



Foundation for Economic and Industrial Research

The Greek Economy

4/12

Quarterly Bulletin

No 70, January 2013

Editorial Policy

The analysis of the Greek Economy is the product of a collective effort by the research staff of the Foundation. The views presented here represent a reached consensus and no individual bears sole responsibility for all or part of it. Furthermore, the views expressed do not necessarily reflect those of other organisations that may support, finance or cooperate with the Foundation.

IOBE

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

Copyright ©2013 Foundation for Economic & Industrial Research

ISSN 1106 – 4315

With the financial support of:



This study may not be reproduced in any form or for any purpose without the prior knowledge and consent of the publisher.

Foundation for Economic and Industrial Research (IOBE)
11, Tsami Karