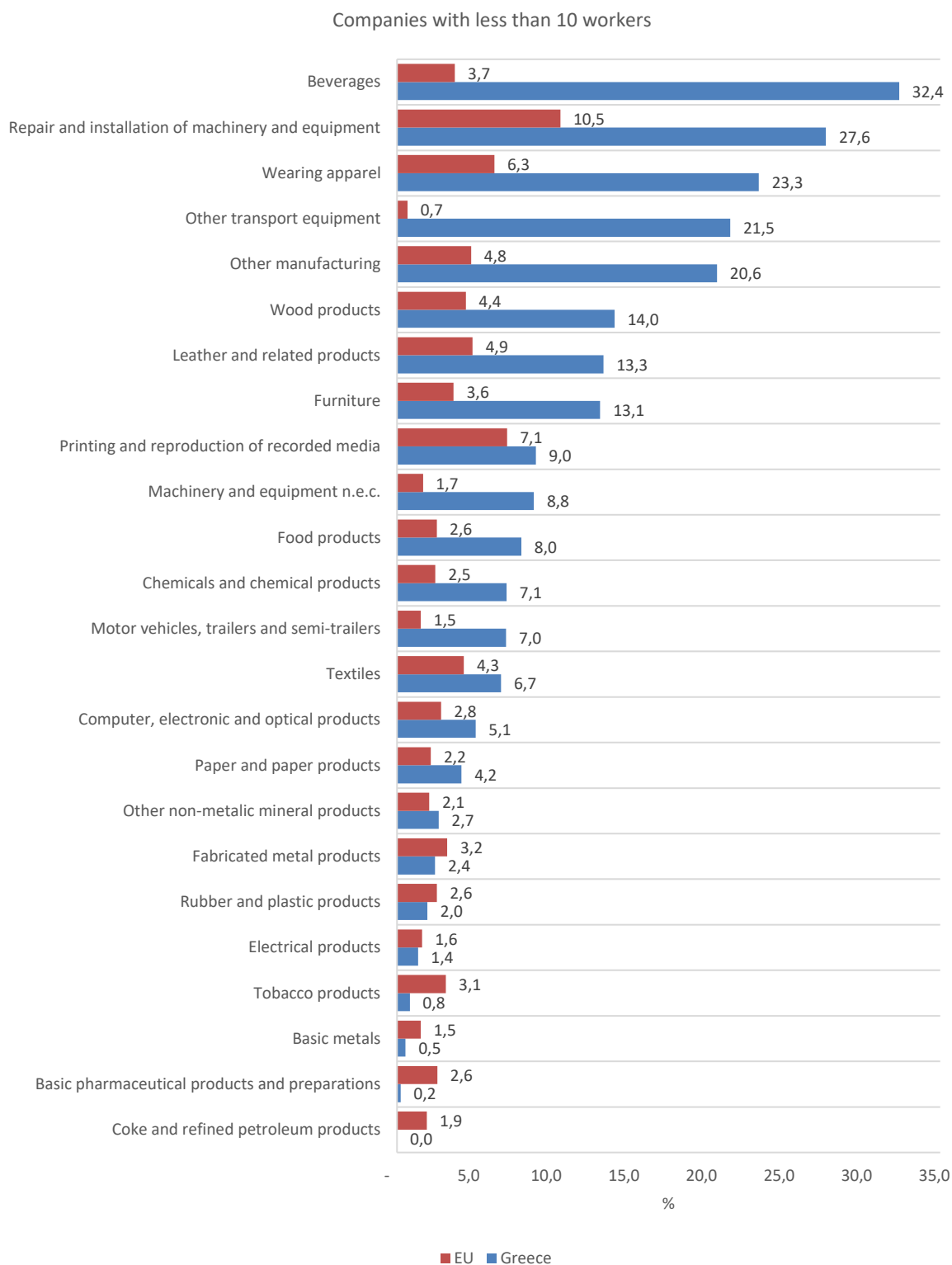
**Source:** Eurostat- Data Processing IOBE

Figure 3.26

Export share by industry, by business size (number of employees), large enterprises (2014)

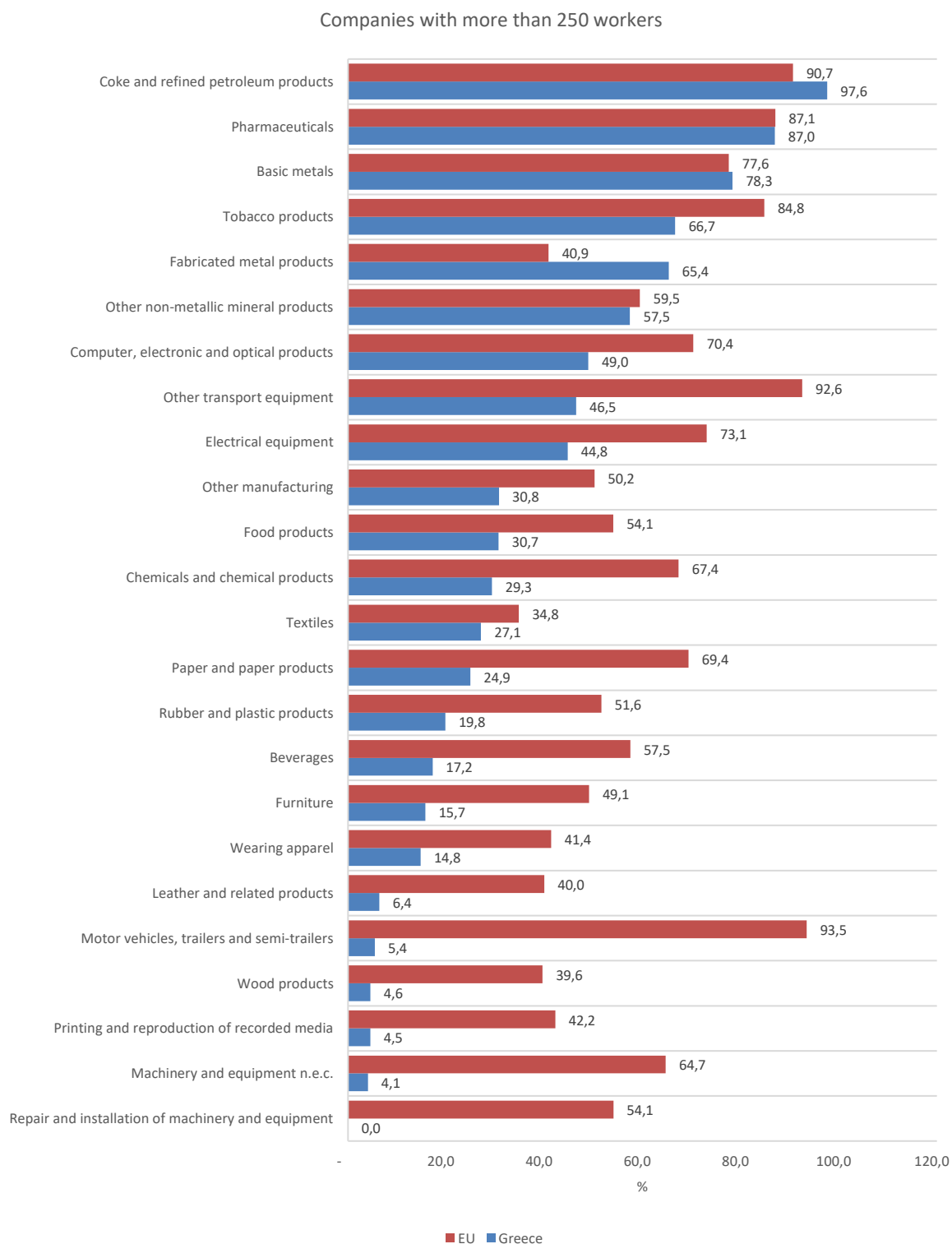
**Source:** Eurostat- Data Processing IOBE

Table 3.11 Balance of Payments in million €

| January - April | | | | April | | | |
|-----------------|--|----------|----------|----------|----------|----------|----------|
| | | 2015 | 2016 | 2017 | 2015 | 2016 | 2017 |
| I | CURRENT ACCOUNT (I.A + I.B + I.C + I.D) | -4,156.9 | -3,244.1 | -2,993.5 | -1,014.3 | -872.2 | -461.7 |
| | GOODS AND SERVICES ACCOUNT (I.A + I.B) | -4,496.5 | -4,256.4 | -4,557.0 | -806.8 | -854.9 | -561.9 |
| I.A | GOODS ACCOUNT (I.A.1 - I.A.2) | -6,639.1 | -5,493.7 | -6,235.6 | -1,652.2 | -1,376.5 | -1,180.3 |
| | Oil balance | -1,737.3 | -727.2 | -1,322.8 | -532.1 | -168.7 | -24.6 |
| | Trade balance excluding oil | -4,901.8 | -4,766.5 | -4,912.8 | -1,120.1 | -1,207.8 | -1,155.7 |
| | Ships balance | -203.1 | -133.7 | -88.0 | -9.8 | -46.9 | -34.0 |
| | Trade balance excluding ships | -6,436.0 | -5,360.0 | -6,147.6 | -1,642.4 | -1,329.6 | -1,146.3 |
| | Trade balance excluding oil and ships | -4,698.7 | -4,632.8 | -4,824.8 | -1,110.3 | -1,160.9 | -1,121.7 |
| I.A.1 | Exports | 8,235.0 | 7,553.0 | 8,980.7 | 2,150.0 | 2,011.6 | 2,269.6 |
| | Oil | 2,220.8 | 1,643.8 | 2,709.6 | 549.4 | 466.4 | 735.3 |
| | Ships (sales) | 123.0 | 26.7 | 60.8 | 50.0 | 5.5 | 3.9 |
| | Goods excluding oil and ships | 5,891.1 | 5,882.5 | 6,210.4 | 1,550.7 | 1,539.7 | 1,530.4 |
| I.A.2 | Imports | 14,874.1 | 13,046.7 | 15,216.3 | 3,802.2 | 3,388.1 | 3,449.9 |
| | Oil | 3,958.1 | 2,371.0 | 4,032.3 | 1,081.5 | 635.1 | 759.9 |
| | Ships (buying) | 326.2 | 160.4 | 148.8 | 59.8 | 52.4 | 37.9 |
| | Goods excluding oil and ships | 10,589.8 | 10,515.3 | 11,035.2 | 2,661.0 | 2,700.7 | 2,652.1 |
| I.B | SERVICES ACCOUNT (I.B.1-I.B.2) | 2,142.6 | 1,237.2 | 1,678.5 | 845.4 | 521.7 | 618.3 |
| I.B.1 | Receipts | 6,617.2 | 4,270.8 | 5,115.7 | 1,924.1 | 1,261.2 | 1,506.6 |
| | Travel | 992.7 | 973.6 | 996.9 | 476.8 | 434.5 | 483.7 |
| | Transportation | 4,201.0 | 2,273.1 | 2,702.9 | 1,098.6 | 564.6 | 688.2 |
| | Other services | 1,423.5 | 1,024.1 | 1,416.0 | 348.8 | 262.1 | 334.7 |
| I.B.2 | Payments | 4,474.5 | 3,033.6 | 3,437.2 | 1,078.8 | 739.6 | 888.2 |
| | Travel | 602.6 | 634.0 | 609.7 | 166.1 | 171.3 | 236.6 |
| | Transportation | 2,294.0 | 1,404.7 | 1,577.4 | 585.8 | 360.9 | 362.4 |
| | Other services | 1,577.9 | 994.9 | 1,250.1 | 326.8 | 207.3 | 289.2 |
| I.C | PRIMARY INCOME ACCOUNT (I.C.1-I.C.2) | 541.6 | 980.0 | 1,347.6 | -87.5 | 32.3 | 208.7 |
| I.C.1 | Receipts | 3,341.1 | 2,866.4 | 3,113.9 | 430.0 | 352.1 | 551.0 |
| | From work (wages, compensation) | 64.9 | 39.5 | 42.5 | 18.8 | 12.7 | 12.6 |
| | From investments (interest, dividends, profit) | 1,476.2 | 1,168.2 | 1,331.4 | 358.3 | 286.1 | 474.2 |
| | Other primary income | 1,800.0 | 1,658.7 | 1,739.9 | 52.9 | 53.3 | 64.2 |
| I.C.2 | Payments | 2,799.5 | 1,886.3 | 1,766.2 | 517.5 | 319.8 | 342.3 |
| | From work (wages, compensation) | 205.7 | 72.9 | 91.4 | 45.8 | 18.8 | 23.1 |
| | From investments (interest, dividends, profit) | 2,451.9 | 1,710.9 | 1,583.4 | 446.1 | 285.6 | 293.4 |
| | Other primary income | 141.9 | 102.6 | 91.4 | 25.7 | 15.5 | 25.7 |
| I.D | SECONDARY INCOME ACCOUNT (I.D.1-I.D.2) | -202.0 | 32.3 | 215.9 | -120.0 | -49.6 | -108.5 |
| I.D.1 | Receipts | 933.6 | 782.8 | 947.8 | 100.9 | 79.3 | 94.8 |
| | General government | 600.0 | 552.9 | 580.0 | 17.6 | 17.8 | 21.4 |
| | Other sectors | 333.6 | 229.9 | 367.8 | 83.2 | 61.5 | 73.4 |
| I.D.2 | Payments | 1,135.6 | 750.5 | 731.9 | 220.9 | 129.0 | 203.3 |
| | General government | 804.2 | 581.2 | 517.9 | 145.4 | 87.6 | 145.8 |
| | Other sectors | 331.4 | 169.3 | 214.0 | 75.5 | 41.4 | 57.5 |
| II | CAPITAL ACCOUNT (II.1-II.2) | 461.5 | 675.5 | 233.0 | -18.8 | -13.4 | -2.7 |
| II.1 | Receipts | 588.3 | 765.7 | 286.1 | 5.4 | 4.4 | 4.8 |
| | General government | 569.0 | 751.8 | 268.2 | 0.6 | 0.4 | 0.4 |
| | Other sectors | 19.4 | 13.9 | 17.9 | 4.9 | 4.0 | 4.3 |
| II.2 | Payments | 126.8 | 90.2 | 53.1 | 24.3 | 17.8 | 7.4 |
| | General government | 2.7 | 0.6 | 1.1 | 0.6 | 0.1 | 0.4 |
| | Other sectors | 124.1 | 89.6 | 52.0 | 23.6 | 17.7 | 7.0 |
| | BALANCE OF CURRENT AND CAPITAL ACCOUNT (I+II) | -3,695.3 | -2,568.6 | -2,760.5 | -1,033.1 | -885.6 | -464.3 |
| III | FINANCIAL ACCOUNT (III.A+III.B+III.C+III.D) | -3,012.7 | -1,803.2 | -2,619.9 | -862.9 | -610.2 | -869.5 |
| III.A | DIRECT INVESTMENT* | 363.3 | 372.2 | -434.1 | 72.7 | -5.9 | -169.0 |
| | Assets | 617.4 | 770.9 | 907.9 | 162.6 | 100.1 | 95.1 |
| | Liabilities | 254.2 | 398.8 | 1,341.9 | 89.8 | 106.0 | 264.1 |
| III.B | PORTFOLIO INVESTMENT** | -3,177.5 | 2,924.4 | 1,573.5 | 209.8 | 541.0 | 300.2 |
| | Assets | -6,008.3 | 3,011.6 | 297.2 | -138.2 | 537.1 | -750.7 |
| | Liabilities | -2,830.9 | 87.1 | -1,276.3 | -348.0 | -3.9 | -1,050.9 |
| III.C | OTHER INVESTMENT* | -554.5 | -5,904.3 | -3,480.3 | -1,126.4 | -1,176.3 | -1,026.7 |
| | Assets | 16,295.6 | -2,412.9 | -3,588.4 | 2,509.0 | -451.6 | -1,080.9 |
| | Liabilities | 16,850.2 | 3,491.3 | -108.1 | 3,635.4 | 724.8 | -54.2 |
| | (Loans of general government) | -3,661.3 | -2,195.0 | -2,462.6 | -482.7 | -462.6 | -227.9 |
| III.D | CHANGE IN RESERVE ASSETS*** | 356.0 | 804.5 | -279.0 | -19.0 | 31.0 | 26.0 |
| IV | BALANCE ITEMS (I + II + IV + V = 0) | 682.6 | 765.4 | 140.6 | 170.2 | 275.4 | -405.2 |
| | RESERVE ASSETS (STOCK)*** | | | | 5,877 | 6,783 | 6,447 |

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. EFFECTS OF REFORMS ON SECTORS PRODUCING TRADABLE GOODS AND SERVICES¹⁶

4.1 Introduction

The crisis of the Greek economy has highlighted not only the chronic fiscal imbalances of the economy, the high fiscal deficit and the large public debt, but also the significant distortions of its production structure. These distortions mainly come from regulatory constraints on the operation of sectors producing goods and services, as well as from the active participation of the public sector in production.

When the first agreement with the official lenders of the Greek state was drawn in June 2010, the emphasis was placed on enforcing front-end fiscal adjustment measures. However, structural changes in product and service sectors and in the labour market were also introduced, with the main aim to change the growth model of the domestic economy through the transfer of production factors from sectors that produce goods and services for the domestic market to sectors and activities supplying internationally tradable output. Yet, to achieve this goal, the legalisation of the reforms is not sufficient – their implementation should be monitored and their impact assessed.

In this regard, the main purpose of the IOBE study presented in the fourth chapter of this quarterly report is to assess the effects of the reforms that have taken place in specific sectors of internationally traded goods and services in terms of achieved technical efficiency. In addition, the study examines the effect on the technical efficiency of these sectors of "horizontal" reforms that affect many or all sectors of the Greek economy, controlling for the effects of company-level factors and the macroeconomic environment.

Note that the term 'technical efficiency' refers to the ability of an enterprise to produce the maximum possible level of output, given the factors of production and the level of technology at its disposal.

4.2 Sectors of internationally tradable goods and services and relevant reforms

The study examined the impact of structural changes, sectoral and horizontal, on technical efficiency, controlling for the characteristics of each enterprise and the wider macroeconomic environment, in the following sectors:

Electricity Production and Distribution: The reforms in this sector began in the late 1990s - early 2000s and continued until 2016. The reforms include laws on the licencing of private companies for the production and sale of electricity in Greece and the establishment of the Regulatory Authority for Energy (Law 2773/1999 with its subsequent amendments),

¹⁶ The study was conducted by IOBE on behalf of the Bank of Greece. It is available in Greek at the IOBE website: http://iobe.gr/research_dtl.asp?RID=146.

for the establishment of the Hellenic Transmission System Operator (P.D. 328/2000), the Independent Power Transmission Operator ADMIE and the electricity market operator LAGIE (Law 4001/2011) and for the reduction of the share of the incumbent Public Power Company (PPC) in the retail market below 50% until 2019 (N. 4389/2016).

Road Freight Transport: The major reform was introduced with Law 3887/2010, which ensured free access to the road haulage operator profession under certain conditions (qualitative and financial), deregulated the number of licensed Public Utility Vehicle (PUV) licenses and abolished the administrative setting of limits on fares.

Road Passenger Transport: The main reform was introduced with Law 4002/2011, which abolished the mandate of the administrative authorities to determine the number of tourist buses. However, restrictions are still in place as the tourist buses are not allowed to take passengers at intermediate stops, unlike the intercity bus companies KTEL which can also provide tourist services, if tourist buses do not operate in their area.

Cruise-Yacht Services: Law 4072/2011 extended the right to carry out cruise ships to third country vessels, while significant changes were made to the provisions concerning the crew of the sailing vessel, which are now less restrictive.

Gambling: The most important changes in the operation of the sector concern licencing, certifications, supervision and control of the conduct and exploitation of games (Law 4002/2011). Additionally, 33% of OPAP shares were sold to Emma Delta Hellenic Holdings Limited in November 2013. Finally, the concession for betting on horse races was awarded to the company Horse Races SA for 20 years with Law 4338/2015.

4.3 «Horizontal» reforms

As mentioned in the introduction, the study also assessed the impact of "horizontal" reforms, which concern many or all sectors of the Greek economy. The most important of these are considered to relate to the functioning of the labour market and the process of founding businesses.

In the **labour market**, the most important reforms since 2010 concern the prioritising of business-level contracts over sectoral and professional collective bargaining agreements (Law 3889/2010), the introduction of contracts for 18-25 years old with 20% lower minimum wage (Law 3986/2011), the reduction of the minimum wage by 22% for employees aged over 25 and by 32% for younger employees (Law 4046/2012), and the reduction of the compensation in case of dismissal (Law 4093/2012).

With regard to the **start-up of businesses**, Law 3853/2010 provided the possibility to establish a company through a one-stop shop, while Law 4072/2012 introduced a new legal

form, the Private Capital Company (PCC), which is much easier and quicker establish, as it has a minimum required initial capital of €1.

4.4 Technical efficiency assessment model, variables and data

As regards the econometric specialisation of the model used in the study, a Stochastic Production Frontier model, where the production function follows the Translog Production Function, was selected among the alternative models developed in the bibliography. With this specialisation, the production of each business was assumed to be a function of two inputs, capital and labour, and the time trend. Moreover, the quantity of the production factors and the technology used by the company were taken as given.

The **model** has the following algebraic form:

$$y_{it} = \alpha + w_i + x_{it}\beta + v_{it} - u_{it}(z_{it}\delta)$$

where y_{it} is the logarithm of the output of enterprise i in period t , α is a common fixed term, w_i a constant for each production unit, x_{it} a vector of the logarithm of the production factors as independent variables, β a vector of the coefficients of the independent variables, v_{it} a random error representing the variation in production due to factors outside the control of the production units (for example strikes, weather, etc.), errors in the estimation and specification of the model, u_{it} a non-negative random variable representing the technical inefficiency of the production unit, which is a function of exogenous¹⁷ variables concerning each company, sectoral reforms, "horizontal" reforms and the macroeconomic environment, z_{it} a vector of exogenous variables and δ a vector of coefficients of the exogenous variables.

The **exogenous variables** used to interpret the trend of technical efficiency include variables related to sectoral structural reforms, variables related to "horizontal" reforms (labour market flexibility, facilitation of start-ups), variables related to the characteristics of each enterprise (age, export activity, facility location) and variables related to the macroeconomic environment in Greece (recession, rate of change of credit).

The **data** which were used to estimate the Stochastic Production Frontier model, came mainly from the database of Infobank - Hellastat SA and from ICAP SA, as well as from the OECD database. The sample unbalanced panel data (cross-section and time series) on 601 enterprises, active between 2001 and 2014 in the above sectors.

¹⁷ The variables that are not inputs or outputs of the production process are defined as exogenous in the model.

4.5 Results from the econometric estimation

Starting from the variables which capture the impact of **sectoral reforms**, the econometric estimation showed that the reforms that took place in sectors producing internationally traded goods and services have exerted a variety of effects.

In particular, the results in sectors Cruise-Yacht Services and Gambling were statistically insignificant. In the Cruise-Yacht Services, this effect may be due to the fact that the reforms mainly facilitated the foreign cruise ship traffic in Greece and less the establishment of new businesses in the domestic sector. In the case of the Gambling industry, the effect may be due to the fact that the reforms have not yet matured to exert positive effects on efficiency as they took place in 2011-2013, while the time horizon of the study only extends to 2014.

In Road Freight Transport, the coefficient on the basic variable representing structural changes was also statistically insignificant. However, using an alternative measure for the reforms in this sector, derived from the OECD database,¹⁸ it appears that the decrease in the degree of market regulation in this sector contributed to the strengthening of its technical efficiency. *That is, the deregulation of the mode of operation has allowed the production units to increase their output by using given production factors and a given level of technology, compared with the period when the market was not deregulated.*

In Electricity Generation and Distribution, the estimated impact of sectoral reforms on its effectiveness was negative. This effect may be partly due to the extensive reduction of the feed-in tariffs for photovoltaic power plants and other categories of renewable energy sources a few years ago, which has led many businesses undertaking these activities to have a marginal cost of capital higher than the marginal revenue (price), rendering their production process ineffective. The use of an alternative variable for structural changes from the OECD database¹⁹ has given statistically insignificant results.

Finally, the structural changes that have taken place in Road Passenger Transport have influenced positively the technical efficiency of its companies.

Moving on to the «**horizontal**» reforms, their effect on technical efficiency was statistically significant in some of the examined sectors. In the sectors where the effect is statistically significant, the conclusion is that the labour market reforms are conducive to the efficient operation of the enterprises. However, the statistically significant effects of the start-up facilitation reform vary.

The **deregulation of the labour market** appears to have a positive effect on the efficiency in the sectors Road Passenger Transport, Road Freight Transport and Electricity Production-

¹⁸ This variable measures the extent to which this sector is regulated in Greece.

¹⁹ As in the case of Road Freight Transport, this variable measures the extent to which this sector is regulated in Greece.

Distribution. That said, in Cruise-Yacht Services and Gambling the result was statistically insignificant.

However, when this variable was replaced by two alternative measures, coming from the OECD database, the results changed. The first of these measures the degree of regulation of the labour market with regard to permanent contracts, while the second focuses on temporary contracts.

The changes in the legal framework for permanent employment resulted in statistically significant results only in the Road Freight Sector. The result for this variable has shown that a reduction in the degree of labour market regulation in relation to these employment contracts increases the efficiency of the industry.

The impact of changes to temporary employment regulations is statistically significant in only two sectors. In Cruise-Yacht Services, the relaxation of the labour market regulation in relation to these employment contracts has an impact on the level of technical efficiency of its companies. In many cases, the companies operating in the sector are operating through subsidiaries abroad, while most crew members are of various nationalities, seasonally employed, with employment contracts governed by foreign, more flexible legal terms than in Greece. The easing of the domestic labour market regulations as regards temporary employment has perhaps made it affordable to cover part of the crew requirements by recruiting seasonal workers from Greece without any loss of business efficiency.

In Road Freight Transport, a reduction in the degree of regulation of the labour market in terms of temporary employment was estimated to limit the efficiency of its operations. Taking also into account the opposite effect of the variable reflecting the regulation of the labour market in relation to the permanent employment regime, the overall impact of the labour market reforms on efficiency is positive, as the coefficient of the first variable is much higher than the coefficient of the second variable.

Regarding the introduction of the Private Capital Company form, the result was statistically insignificant in the case of Electricity Generation and Distribution, probably because its companies must have the legal form of Société Anonyme or limited companies, with a share capital of at least €600,000 or €60,000 respectively (Law 4001/2011), and not the legal form of a Private Capital Company. In the case of Road Passenger Transport, facilitating start-ups was found to have a negative effect on technical efficiency, perhaps because, while allowing new companies to enter the industry, the decline in activity that followed - particularly in the years 2012-2013 - has negatively affected the effectiveness of all its businesses. In contrast, this reform has strengthened the effectiveness of Road Freight Transport, probably because it freed up resources that could be used for the production purposes of the new businesses, improving their technical efficiency.

No estimates were made with this variable for Cruise-Yacht Services and Gambling. In the first of these sectors, the companies usually opt for the legal form of Société Anonyme, due to the requirements of fixed capital for their establishment and operation, and the business risk that they undertake. In the second, the start-up of a gambling business depends mainly on the granting of authorisation by the authorities and not on the ease of the relevant procedures and on the minimum required capital.

Regarding the variables relating to the companies and the economic environment in which they operate, **age** seems to affect the efficiency of enterprises in all the sectors under examination, except for Cruise-Yacht Services, where its effect was statistically insignificant. As a company's years of operation grow, it usually gains more experience in its production and operation, and acquires better knowledge of the characteristics and peculiarities of the market in which it operates. Thus, it is able to adapt better its output to changes in demand, technological progress, and developments at the industry and the economy levels.

Export activity appears to exert a negative impact on the technical efficiency of the Electricity Generation and Distribution sector. The counterintuitive effect of exports is probably due to an inaccurate approximation of the export activity of the companies in the sample, as it was made with a dummy variable rather than with a measure that captures the absolute amount of exports or their change. In the case of Road Freight Transport, the result was statistically insignificant, while no estimations of this effect were performed for the other three sectors, as in two of them²⁰ no company reported any export activity between 2001 and 2014 and in one of them²¹ only one company had export activity during that period.

The **location of enterprises within the prefectures of Attica and Thessaloniki** was estimated to have a positive effect on the technical efficiency in Cruise-Yacht Services and Road Passenger Transport. Piraeus and Thessaloniki are the ports with the largest capacity of cruise ships, while a large share of the tourists visiting Greece usually use Athens or Thessaloniki as a "gateway". As a result, the companies closest to or within these cities can minimise the distance of their headquarters to the points of entry of their customers and thus to increase their effectiveness.

In the remaining sectors, the location of the enterprises within the prefectures of Attica and Thessaloniki had a negative effect on their efficiency. In Electricity Generation and Distribution, being near large urban centres removes the businesses from sources of raw materials used in electricity generation (e.g. lignite, water), with negative effects on their efficiency. In Road Freight Transport, the operation exclusively within the two large prefectures is likely to remove the enterprises from major points of entry of commodities in the country (such as the ports of Patra, Igoumenitsa and Astakos), increasing their operating

²⁰ Road Passenger Transport and Gambling

²¹ Cruise-Yacht Services

costs (fuel, cost of owning or renting parking spaces), with corresponding negative effects on their efficiency. Finally, in the case of Gambling, the negative effect is probably due to the fact that the casinos have an incentive to settle mainly in tourist areas outside the larger urban centres, in order to serve visitors from Greece and abroad.

The **credit expansion** was found to have a positive impact on the efficiency in three sectors (Electricity Production - Distribution, Road Freight Transport, Cruise-Yacht Services), as it probably enables them to finance easier their high-cost investment plans (e.g. construction-modernisation of power stations, purchase of trucks, construction of vessels) and to respond better to their current obligations (e.g. to cover operating costs, asset maintenance costs). In the case of Road Passenger Transport, the negative impact of credit on technical efficiency is probably due to a more rational use of the decreasing since 2010 - when the domestic credit crunch began - business loans. Only in Gambling, credit expansion did not have a statistically significant impact on technical efficiency.

The last factor estimated to have an impact on technical effectiveness was the **recession**. As expected, it adversely affects the technical efficiency of most of the sectors under examination, namely in three out of five (Road Passenger Transport, Road Freight Transport and Gambling). The economic recession was found to have a positive impact on the efficiency of Cruise-Yacht Services. One possible explanation for this result is that the recession has urged the sector companies to manage their available production factors more rationally, resulting in an improvement of the efficiency that they achieve. Finally, in Electricity Production - Distribution, the effect of the recession was statistically insignificant.

Figure 4.1

Number of branches with positive, negative or statistically insignificant effect of the exogenous variables on their technical efficiency

| Variables | Positive impact | Negative impact | Statistically insignificant impact |
|---|-----------------|-----------------|------------------------------------|
| COMPANY-LEVEL | | | |
| Age | 4 | | 1 |
| Export activity | | 1 | 1 |
| Headquarters in Attica - Thessaloniki | 2 | 3 | |
| ECONOMIC ENVIRONMENT | | | |
| Credit expansion/contraction | 3 | 1 | 1 |
| Recession | 1 | 3 | 1 |
| SECTOR-LEVEL | | | |
| Cruise-Yacht Services | | | 1 |
| Road Passenger Transport | 1 | | |
| Road Freight Transport | | | 1 |
| Road Freight Transport (OECD) | 1 | | |
| Energy | | 1 | |
| Energy (OECD) | | | 1 |
| Gambling | | | 1 |
| HORIZONTAL | | | |
| Labour market | 3 | | 2 |
| Labour market (OECD – permanent employment) | 1 | | 4 |
| Labour market (OECD – temporary employment) | 1 | 1 | 3 |
| PCC | 1 | 1 | 1 |

4.6 Technical efficiency by sector

Regarding **the mean cross-sectional and longitudinal technical efficiency** from 2001 to 2014 (Figure 4.1), the best performance was recorded by Road Passenger Transport (0.82), followed by Cruise-Yacht Services and Road Freight Transport with essentially the same level of technical efficiency (0.77 and 0.76, respectively). Electricity Production-Distribution (0.46) and Gambling (0.44) followed at a distance.

Moving on to the trends in the **average annual technical efficiency** by sector from 2001 to 2014, the Electricity Generation-Distribution exhibited a steady decline over the period under investigation. This trend is interpreted to a small extent by the applied exogenous variables, as the recession and the business start-up effect were statistically insignificant, while the impact of sector and labour market reforms was marginal.

In Road Freight Transport, the variance of the average annual technical efficiency between 2009 and 2014 is interpreted well by the exogenous variables. In 2009 and 2010, the technical efficiency declined due to the recession and the credit crunch, while from 2011 to 2014 it strengthened from the positive effects of the liberalisation in the sector, the structural changes in the labour market and the aging of the enterprises in the sample.

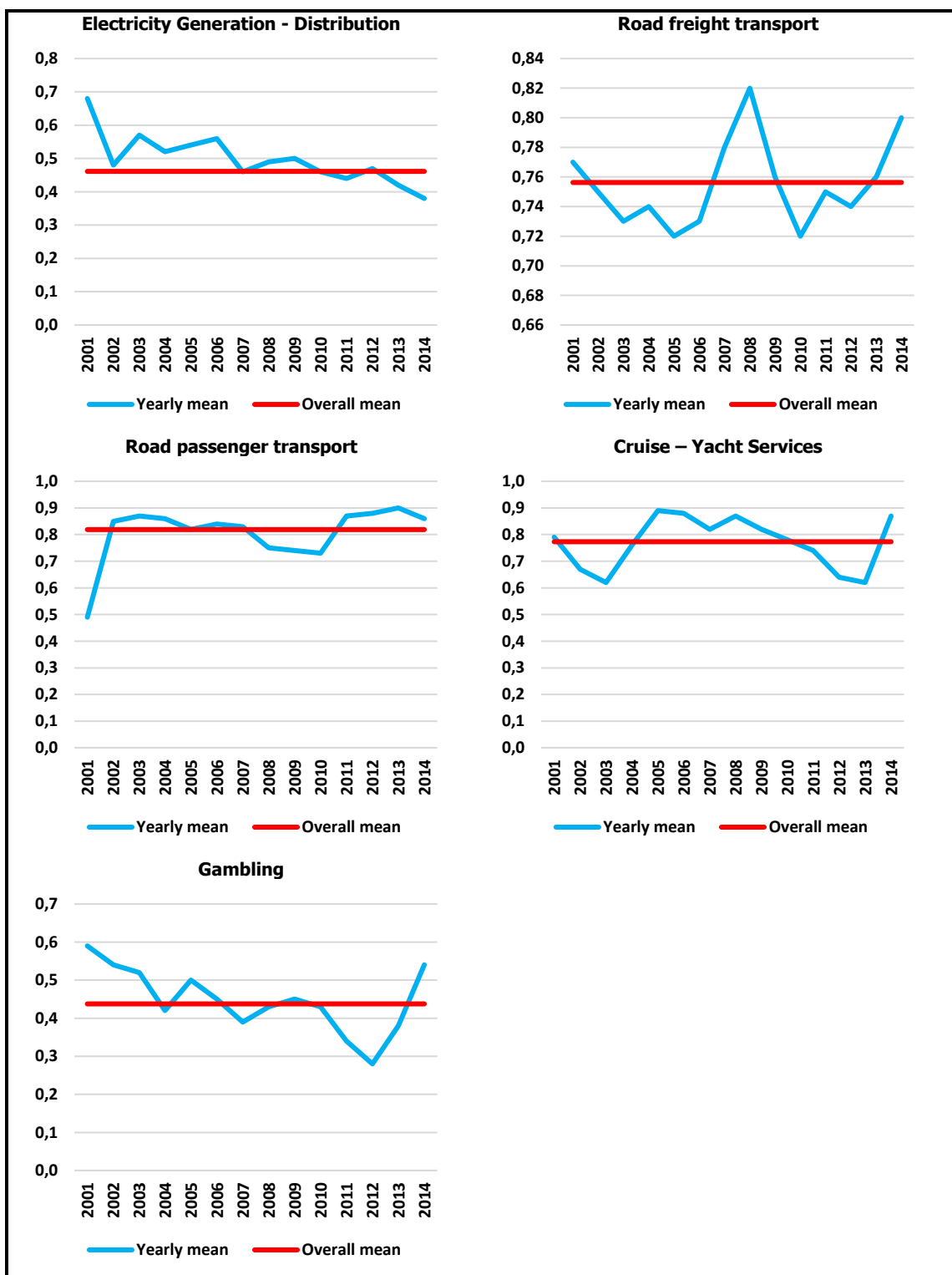
In Road Passenger Transport, the trend of the average annual technical efficiency since 2008 is correlated strongly with the effect of exogenous variables. Between 2008 and 2010, it declined as a result of the recession and the credit expansion, which was found to reduce efficiency in this sector. In contrast, technical efficiency increased between 2011 and 2013 as a result of structural changes in the sector, labour market reforms and the credit crunch.

In Cruise-Yacht Services, the average annual technical efficiency declined between 2006 and 2013 and increased thereafter, which cannot be explained by the effects of the exogenous variables. The reforms in the sector and in the regulatory framework governing permanent employment contracts did not have a statistically significant impact. Meanwhile, the recession and the flow of credit had a statistically significant but counterbalanced effect, mutually eliminating each other.

Finally, the trend of technical efficiency in Gambling, which declined between 2006 and 2012 and then rose, cannot be explained with the changes in the exogenous variables either. The reforms of the regulatory framework of the sector and the labour market, and the rate of change of credit did not have a statistically significant effect, while the combination of the effects of the statistically significant variables (positive for age, negative for location and recession) was not in line with the evolution of the technical efficiency in the sector.

Figure 4.1

Annual average technical efficiency and longitudinal and cross-sectional average technical efficiency per branch



Source: IOBE

4.7 Epilogue

The main objective of this study was to assess the impact of sectoral and horizontal reforms on the technical efficiency of five sectors of internationally traded goods and services of the Greek economy. The econometric estimation showed that the sectoral reforms that took place in the sectors of internationally traded goods and services have exerted a variety of effects. The effect of "horizontal" reforms on technical efficiency was statistically significant in some of the sectors under review. In the sectors where the effect was statistically significant, the labour market reforms were conducive to the efficiency of the operation of the businesses. Yet, the statistically significant effects of the start-up facilitation reform were varied.

The assessment of the econometric results should take into account the relatively short period of time that has elapsed from their legislation until the end of the period covered by this study, which is very likely to be inadequate for the full realisation of the effects. Consequently, a review of their impact in the future, perhaps under better conditions in the Greek economy than in the period between 2008 and 2014, will probably produce results, which capture a more complete manifestation of their effects. This exercise is particularly important, as the structural changes that boost competition and exports in the Greek economy are two of the key "tools" for the transition to a new growth model, characterised by stronger competition, production of more internationally tradable goods and services, higher exports and lower dependence on domestic demand.

5. APPENDIX: KEY ECONOMIC INDICATORS

Table 1: GDP growth

| | Annual data (%) | | | | | | | | | |
|----------------|-----------------|------|-------|------|------|------|------|------|------|------|
| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Austria | 3.6 | 1.5 | -3.8 | 1.9 | 2.8 | 0.7 | 0.1 | 0.6 | 1 | 0.2 |
| Belgium | 3.4 | 0.7 | -2.3 | 2.7 | 1.8 | 0.1 | -0.1 | 1.7 | 1.5 | 0.7 |
| Bulgaria | 7.3 | 6 | -3.6 | 1.3 | 1.9 | 0 | 0.9 | 1.3 | 3.6 | 4.1 |
| France | 2.4 | 0.2 | -2.9 | 2 | 2.1 | 0.2 | 0.6 | 0.6 | 1.3 | 0.9 |
| Germany | 3.3 | 1.1 | -5.6 | 4.1 | 3.7 | 0.5 | 0.5 | 1.6 | 1.7 | 0.6 |
| Denmark | 0.9 | -0.5 | -4.9 | 1.9 | 1.3 | 0.2 | 0.9 | 1.7 | 1.6 | 0.5 |
| Czech Republic | 5.5 | 2.7 | -4.8 | 2.3 | 2 | -0.8 | -0.5 | 2.7 | 4.5 | 2.2 |
| EU | 3.1 | 0.4 | -4.4 | 2.1 | 1.7 | -0.5 | 0.2 | 1.6 | 2.2 | 1.5 |
| Greece | 3.3 | -0.3 | -4.3 | -5.5 | -9.1 | -7.3 | -3.2 | 0.4 | -0.2 | 0.0 |
| Estonia | 7.7 | -5.4 | -14.7 | 2.3 | 7.6 | 4.3 | 1.4 | 2.8 | 1.4 | 1.4 |
| Euro area | 3 | 0.4 | -4.5 | 2.1 | 1.5 | -0.9 | -0.3 | 1.2 | 2 | 1.4 |
| United Kingdom | 2.6 | -0.6 | -4.3 | 1.9 | 1.5 | 1.3 | 1.9 | 3.1 | 2.2 | 1.1 |
| Ireland | 3.8 | -4.4 | -4.6 | 2 | 0 | -1.1 | 1.1 | 8.5 | 26.3 | 4.3 |
| Spain | 3.8 | 1.1 | -3.6 | 0 | -1 | -2.9 | -1.7 | 1.4 | 3.2 | 3.1 |
| Italy | 1.5 | -1.1 | -5.5 | 1.7 | 0.6 | -2.8 | -1.7 | 0.1 | 0.7 | 1.1 |
| Croatia | 5.2 | 2.1 | -7.4 | -1.7 | -0.3 | -2.2 | -1.1 | -0.5 | 1.6 | 3.5 |
| Cyprus | 4.8 | 3.9 | -1.8 | 1.3 | 0.3 | -3.2 | -6 | -1.5 | 1.7 | 2.2 |
| Latvia | 9.9 | -3.6 | -14.3 | -3.8 | 6.2 | 4 | 2.9 | 2.1 | 2.7 | 2.8 |
| Lithuania | 11.1 | 2.6 | -14.8 | 1.6 | 6 | 3.8 | 3.5 | 3.5 | 1.8 | 3.6 |
| Luxemburg | 8.4 | -0.8 | -5.4 | 5.8 | 2 | 0 | 4.2 | 4.7 | 3.5 | 1.6 |
| Malta | 4 | 3.3 | -2.5 | 3.5 | 1.4 | 2.7 | 4.6 | 8.4 | 7.4 | 3.9 |
| Netherlands | 3.7 | 1.7 | -3.8 | 1.4 | 1.7 | -1.1 | -0.2 | 1.4 | 2 | 1.6 |
| Hungary | 0.4 | 0.9 | -6.6 | 0.7 | 1.7 | -1.6 | 2.1 | 4 | 3.1 | 2.2 |
| Poland | 7 | 4.2 | 2.8 | 3.6 | 5 | 1.6 | 1.4 | 3.3 | 3.9 | 2.9 |
| Portugal | 2.5 | 0.2 | -3 | 1.9 | -1.8 | -4 | -1.1 | 0.9 | 1.6 | 1.7 |
| Romania | 6.9 | 8.5 | -7.1 | -0.8 | 1.1 | 0.6 | 3.5 | 3.1 | 3.9 | 5.1 |
| Slovakia | 10.8 | 5.6 | -5.4 | 5 | 2.8 | 1.7 | 1.5 | 2.6 | 3.8 | 3.1 |
| Slovenia | 6.9 | 3.3 | -7.8 | 1.2 | 0.6 | -2.7 | -1.1 | 3.1 | 2.3 | 2.4 |
| Sweden | 3.4 | -0.6 | -5.2 | 6 | 2.7 | -0.3 | 1.2 | 2.6 | 4.1 | 2 |
| Finland | 5.2 | 0.7 | -8.3 | 3 | 2.6 | -1.4 | -0.8 | -0.7 | 0.2 | 1.1 |

Table 2: General Government Debt as % of GDP

| | Annual data (%) | | | | | | | | | |
|----------------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Austria | 65.1 | 68.8 | 80.1 | 82.8 | 82.6 | 82 | 81.3 | 84.4 | 85.5 | 84.6 |
| Belgium | 87 | 92.5 | 99.5 | 99.7 | 102.3 | 104.1 | 105.6 | 106.7 | 106.0 | 105.9 |
| Bulgaria | 16.3 | 13 | 13.7 | 15.3 | 15.2 | 16.7 | 17.0 | 27.0 | 26.0 | 29.5 |
| France | 64.3 | 68 | 78.9 | 81.6 | 85.2 | 89.5 | 92.3 | 94.9 | 95.6 | 96.0 |
| Germany | 63.7 | 65.1 | 72.6 | 81 | 78.7 | 79.9 | 77.5 | 74.9 | 71.2 | 68.3 |
| Denmark | 27.3 | 33.4 | 40.4 | 42.9 | 46.4 | 45.2 | 44.0 | 44.0 | 39.6 | 37.8 |
| Czech Republic | 27.8 | 28.7 | 34.1 | 38.2 | 39.8 | 44.5 | 44.9 | 42.2 | 40.3 | 37.2 |
| EU | 65 | 68.6 | 78.4 | 83.8 | 86.1 | 89.5 | 85.7 | 86.7 | 84.9 | 83.5 |
| Greece | 103.1 | 109.4 | 126.7 | 146.2 | 172.1 | 159.6 | 177.4 | 179.7 | 177.4 | 179.0 |
| Estonia | 3.7 | 4.5 | 7 | 6.6 | 6.1 | 9.7 | 10.2 | 10.7 | 10.1 | 9.5 |
| Euro area | 57.5 | 60.7 | 72.8 | 78.4 | 81.1 | 83.8 | 91.4 | 92.0 | 90.3 | 89.2 |
| United Kingdom | 42 | 50.2 | 64.5 | 76 | 81.6 | 85.1 | 86.2 | 88.1 | 89.0 | 89.3 |
| Ireland | 23.9 | 42.4 | 61.7 | 86.3 | 109.6 | 119.5 | 119.5 | 105.3 | 78.7 | 75.4 |
| Spain | 35.5 | 39.4 | 52.7 | 60.1 | 69.5 | 85.7 | 95.5 | 100.4 | 99.8 | 99.4 |
| Italy | 99.8 | 102.4 | 112.5 | 115.4 | 116.5 | 123.3 | 129.0 | 131.8 | 132.1 | 132.6 |
| Croatia | 37.7 | 39.6 | 49 | 58.3 | 65.2 | 70.7 | 82.2 | 86.6 | 86.7 | 84.2 |
| Cyprus | 53.5 | 44.7 | 53.4 | 55.8 | 65.2 | 79.3 | 102.2 | 107.1 | 107.5 | 107.8 |
| Latvia | 8.4 | 18.7 | 36.6 | 47.4 | 42.8 | 41.3 | 39.0 | 40.9 | 36.5 | 40.1 |
| Lithuania | 15.9 | 14.6 | 28 | 36.2 | 37.2 | 39.8 | 38.7 | 40.5 | 42.7 | 40.2 |
| Luxemburg | 7.8 | 15.1 | 16 | 19.9 | 18.8 | 21.8 | 23.4 | 22.4 | 21.6 | 20.0 |
| Malta | 62.4 | 62.7 | 67.8 | 67.6 | 70 | 67.6 | 68.7 | 64.3 | 60.6 | 58.3 |
| Netherlands | 42.7 | 54.8 | 56.9 | 59.3 | 61.6 | 66.4 | 67.7 | 67.9 | 65.2 | 62.3 |
| Hungary | 65.6 | 71.6 | 77.8 | 80.5 | 80.7 | 78.2 | 76.6 | 75.7 | 74.7 | 74.1 |
| Poland | 44.2 | 46.3 | 49.4 | 53.1 | 54.1 | 53.7 | 55.7 | 50.2 | 51.1 | 54.4 |
| Portugal | 68.4 | 71.7 | 83.6 | 96.2 | 111.4 | 126.2 | 129.0 | 130.6 | 129.0 | 130.4 |
| Romania | 12.7 | 13.2 | 23.2 | 29.9 | 34.2 | 37.3 | 37.8 | 39.4 | 38.0 | 37.6 |
| Slovakia | 30.1 | 28.5 | 36.3 | 41.2 | 43.7 | 52.2 | 54.7 | 53.6 | 52.5 | 51.9 |
| Slovenia | 22.8 | 21.8 | 34.6 | 38.4 | 46.6 | 53.9 | 71.0 | 80.9 | 83.1 | 79.7 |
| Sweden | 39 | 37.5 | 41 | 38.3 | 37.5 | 37.8 | 40.4 | 45.2 | 43.9 | 41.6 |
| Finland | 34 | 32.7 | 41.7 | 47.1 | 48.5 | 53.9 | 56.5 | 60.2 | 63.7 | 63.6 |

Table 3: General Government Balance as % of GDP

| | Annual data (%) | | | | | | | | | |
|----------------|-----------------|-------|-------|-------|-------|-------|-------|------|------|------|
| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Austria | -1.4 | -1.5 | -5.4 | -4.5 | -2.6 | -2.2 | -1.4 | -2.7 | -1.1 | -1.6 |
| Belgium | 0.1 | -1.1 | -5.4 | -4.0 | -4.1 | -4.2 | -3.1 | -3.1 | -2.5 | -2.6 |
| Bulgaria | 1.1 | 1.6 | -4.1 | -3.1 | -2.0 | -0.3 | -0.4 | -5.5 | -1.6 | 0.0 |
| France | -2.5 | -3.2 | -7.2 | -6.8 | -5.1 | -4.8 | -4.0 | -3.9 | -3.6 | -3.4 |
| Germany | 0.2 | -0.2 | -3.2 | -4.2 | -1.0 | 0.0 | -0.2 | 0.3 | 0.7 | 0.8 |
| Denmark | 5.0 | 3.2 | -2.8 | -2.7 | -2.1 | -3.5 | -1.0 | 1.4 | -1.3 | -0.9 |
| Czech Republic | -0.7 | -2.1 | -5.5 | -4.4 | -2.7 | -3.9 | -1.2 | -1.9 | -0.6 | 0.6 |
| EU | -0.9 | -2.4 | -6.6 | -6.4 | -4.6 | -4.3 | -3.3 | -3.0 | -2.4 | -1.7 |
| Greece | -6.7 | -10.2 | -15.1 | -11.2 | -10.3 | -8.8 | -13.1 | -3.7 | -5.9 | 0.7 |
| Estonia | 2.7 | -2.7 | -2.2 | 0.2 | 1.2 | -0.3 | -0.2 | 0.7 | 0.1 | 0.3 |
| Euro area | -0.6 | -2.2 | -6.3 | -6.2 | -4.2 | -3.6 | -3.0 | -2.6 | -2.1 | -1.5 |
| United Kingdom | -2.9 | -4.9 | -10.2 | -9.6 | -7.6 | -8.3 | -5.6 | -5.7 | -4.3 | -3.0 |
| Ireland | 0.3 | -7.0 | -13.8 | -32.1 | -12.6 | -8.0 | -5.7 | -3.7 | -2.0 | -0.6 |
| Spain | 2.0 | -4.4 | -11.0 | -9.4 | -9.6 | -10.5 | -7.0 | -6.0 | -5.1 | -4.5 |
| Italy | -1.5 | -2.7 | -5.3 | -4.2 | -3.7 | -2.9 | -2.9 | -3.0 | -2.7 | -2.4 |
| Croatia | -2.4 | -2.8 | -6.0 | -6.2 | -7.8 | -5.3 | -5.3 | -5.4 | -3.4 | -0.8 |
| Cyprus | 3.2 | 0.9 | -5.4 | -4.7 | -5.7 | -5.8 | -5.1 | -8.8 | -1.2 | 0.4 |
| Latvia | -0.7 | -4.1 | -9.1 | -8.5 | -3.4 | -0.8 | -1.0 | -1.6 | -1.3 | 0.0 |
| Lithuania | -0.8 | -3.1 | -9.1 | -6.9 | -8.9 | -3.1 | -2.6 | -0.7 | -0.2 | 0.3 |
| Luxemburg | 4.2 | 3.4 | -0.7 | -0.7 | 0.5 | 0.3 | 1.0 | 1.4 | 1.4 | 1.6 |
| Malta | -2.3 | -4.2 | -3.3 | -3.2 | -2.5 | -3.6 | -2.6 | -2.0 | -1.3 | 1.0 |
| Netherlands | 0.2 | 0.2 | -5.4 | -5.0 | -4.3 | -3.9 | -2.4 | -2.3 | -2.1 | 0.4 |
| Hungary | -5.1 | -3.6 | -4.6 | -4.5 | -5.5 | -2.3 | -2.6 | -2.1 | -1.6 | -1.8 |
| Poland | -1.9 | -3.6 | -7.3 | -7.3 | -4.8 | -3.7 | -4.1 | -3.5 | -2.6 | -2.4 |
| Portugal | -3.0 | -3.8 | -9.8 | -11.2 | -7.4 | -5.7 | -4.8 | -7.2 | -4.4 | -2.0 |
| Romania | -2.8 | -5.5 | -9.5 | -6.9 | -5.4 | -3.7 | -2.1 | -1.4 | -0.8 | -3.0 |
| Slovakia | -1.9 | -2.4 | -7.8 | -7.5 | -4.3 | -4.3 | -2.7 | -2.7 | -2.7 | -1.7 |
| Slovenia | -0.1 | -1.4 | -5.9 | -5.6 | -6.7 | -4.1 | -15.1 | -5.4 | -2.9 | -1.8 |
| Sweden | 3.3 | 1.9 | -0.7 | -0.1 | -0.2 | -1.0 | -1.4 | -1.5 | 0.3 | 0.9 |
| Finland | 5.1 | 4.2 | -2.5 | -2.6 | -1.0 | -2.2 | -2.6 | -3.2 | -2.7 | -1.9 |

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

| | Annual data (%) | | | | | | | | | |
|----------------|-----------------|------|------|------|------|------|------|------|------|------|
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| Austria | 17.8 | 16.7 | 20.6 | 19.1 | 18.9 | 19.2 | 18.5 | 18.8 | 19.2 | 18.3 |
| Belgium | 21.5 | 21.6 | 20.8 | 20.2 | 20.8 | 21 | 21.6 | 20.8 | 21.2 | 21.1 |
| Bulgaria | 61.3 | 60.7 | 44.8 | 46.2 | 49.2 | 49.1 | 49.3 | 48 | 40.1 | 41.3 |
| France | 18.8 | 19 | 18.5 | 18.5 | 19.2 | 19.3 | 19.1 | 18.1 | 18.5 | 17.7 |
| Germany | 20.2 | 20.6 | 20.1 | 20 | 19.7 | 19.9 | 19.6 | 20.3 | 20.6 | 20 |
| Denmark | 16.7 | 16.8 | 16.3 | 17.6 | 18.3 | 17.6 | 17.5 | 18.3 | 17.9 | 17.7 |
| Czech Republic | 18 | 15.8 | 15.3 | 14 | 14.4 | 15.3 | 15.4 | 14.6 | 14.8 | 14 |
| EU | : | : | : | : | 23.7 | 24.3 | 24.7 | 24.6 | 24.4 | 23.7 |
| Greece | 29.3 | 28.3 | 28.1 | 27.6 | 27.7 | 31 | 34.6 | 35.7 | 36 | 35.7 |
| Estonia | 22 | 22 | 21.8 | 23.4 | 21.7 | 23.1 | 23.4 | 23.5 | 26 | 24.2 |
| Euro area | 22.1 | 21.9 | 21.7 | 21.6 | 22 | 22.9 | 23.3 | 23.1 | 23.5 | 23 |
| United Kingdom | 23.7 | 22.6 | 23.2 | 22 | 23.2 | 22.7 | 24.1 | 24.8 | 24.1 | 23.5 |
| Ireland | 23.3 | 23.1 | 23.7 | 25.7 | 27.3 | 29.4 | 30 | 29.5 | 27.6 | 26 |
| Spain | 24 | 23.3 | 23.8 | 24.7 | 26.1 | 26.7 | 27.2 | 27.3 | 29.2 | 28.6 |
| Italy | 25.9 | 26 | 25.5 | 24.9 | 25 | 28.1 | 29.9 | 28.5 | 28.3 | 28.7 |
| Croatia | : | : | : | : | 31.1 | 32.6 | 32.6 | 29.8 | 29.3 | 29.1 |
| Cyprus | 25.4 | 25.2 | 23.3 | 23.5 | 24.6 | 24.6 | 27.1 | 27.8 | 27.4 | 28.9 |
| Latvia | 42.2 | 35.1 | 34.2 | 37.9 | 38.2 | 40.1 | 36.2 | 35.1 | 32.7 | 30.9 |
| Lithuania | 35.9 | 28.7 | 28.3 | 29.6 | 34 | 33.1 | 32.5 | 30.8 | 27.3 | 29.3 |
| Luxemburg | 16.5 | 15.9 | 15.5 | 17.8 | 17.1 | 16.8 | 18.4 | 19 | 19 | 18.5 |
| Malta | 19.5 | 19.7 | 20.1 | 20.3 | 21.2 | 22.1 | 23.1 | 24 | 23.8 | 22.4 |
| Netherlands | 16 | 15.7 | 14.9 | 15.1 | 15.1 | 15.7 | 15 | 15.9 | 16.5 | 16.4 |
| Hungary | 31.4 | 29.4 | 28.2 | 29.6 | 29.9 | 31.5 | 33.5 | 34.8 | 31.8 | 28.2 |
| Poland | 39.5 | 34.4 | 30.5 | 27.8 | 27.8 | 27.2 | 26.7 | 25.8 | 24.7 | 23.4 |
| Portugal | 25 | 25 | 26 | 24.9 | 25.3 | 24.4 | 25.3 | 27.5 | 27.5 | 26.6 |
| Romania | : | 47 | 44.2 | 43 | 41.5 | 40.9 | 43.2 | 41.9 | 40.3 | 37.4 |
| Slovakia | 26.7 | 21.4 | 20.6 | 19.6 | 20.6 | 20.6 | 20.5 | 19.8 | 18.4 | 18.4 |
| Slovenia | 17.1 | 17.1 | 18.5 | 17.1 | 18.3 | 19.3 | 19.6 | 20.4 | 20.4 | 19.2 |
| Sweden | 16.3 | 13.9 | 14.9 | 15.9 | 15 | 16.1 | 15.6 | 16.4 | 16.9 | 16 |
| Finland | 17.1 | 17.4 | 17.4 | 16.9 | 16.9 | 17.9 | 17.2 | 16 | 17.3 | 16.8 |

(*) For the exact definition of the indicator, see the end of this section

Table 5: Inflation

| | Annual data (%) | | | Q1 | | | Change (%) | |
|----------------|-----------------|------|------|------|------|------|------------|---------|
| | 2014 | 2015 | 2016 | 2015 | 2016 | 2017 | 2016/15 | 2017/16 |
| Austria | 1.5 | 0.8 | 1.0 | 0.6 | 1.0 | 2.2 | 0.4 | 1.2 |
| Belgium | 0.5 | 0.6 | 1.8 | -0.4 | 1.5 | 3.0 | 1.9 | 1.5 |
| Bulgaria | -1.6 | -1.1 | -1.3 | -1.7 | -1.1 | 0.8 | 0.6 | 1.9 |
| France | 0.6 | 0.1 | 0.3 | -0.2 | 0.0 | 1.5 | 0.3 | 1.4 |
| Germany | 0.8 | 0.1 | 0.4 | -0.1 | 0.1 | 1.9 | 0.2 | 1.8 |
| Denmark | 0.4 | 0.2 | 0.0 | 0.0 | 0.1 | 0.8 | 0.1 | 0.8 |
| Czech Republic | 0.4 | 0.3 | 0.7 | 0.0 | 0.4 | 2.5 | 0.4 | 2.1 |
| EU | 0.5 | 0.0 | 0.2 | -0.3 | 0.1 | 1.8 | 0.4 | 1.7 |
| Greece | -1.4 | -1.1 | 0.0 | -2.2 | -0.2 | 1.5 | 2.0 | 1.8 |
| Estonia | 0.5 | 0.1 | 0.8 | -0.2 | 0.3 | 3.1 | 0.6 | 2.7 |
| Euro area | 0.4 | 0.0 | 0.2 | -0.3 | 0.0 | 1.8 | 0.4 | 1.7 |
| United Kingdom | 1.5 | 0.1 | 0.6 | 0.1 | 0.4 | 2.1 | 0.3 | 1.8 |
| Ireland | 0.3 | 0.0 | -0.2 | -0.3 | -0.3 | 0.4 | 0.1 | 0.6 |
| Spain | -0.2 | -0.6 | -0.3 | -1.2 | -0.8 | 2.7 | 0.4 | 3.5 |
| Italy | 0.2 | 0.1 | 0.0 | -0.1 | 0.0 | 1.3 | 0.1 | 1.3 |
| Croatia | 0.2 | -0.3 | -0.6 | -0.3 | -0.6 | 1.1 | -0.2 | 1.7 |
| Cyprus | -0.3 | -1.5 | -1.2 | -1.0 | -1.8 | 1.2 | -0.9 | 3.0 |
| Latvia | 0.7 | 0.2 | 0.1 | 0.1 | -0.5 | 3.1 | -0.6 | 3.6 |
| Lithuania | 0.2 | -0.7 | 0.7 | -1.3 | 0.7 | 3.0 | 2.0 | 2.3 |
| Luxemburg | 0.7 | 0.1 | 0.0 | -0.5 | -0.1 | 2.6 | 0.3 | 2.7 |
| Malta | 0.8 | 1.2 | 0.9 | 0.6 | 0.9 | 1.3 | 0.3 | 0.3 |
| Netherlands | 0.3 | 0.2 | 0.1 | -0.5 | 0.3 | 1.3 | 0.8 | 1.0 |
| Hungary | 0.0 | 0.1 | 0.5 | -0.9 | 0.4 | 2.7 | 1.3 | 2.3 |
| Poland | 0.1 | -0.7 | -0.2 | -1.2 | -0.3 | 1.7 | 0.9 | 2.0 |
| Portugal | -0.2 | 0.5 | 0.6 | 0.0 | 0.5 | 1.4 | 0.5 | 1.0 |
| Romania | 1.4 | -0.4 | -1.1 | 0.6 | -2.0 | 0.4 | -2.6 | 2.4 |
| Slovakia | -0.1 | -0.3 | -0.5 | -0.5 | -0.5 | 1.0 | 0.0 | 1.5 |
| Slovenia | 0.4 | -0.8 | -0.2 | -0.5 | -0.9 | 2.0 | -0.3 | 2.9 |
| Sweden | 0.2 | 0.7 | 1.1 | 0.6 | 1.1 | 1.6 | 0.5 | 0.5 |
| Finland | 1.2 | -0.2 | 0.4 | -0.1 | 0.0 | 1.1 | 0.0 | 1.1 |

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

| | Annual data (%) | | | | | | | | |
|----------------|-----------------|------|------|------|------|------|------|------|------|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Austria | 124 | 126 | 126 | 128 | 131 | 131 | 130 | 128 | 126 |
| Belgium | 116 | 118 | 121 | 120 | 121 | 120 | 120 | 119 | 118 |
| Bulgaria | 43 | 44 | 45 | 45 | 46 | 46 | 46 | 47 | 48 |
| France | 107 | 108 | 108 | 108 | 107 | 109 | 107 | 106 | 105 |
| Germany | 117 | 117 | 120 | 123 | 124 | 124 | 125 | 124 | 123 |
| Denmark | 125 | 125 | 129 | 128 | 127 | 128 | 127 | 127 | 125 |
| Czech Republic | 84 | 85 | 83 | 83 | 83 | 84 | 86 | 87 | 88 |
| EU | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Greece | 93 | 94 | 85 | 75 | 72 | 72 | 70 | 68 | 67 |
| Estonia | 69 | 64 | 65 | 71 | 74 | 75 | 76 | 75 | 74 |
| Euro area | 109 | 109 | 108 | 108 | 107 | 107 | 107 | 106 | 106 |
| United Kingdom | 109 | 107 | 107 | 105 | 107 | 107 | 109 | 108 | 108 |
| Ireland | 134 | 129 | 130 | 131 | 132 | 133 | 137 | 177 | 177 |
| Spain | 101 | 101 | 96 | 93 | 91 | 90 | 90 | 90 | 92 |
| Italy | 107 | 106 | 104 | 104 | 102 | 99 | 97 | 96 | 96 |
| Croatia | 63 | 62 | 59 | 60 | 60 | 59 | 59 | 58 | 59 |
| Cyprus | 106 | 105 | 100 | 96 | 91 | 84 | 81 | 82 | 81 |
| Latvia | 59 | 52 | 53 | 57 | 60 | 62 | 64 | 64 | 65 |
| Lithuania | 63 | 56 | 60 | 66 | 70 | 73 | 75 | 75 | 75 |
| Luxemburg | 259 | 250 | 256 | 263 | 259 | 261 | 267 | 264 | 267 |
| Malta | 79 | 81 | 84 | 83 | 84 | 86 | 86 | 88 | 95 |
| Netherlands | 139 | 137 | 134 | 133 | 133 | 134 | 131 | 128 | 128 |
| Hungary | 62 | 64 | 64 | 66 | 65 | 67 | 68 | 68 | 67 |
| Poland | 55 | 60 | 62 | 65 | 67 | 67 | 68 | 69 | 69 |
| Portugal | 81 | 82 | 82 | 77 | 75 | 77 | 77 | 77 | 77 |
| Romania | 49 | 50 | 52 | 52 | 54 | 55 | 55 | 57 | 59 |
| Slovakia | 71 | 71 | 74 | 75 | 76 | 77 | 77 | 77 | 77 |
| Slovenia | 90 | 85 | 83 | 83 | 82 | 81 | 83 | 83 | 83 |
| Sweden | 127 | 123 | 125 | 126 | 127 | 125 | 124 | 124 | 124 |
| Finland | 121 | 117 | 116 | 117 | 115 | 113 | 111 | 109 | 109 |

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

| | Annual data | | | | | | | | |
|----------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Austria | 115.8 | 115.7 | 114.7 | 114.6 | 116.3 | 116.2 | 115.6 | 115 | 115.4 |
| Belgium | 128.4 | 129.8 | 131.4 | 129.8 | 130.9 | 130.2 | 131 | 130.1 | 129.3 |
| Bulgaria | 39.4 | 39.5 | 41.3 | 42.2 | 43.6 | 43 | 43.5 | 44.2 | 45.1 |
| France | 116.6 | 117.6 | 117.1 | 116.7 | 115 | 116.3 | 115.4 | 115.3 | 115 |
| Germany | 107 | 104.3 | 105.2 | 106.5 | 105.4 | 104.8 | 106.2 | 106 | 105.8 |
| Denmark | 107.7 | 109.7 | 115.3 | 114.7 | 114.5 | 115.4 | 114.8 | 114.5 | 113.4 |
| Czech Republic | 77.6 | 79.1 | 77 | 77.4 | 76.2 | 76.7 | 79.3 | 80 | 79.6 |
| EU | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Greece | 98.5 | 98.2 | 89.6 | 85.6 | 86 | 87.1 | 85.6 | 82.6 | 81 |
| Estonia | 66.1 | 66.7 | 70.6 | 72.1 | 73.4 | 73.2 | 73.7 | 71.1 | 70.9 |
| Euro area | 108.6 | 108.7 | 107.9 | 107.8 | 107.2 | 107.3 | 107.3 | 107.2 | 106.9 |
| United Kingdom | 105.3 | 103.2 | 103.2 | 101.4 | 101.7 | 101.3 | 101.7 | 101.2 | 100.9 |
| Ireland | 130.7 | 134.9 | 140.8 | 143.6 | 145.1 | 141.6 | 145.1 | 186 | 184.2 |
| Spain | 100.9 | 105.6 | 102 | 101.3 | 103.2 | 103.5 | 103.2 | 101.5 | 101.8 |
| Italy | 115 | 115 | 112.9 | 112.3 | 110.2 | 108.8 | 107.7 | 107.4 | 106.7 |
| Croatia | 70.6 | 68.5 | 67.1 | 70.1 | 72.4 | 73.1 | 70.3 | 68.8 | 70.6 |
| Cyprus | 95 | 95.4 | 91.6 | 90 | 88.7 | 86.8 | 85.2 | 85.2 | 83.1 |
| Latvia | 56.1 | 56.2 | 58.8 | 61.4 | 62.8 | 62.4 | 64.5 | 64.5 | 65.6 |
| Lithuania | 65.1 | 61.3 | 67.2 | 71.4 | 73.1 | 74.3 | 74.5 | 73.2 | 72.1 |
| Luxembourg | 167.6 | 160 | 161.8 | 165.4 | 161.6 | 163.2 | 167.8 | 166.3 | 168.9 |
| Malta | 94 | 96.9 | 97.1 | 91.8 | 90.3 | 89.5 | 90.2 | 92.2 | 93.1 |
| Netherlands | 118.4 | 115.8 | 113.5 | 112.2 | 112 | 113.9 | 112.9 | 111.1 | 112.4 |
| Hungary | 70.3 | 72.2 | 72.7 | 73.8 | 72.5 | 72.9 | 71 | 70.3 | 68.1 |
| Poland | 62.1 | 65.4 | 70.2 | 72.7 | 74.1 | 74 | 73.9 | 74.3 | 75.2 |
| Portugal | 77.5 | 79.6 | 79.9 | 76.5 | 76.8 | 79.7 | 79 | 78.2 | 77.9 |
| Romania | 50 | 49.9 | 51.1 | 51.9 | 55.7 | 56.3 | 57 | 59.4 | 62.6 |
| Slovakia | 79.4 | 79.3 | 83.6 | 81.6 | 82.5 | 83.8 | 84.1 | 83.3 | 82 |
| Slovenia | 83.8 | 80.2 | 79.6 | 80.8 | 80.1 | 79.8 | 81.7 | 81.5 | 80.9 |
| Sweden | 118.3 | 116.4 | 116.8 | 116.3 | 116.4 | 114.2 | 113 | 113.4 | 114 |
| Finland | 114 | 111.4 | 111.1 | 111.4 | 109.2 | 108 | 106.9 | 106.9 | 107.8 |

Table 8: Employment rate of workers aged 20-64 (*)

| | Annual data (%) | | | Q1 | | | Change (%) | |
|----------------|-----------------|------|------|------|------|------|------------|---------|
| | 2014 | 2015 | 2016 | 2015 | 2016 | 2017 | 2017/16 | 2016/15 |
| Austria | 74.2 | 74.3 | 74.8 | 73.4 | 73.7 | 74.2 | 0.5 | 0.3 |
| Belgium | 67.3 | 67.2 | 67.7 | 67.4 | 66.9 | : | : | -0.5 |
| Bulgaria | 65.1 | 67.1 | 67.7 | 65.0 | 66.5 | 68.6 | 2.1 | 1.5 |
| France | 69.4 | 69.5 | 70.0 | 68.9 | 69.5 | 69.7 | 0.2 | 0.6 |
| Germany | 77.7 | 78.0 | 78.7 | 77.6 | 78.2 | : | : | 0.6 |
| Denmark | 75.9 | 76.5 | 77.4 | 75.9 | 77.1 | : | : | 1.2 |
| Czech Republic | 73.5 | 74.8 | 76.8 | 74.0 | 75.7 | : | : | 1.7 |
| EU | 69.2 | 70.1 | 71.1 | 69.1 | 70.2 | : | : | 1.1 |
| Greece | 53.3 | 54.9 | 56.2 | 53.1 | 55.1 | 56.2 | 1.1 | 2.0 |
| Estonia | 74.3 | 76.5 | 76.6 | 74.4 | 75.1 | 77.9 | 2.8 | 0.7 |
| Euro area | 68.1 | 68.8 | 69.9 | 68.1 | 69.1 | : | : | 1.0 |
| United Kingdom | 76.2 | 76.9 | 77.6 | 76.5 | 77.2 | 77.8 | 0.6 | 0.7 |
| Ireland | 67.0 | 68.8 | 70.3 | 67.7 | 69.2 | : | : | 1.5 |
| Spain | 59.9 | 62.0 | 63.9 | 60.5 | 62.8 | 64.3 | 1.5 | 2.3 |
| Italy | 59.9 | 60.6 | 61.6 | 59.7 | 60.6 | 61.6 | 1.0 | 0.9 |
| Croatia | 59.2 | 60.5 | 61.4 | 59.0 | 59.4 | 60.5 | 1.1 | 0.4 |
| Cyprus | 67.6 | 68.0 | 68.8 | 67.2 | 66.7 | : | : | -0.5 |
| Latvia | 70.7 | 72.5 | 73.2 | 71.5 | 72.8 | 73.3 | 0.5 | 1.3 |
| Lithuania | 71.8 | 73.4 | 75.2 | 72.2 | 74.2 | 74.7 | 0.5 | 2.0 |
| Luxemburg | 72.1 | 70.9 | 70.7 | 71.1 | 70.5 | : | : | -0.6 |
| Malta | 66.4 | 67.8 | 69.6 | 66.3 | 68.5 | 69.7 | 1.2 | 2.2 |
| Netherlands | 75.4 | 76.4 | 77.1 | 76.0 | 76.4 | : | : | 0.4 |
| Hungary | 66.7 | 68.9 | 71.5 | 67.3 | 70.0 | : | : | 2.7 |
| Poland | 66.5 | 67.8 | 69.3 | 66.7 | 68.4 | 70.1 | 1.7 | 1.7 |
| Portugal | 67.6 | 69.1 | 70.6 | 67.9 | 69.3 | 71.7 | 2.4 | 1.4 |
| Romania | 65.7 | 66.0 | 66.3 | 63.7 | 64.5 | : | : | 0.8 |
| Slovakia | 65.9 | 67.7 | 69.8 | 66.8 | 69.0 | 70.7 | 1.7 | 2.2 |
| Slovenia | 67.7 | 69.1 | 70.1 | 67.5 | 68.3 | 71.5 | 3.2 | 0.8 |
| Sweden | 80.0 | 80.5 | 81.2 | 79.2 | 80.0 | 80.8 | 0.8 | 0.8 |
| Finland | 73.1 | 72.9 | 73.4 | 71.8 | 72.2 | : | : | 0.4 |

(*) 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 | 2015 | 2016 | 2017 | 2017/16 | 2016/15 |
| Austria | 45.1 | 46.3 | 49.2 | 45.1 | 47.9 | 49.7 | 1.8 | 2.8 |
| Belgium | 42.7 | 44.0 | 45.4 | 42.9 | 44.0 | : | : | 1.1 |
| Bulgaria | 50.0 | 53.0 | 54.5 | 50.2 | 52.8 | 55.2 | 2.4 | 2.6 |
| France | 46.9 | 48.7 | 49.8 | 48.0 | 49.3 | 50.4 | 1.1 | 1.3 |
| Germany | 65.6 | 66.2 | 68.6 | 65.3 | 67.8 | : | : | 2.5 |
| Denmark | 63.2 | 64.7 | 67.8 | 64.4 | 65.4 | : | : | 1.0 |
| Czech Republic | 54.0 | 55.5 | 58.5 | 54.5 | 56.5 | : | : | 2.0 |
| EU | 51.8 | 53.3 | 55.3 | 52.2 | 54.3 | : | : | 2.1 |
| Greece | 34.0 | 34.3 | 36.3 | 33.0 | 35.5 | 37.3 | 1.8 | 2.5 |
| Estonia | 64.0 | 64.5 | 65.3 | 61.8 | 61.7 | 66.7 | 5.0 | -0.1 |
| Euro area | 51.7 | 53.3 | 55.3 | 52.4 | 54.5 | : | : | 2.1 |
| United Kingdom | 61.0 | 62.2 | 63.4 | 61.6 | 62.9 | 63.9 | 1.0 | 1.3 |
| Ireland | 53.0 | 55.6 | 57.2 | 54.3 | 57.2 | : | : | 2.9 |
| Spain | 44.3 | 46.9 | 49.1 | 45.9 | 48.6 | 49.7 | 1.1 | 2.7 |
| Italy | 46.2 | 48.3 | 50.3 | 47.5 | 49.2 | 51.1 | 1.9 | 1.7 |
| Croatia | 36.2 | 39.0 | 38.1 | 38.5 | 35.5 | 36.1 | 0.6 | -3.0 |
| Cyprus | 46.9 | 48.2 | 52.1 | 47.0 | 49.7 | : | : | 2.7 |
| Latvia | 56.4 | 59.4 | 61.4 | 58.7 | 60.2 | 60.1 | -0.1 | 1.5 |
| Lithuania | 56.2 | 60.4 | 64.6 | 58.7 | 63.2 | 65.3 | 2.1 | 4.5 |
| Luxemburg | 42.5 | 38.5 | 39.6 | 42.1 | 40.1 | : | : | -2.0 |
| Malta | 37.8 | 40.4 | 44.0 | 37.4 | 42.0 | 41.1 | -0.9 | 4.6 |
| Netherlands | 59.9 | 61.7 | 63.5 | 61.1 | 62.7 | : | : | 1.6 |
| Hungary | 41.7 | 45.3 | 49.9 | 43.0 | 47.9 | : | : | 4.9 |
| Poland | 42.5 | 44.3 | 46.2 | 42.9 | 45.0 | 47.0 | 2.0 | 2.1 |
| Portugal | 47.8 | 49.9 | 52.1 | 48.6 | 50.0 | 53.9 | 3.9 | 1.4 |
| Romania | 43.1 | 41.1 | 42.8 | 38.4 | 41.3 | : | : | 2.9 |
| Slovakia | 44.8 | 47.0 | 49.1 | 45.9 | 47.5 | 51.7 | 4.2 | 1.6 |
| Slovenia | 35.4 | 36.6 | 38.6 | 35.3 | 38.2 | 40.5 | 2.3 | 2.9 |
| Sweden | 74.0 | 74.5 | 75.5 | 74.1 | 74.5 | 75.8 | 1.3 | 0.4 |
| Finland | 59.1 | 60.0 | 61.4 | 59.2 | 60.5 | : | : | 1.3 |

(*) % 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 (%) | |
|----------------|-----------------|------|------|------|--------|------|
| | 2013 | 2014 | 2015 | 2016 | 2017 | 2016 |
| Austria | 0.4 | 0.1 | 0.9 | 1.7 | 1.1 | 1.6 |
| Belgium | 0.1 | 0.3 | 0.2 | 0.8 | : | -0.4 |
| Bulgaria | -0.2 | 1.3 | 1.7 | -0.5 | 1.8 | 0.7 |
| France | -0.1 | 2.3 | 0.1 | 0.6 | 0.4 | 0.6 |
| Germany | 0.8 | 0.7 | 0.9 | 2.9 | : | 2.2 |
| Denmark | 0.0 | 0.7 | 1.4 | 3.2 | : | 2.8 |
| Czech Republic | 0.7 | 0.8 | 1.4 | 1.9 | : | 1.5 |
| EU | -0.3 | 1.3 | 1.1 | 1.6 | : | 1.5 |
| Greece | -4.9 | 0.6 | 2.1 | 1.7 | 1.4 | 2.8 |
| Estonia | 0.9 | 0.5 | 2.6 | 0.6 | 3.1 | 0.3 |
| Euro area | -0.6 | 0.9 | 1.0 | 1.8 | : | 1.6 |
| United Kingdom | 0.9 | 2.2 | 1.7 | 1.4 | 1.2 | 1.4 |
| Ireland | 2.1 | 1.5 | 2.6 | 2.9 | : | 2.3 |
| Spain | -2.7 | 1.2 | 3.0 | 2.7 | 2.2 | 3.3 |
| Italy | -1.8 | 0.2 | 0.8 | 1.3 | 1.2 | 1.1 |
| Croatia | -2.3 | 3.2 | 1.3 | 0.3 | 0.6 | -0.1 |
| Cyprus | -4.9 | -0.4 | -1.3 | 2.5 | : | -0.3 |
| Latvia | 1.7 | -0.9 | 1.3 | -0.3 | -1.2 | 0.3 |
| Lithuania | 1.6 | 1.9 | 1.2 | 2.0 | -1.0 | 1.7 |
| Luxemburg | 1.0 | 2.8 | 4.8 | 1.2 | : | 1.4 |
| Malta | 3.1 | 2.8 | 2.3 | 2.9 | 2.9 | 2.9 |
| Netherlands | -0.9 | -0.9 | 1.0 | 1.3 | : | 0.7 |
| Hungary | 1.8 | 5.4 | 2.7 | 3.4 | : | 3.4 |
| Poland | -0.2 | 1.8 | 1.4 | 0.7 | 1.4 | 1.1 |
| Portugal | -2.3 | 2.3 | 1.1 | 1.2 | 3.0 | 1.2 |
| Slovakia | -2.3 | 2.3 | -0.9 | -1.0 | : | 0.1 |
| Slovenia | -0.5 | 0.9 | 2.6 | 2.8 | 1.8 | 2.9 |
| Sweden | 0.0 | 1.4 | 0.1 | -0.3 | 4.1 | 0.2 |
| Czech Republic | -2.0 | 0.5 | 1.4 | 1.5 | 2.3 | 1.7 |
| Finland | 1.0 | 0.9 | -0.4 | 0.5 | : | 0.2 |

Table 11: Unemployment rate – Total population

| | Annual data (%) | | | Q1 | | | Change (%) | |
|----------------|-----------------|------|------|------|------|------|------------|---------|
| | 2014 | 2015 | 2016 | 2015 | 2016 | 2017 | 2017/16 | 2016/15 |
| Austria | 5.6 | 5.7 | 5.8 | 5.7 | 6.1 | 5.8 | -0.3 | 0.4 |
| Belgium | 8.5 | 8.5 | 7.7 | 8.6 | 8.2 | : | : | -0.4 |
| Bulgaria | 11.4 | 9.2 | 7.5 | 10.5 | 8.6 | 6.9 | -1.7 | -1.9 |
| France | 10.3 | 10.4 | 9.7 | 10.5 | 10.4 | 9.7 | -0.7 | -0.1 |
| Germany | 5.0 | 4.6 | 4.1 | 5.0 | 4.5 | : | : | -0.5 |
| Denmark | 6.6 | 6.2 | 5.8 | 6.5 | 5.9 | : | : | -0.6 |
| Czech Republic | 6.1 | 5.1 | 3.9 | 5.9 | 4.4 | : | : | -1.5 |
| EU | 10.2 | 9.4 | 8.4 | 10.0 | 9.0 | : | : | -1.0 |
| Greece | 26.5 | 24.9 | 23.5 | 26.7 | 24.9 | 23.3 | -1.6 | -1.8 |
| Estonia | 7.4 | 6.2 | 6.8 | 6.6 | 6.5 | 5.5 | -1.0 | -0.1 |
| Euro area | 11.6 | 10.9 | 9.9 | 11.5 | 10.6 | : | : | -0.9 |
| United Kingdom | 6.1 | 5.3 | 4.3 | 4.8 | 4.5 | 4.1 | -0.4 | -0.3 |
| Ireland | 11.3 | 9.4 | 7.7 | 9.8 | 8.3 | : | : | -1.5 |
| Spain | 24.5 | 22.1 | 19.3 | 23.4 | 20.7 | 18.5 | -2.2 | -2.7 |
| Italy | 12.7 | 11.9 | 11.6 | 12.7 | 12.0 | 12.0 | 0.0 | -0.7 |
| Croatia | 17.3 | 16.3 | 12.5 | 17.2 | 15.0 | 13.4 | -1.6 | -2.2 |
| Cyprus | 16.1 | 15.1 | 13.0 | 17.6 | 14.0 | : | : | -3.6 |
| Latvia | 10.8 | 9.9 | 9.8 | 10.3 | 10.4 | 9.6 | -0.8 | 0.1 |
| Lithuania | 10.7 | 9.1 | 8.0 | 10.0 | 8.5 | 8.2 | -0.3 | -1.5 |
| Luxemburg | 6.0 | 6.4 | 5.9 | 6.8 | 5.6 | : | : | -1.2 |
| Malta | 5.8 | 5.4 | 4.3 | 5.3 | 4.6 | 3.9 | -0.7 | -0.7 |
| Netherlands | 7.4 | 6.9 | 5.4 | 6.9 | 6.2 | : | : | -0.7 |
| Hungary | 7.7 | 6.8 | 5.0 | 7.6 | 5.9 | : | : | -1.7 |
| Poland | 9.0 | 7.5 | 6.1 | 8.6 | 6.9 | 5.4 | -1.5 | -1.7 |
| Portugal | 14.1 | 12.6 | 11.2 | 13.9 | 12.5 | 10.2 | -2.3 | -1.4 |
| Romania | 6.8 | 6.8 | 5.7 | 7.2 | 6.5 | : | : | -0.7 |
| Slovakia | 13.2 | 11.5 | 9.4 | 12.2 | 10.2 | 8.5 | -1.7 | -2.0 |
| Slovenia | 9.7 | 9.1 | 8.1 | 9.8 | 8.9 | 7.8 | -1.1 | -0.9 |
| Sweden | 7.9 | 7.4 | 6.3 | 7.5 | 6.8 | 6.5 | -0.3 | -0.7 |
| Finland | 8.7 | 9.4 | 8.2 | 9.3 | 9.1 | : | : | -0.2 |

Table 12: Unemployment rate among men

| | Annual data (%) | | | Q1 | | | Change (%) | |
|----------------|-----------------|------|------|------|------|------|------------|---------|
| | 2014 | 2015 | 2016 | 2015 | 2016 | 2017 | 2017/16 | 2016/15 |
| Austria | 5.9 | 6.1 | 6.3 | 6.2 | 6.7 | 6.5 | -0.2 | 0.5 |
| Belgium | 9.0 | 9.1 | 8.0 | 9.1 | 8.7 | : | : | -0.4 |
| Bulgaria | 12.3 | 9.8 | 8.1 | 11.3 | 9.3 | 6.9 | -2.4 | -2.0 |
| France | 10.5 | 10.8 | 9.9 | 11.0 | 10.9 | 9.7 | -1.2 | -0.1 |
| Germany | 5.3 | 5.0 | 4.5 | 5.6 | 4.8 | : | : | -0.8 |
| Denmark | 6.4 | 5.9 | 5.3 | 6.5 | 5.5 | : | : | -1.0 |
| Czech Republic | 5.1 | 4.2 | 3.4 | 5.1 | 3.8 | : | : | -1.3 |
| EU | 10.1 | 9.3 | 8.2 | 10.0 | 9.0 | : | : | -1.0 |
| Greece | 23.7 | 21.8 | 19.8 | 23.5 | 21.1 | 19.7 | -1.4 | -2.4 |
| Estonia | 7.9 | 6.2 | 7.3 | 7.5 | 7.2 | 5.7 | -1.5 | -0.3 |
| Euro area | 11.5 | 10.7 | 9.6 | 11.5 | 10.4 | : | : | -1.1 |
| United Kingdom | 6.4 | 5.5 | 4.4 | 4.9 | 4.6 | 4.2 | -0.4 | -0.3 |
| Ireland | 12.9 | 10.9 | 9.0 | 11.5 | 10.0 | : | : | -1.5 |
| Spain | 23.6 | 20.8 | 17.8 | 22.4 | 19.1 | 16.9 | -2.2 | -3.3 |
| Italy | 11.9 | 11.3 | 10.8 | 12.2 | 11.4 | 11.2 | -0.2 | -0.8 |
| Croatia | 16.5 | 15.7 | 11.8 | 17.1 | 15.4 | 12.7 | -2.7 | -1.7 |
| Cyprus | 17.1 | 15.2 | 12.7 | 18.2 | 13.9 | : | : | -4.3 |
| Latvia | 11.8 | 11.1 | 11.0 | 11.0 | 11.2 | 10.8 | -0.4 | 0.2 |
| Lithuania | 12.2 | 10.1 | 9.2 | 11.0 | 9.7 | 10.3 | 0.6 | -1.3 |
| Luxemburg | 5.8 | 5.8 | 5.7 | 5.6 | 5.0 | : | : | -0.6 |
| Malta | 6.1 | 5.5 | 4.0 | 5.6 | 4.6 | 3.6 | -1.0 | -1.0 |
| Netherlands | 7.2 | 6.5 | 5.0 | 6.6 | 5.8 | : | : | -0.8 |
| Hungary | 7.6 | 6.6 | 5.0 | 7.6 | 5.9 | : | : | -1.7 |
| Poland | 8.5 | 7.3 | 6.0 | 8.5 | 6.8 | 5.4 | -1.4 | -1.7 |
| Portugal | 13.8 | 12.4 | 11.2 | 13.4 | 12.7 | 9.9 | -2.8 | -0.7 |
| Romania | 7.3 | 7.5 | 6.4 | 8.2 | 7.5 | : | : | -0.7 |
| Slovakia | 12.8 | 10.3 | 8.5 | 11.4 | 9.2 | 8.5 | -0.7 | -2.2 |
| Slovenia | 9.0 | 8.1 | 7.6 | 9.0 | 8.4 | 7.5 | -0.9 | -0.6 |
| Sweden | 8.2 | 7.5 | 6.7 | 7.8 | 7.4 | 7.1 | -0.3 | -0.4 |
| Finland | 9.3 | 9.9 | 8.6 | 10.2 | 9.9 | : | : | -0.3 |

Table 13: Unemployment rate among women

| | Annual data (%) | | | Q1 | | | Change (%) | |
|----------------|-----------------|------|------|------|------|------|------------|---------|
| | 2014 | 2015 | 2016 | 2015 | 2016 | 2017 | 2017/16 | 2016/15 |
| Austria | 5.4 | 5.3 | 5.3 | 5.2 | 5.4 | 5.1 | -0.3 | 0.2 |
| Belgium | 7.9 | 7.8 | 7.4 | 8.0 | 7.6 | : | : | -0.4 |
| Bulgaria | 10.4 | 8.4 | 6.9 | 9.6 | 7.7 | 6.9 | -0.8 | -1.9 |
| France | 10.0 | 9.9 | 9.6 | 10.0 | 9.9 | 9.8 | -0.1 | -0.1 |
| Germany | 4.6 | 4.2 | 3.7 | 4.4 | 4.1 | : | : | -0.3 |
| Denmark | 6.8 | 6.4 | 6.3 | 6.5 | 6.3 | : | : | -0.2 |
| Czech Republic | 7.4 | 6.1 | 4.6 | 6.9 | 5.0 | : | : | -1.9 |
| EU | 10.3 | 9.5 | 8.6 | 9.9 | 9.1 | : | : | -0.8 |
| Greece | 30.2 | 28.9 | 28.2 | 30.6 | 29.6 | 27.8 | -1.8 | -1.0 |
| Estonia | 6.8 | 6.1 | 6.1 | 5.5 | 5.7 | 5.3 | -0.4 | 0.2 |
| Euro area | 11.8 | 11.0 | 10.2 | 11.6 | 10.8 | : | : | -0.8 |
| United Kingdom | 5.8 | 5.1 | 4.2 | 4.6 | 4.3 | 3.9 | -0.4 | -0.3 |
| Ireland | 9.4 | 7.7 | 6.2 | 7.9 | 6.2 | : | : | -1.7 |
| Spain | 25.4 | 23.6 | 21.1 | 24.6 | 22.5 | 20.3 | -2.2 | -2.1 |
| Italy | 13.8 | 12.7 | 12.6 | 13.4 | 12.8 | 13.1 | 0.3 | -0.6 |
| Croatia | 18.3 | 17.0 | 13.2 | 17.3 | 14.4 | 14.3 | -0.1 | -2.9 |
| Cyprus | 15.1 | 14.9 | 13.3 | 16.9 | 14.1 | : | : | -2.8 |
| Latvia | 9.8 | 8.6 | 8.6 | 9.5 | 9.7 | 8.5 | -1.2 | 0.2 |
| Lithuania | 9.2 | 8.2 | 6.8 | 9.0 | 7.2 | 6.2 | -1.0 | -1.8 |
| Luxemburg | 6.4 | 7.2 | 6.3 | 8.3 | 6.3 | : | : | -2.0 |
| Malta | 5.3 | 5.2 | 4.7 | 4.8 | 4.7 | 4.3 | -0.4 | -0.1 |
| Netherlands | 7.8 | 7.3 | 6.0 | 7.2 | 6.7 | : | : | -0.5 |
| Hungary | 7.9 | 7.0 | 5.0 | 7.7 | 6.0 | : | : | -1.7 |
| Poland | 9.6 | 7.7 | 6.1 | 8.8 | 6.9 | 5.3 | -1.6 | -1.9 |
| Portugal | 14.5 | 12.9 | 11.2 | 14.3 | 12.3 | 10.5 | -1.8 | -2.0 |
| Romania | 6.1 | 5.8 | 4.8 | 5.8 | 5.2 | : | : | -0.6 |
| Slovakia | 13.6 | 12.9 | 10.6 | 13.2 | 11.5 | 8.6 | -2.9 | -1.7 |
| Slovenia | 10.6 | 10.1 | 8.6 | 10.8 | 9.5 | 8.2 | -1.3 | -1.3 |
| Sweden | 7.7 | 7.3 | 5.8 | 7.1 | 6.1 | 5.8 | -0.3 | -1.0 |
| Finland | 8.0 | 8.8 | 7.8 | 8.2 | 8.2 | : | : | 0.0 |

Table 14: Long-term unemployment rate (*)

| | Annual data (%) | | | Q1 (%) | | | Change (%) | |
|----------------|-----------------|------|------|--------|------|------|------------|---------|
| | 2014 | 2015 | 2016 | 2015 | 2016 | 2017 | 2017/16 | 2016/15 |
| Austria | 27.2 | 30.5 | 33.7 | 27.3 | 29.0 | 32.0 | 3.0 | 1.7 |
| Belgium | 49.9 | 52.9 | 52.8 | 52.3 | 50.4 | : | : | -1.9 |
| Bulgaria | 60.4 | 61.9 | 59.6 | 59.1 | 55.9 | 54.2 | -1.7 | -3.2 |
| France | 42.8 | 45.4 | 47.2 | 43.0 | 44.3 | 44.7 | 0.4 | 1.3 |
| Germany | 44.3 | 45.3 | 42.7 | 43.1 | 38.9 | : | : | -4.2 |
| Denmark | 25.2 | 29.8 | 25.5 | 27.1 | 24.8 | : | : | -2.3 |
| Czech Republic | 43.5 | 48.2 | 42.8 | 45.8 | 45.9 | : | : | 0.1 |
| EU | 52.6 | 50.2 | 48.6 | 48.2 | 46.4 | : | : | -1.8 |
| Greece | 73.5 | 73.6 | 72.4 | 71.5 | 70.2 | 69.7 | -0.5 | -1.3 |
| Estonia | 45.3 | 40.0 | 32.6 | 41.7 | 25.0 | 33.8 | 8.8 | -16.7 |
| Euro area | 49.5 | 52.8 | 51.5 | 51.2 | 49.3 | : | : | -1.9 |
| United Kingdom | 35.8 | 33.9 | 30.3 | 32.4 | 28.2 | 25.4 | -2.8 | -4.2 |
| Ireland | 59.2 | 59.4 | 57.3 | 60.7 | 58.5 | : | : | -2.2 |
| Spain | 52.8 | 52.5 | 49.2 | 52.3 | 48.4 | 45.6 | -2.8 | -3.9 |
| Italy | 61.4 | 59.7 | 59.1 | 57.7 | 58.0 | 56.9 | -1.1 | 0.3 |
| Croatia | 58.4 | 66.2 | 53.2 | 59.8 | 50.7 | 41.4 | -9.3 | -9.1 |
| Cyprus | 47.7 | 46.7 | 45.3 | 43.2 | 41.2 | : | : | -2.0 |
| Latvia | 43.0 | 46.2 | 41.8 | 43.6 | 45.4 | 38.3 | -7.1 | 1.8 |
| Lithuania | 44.7 | 43.3 | 38.8 | 42.0 | 39.5 | 36.1 | -3.4 | -2.5 |
| Luxemburg | 27.4 | 30.3 | 37.0 | 25.6 | 35.1 | : | : | 9.5 |
| Malta | 46.9 | 48.2 | 45.3 | 46.7 | 46.5 | 48.3 | 1.8 | -0.2 |
| Netherlands | 40.0 | 48.0 | 47.4 | 42.8 | 41.3 | : | : | -1.5 |
| Hungary | 47.5 | 46.8 | 47.7 | 43.0 | 46.4 | : | : | 3.4 |
| Poland | 42.7 | 40.1 | 35.9 | 40.3 | 36.3 | 29.6 | -6.7 | -4.0 |
| Portugal | 59.6 | 59.1 | 56.9 | 57.0 | 53.3 | 51.4 | -1.9 | -3.7 |
| Romania | 41.1 | 45.1 | 51.7 | 42.9 | 52.1 | : | : | 9.2 |
| Slovakia | 70.2 | 66.9 | 61.4 | 65.0 | 61.6 | 61.9 | 0.3 | -3.4 |
| Slovenia | 54.5 | 53.0 | 53.9 | 50.6 | 51.1 | 45.5 | -5.6 | 0.5 |
| Sweden | 18.9 | 24.1 | 22.4 | 19.5 | 19.1 | 19.8 | 0.7 | -0.4 |
| Finland | 22.4 | 27.5 | 29.4 | 23.1 | 25.1 | : | : | 2.0 |

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

Table 15: Unemployment rate of persons aged 15-24

| | Annual data (%) | | | Q1 | | | Change (%) | |
|----------------|-----------------|------|------|------|------|------|------------|---------|
| | 2014 | 2015 | 2016 | 2015 | 2016 | 2017 | 2017/16 | 2016/15 |
| Austria | 10.3 | 10.6 | 11.2 | 9.6 | 11.7 | 10.4 | -1.3 | 2.1 |
| Belgium | 23.2 | 22.1 | 20.1 | 20.4 | 19.8 | : | : | -0.6 |
| Bulgaria | 23.8 | 21.6 | 17.3 | 23.2 | 18.4 | 12.8 | -5.6 | -4.8 |
| France | 24.2 | 24.7 | 24.6 | 25.5 | 25.3 | 22.7 | -2.6 | -0.2 |
| Germany | 7.7 | 7.2 | 7.1 | 7.3 | 7.3 | : | : | 0.0 |
| Denmark | 12.6 | 10.8 | 12.0 | 10.7 | 11.4 | : | : | 0.7 |
| Czech Republic | 15.9 | 12.6 | 10.5 | 13.9 | 9.7 | : | : | -4.2 |
| EU | 22.2 | 20.4 | 18.7 | 21.5 | 19.5 | : | : | -2.0 |
| Greece | 52.4 | 49. | 47.4 | 51.9 | 50.9 | 46.8 | -4.1 | -1.0 |
| Estonia | 15.0 | 13.1 | 13.5 | 13.8 | 15.1 | 15.5 | 0.4 | 1.3 |
| Euro area | 23.7 | 22.4 | 20.9 | 23.3 | 21.9 | : | : | -1.4 |
| United Kingdom | 16.9 | 14.6 | 13.0 | 15.2 | 13.0 | 11.9 | -1.1 | -2.2 |
| Ireland | 23.9 | 20.9 | 17.2 | 21.5 | 16.9 | : | : | -4.6 |
| Spain | 53.2 | 48.3 | 44.5 | 51.4 | 46.5 | 41.7 | -4.8 | -4.9 |
| Italy | 42.7 | 40.3 | 37.8 | 44.9 | 40.3 | 37.3 | -3.0 | -4.6 |
| Croatia | 45.5 | 43.0 | 31.3 | 45.2 | 32.5 | 34.4 | 1.9 | -12.7 |
| Cyprus | 36.0 | 32.8 | 29.1 | 37.0 | 29.8 | : | : | -7.2 |
| Latvia | 19.6 | 16.3 | 17.3 | 14.8 | 15.0 | 17.3 | 2.3 | 0.2 |
| Lithuania | 19.3 | 16.3 | 14.5 | 19.9 | 14.5 | 14.8 | 0.3 | -5.4 |
| Luxemburg | 22.3 | 17.3 | 18.7 | 18.9 | 17.0 | : | : | -1.9 |
| Malta | 11.7 | 11.8 | 11.1 | 9.8 | 9.2 | 10.6 | 1.4 | -0.6 |
| Netherlands | 12.7 | 11.3 | 10.8 | 11.9 | 12.0 | : | : | 0.1 |
| Hungary | 20.4 | 17.3 | 13.0 | 19.4 | 14.2 | : | : | -5.2 |
| Poland | 23.9 | 20.8 | 17.6 | 23.3 | 19.6 | 15.2 | -4.4 | -3.7 |
| Portugal | 34.7 | 32.0 | 27.9 | 34.4 | 31.0 | 25.1 | -5.9 | -3.4 |
| Romania | 24.0 | 21.7 | 20.6 | 24.7 | 21.8 | : | : | -2.9 |
| Slovakia | 29.7 | 26.5 | 22.2 | 26.4 | 24.3 | 18.7 | -5.6 | -2.1 |
| Slovenia | 20.2 | 16.3 | 15.3 | 19.2 | 17.8 | 11.6 | -6.2 | -1.4 |
| Sweden | 22.9 | 20.4 | 18.8 | 23.7 | 21.9 | 20.3 | -1.6 | -1.8 |
| Finland | 20.5 | 22.4 | 19.9 | 24.6 | 23.1 | : | : | -1.5 |

(*) For the exact definition of the indicator "At Risk of Poverty or Social Exclusion Rate" refer to:

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

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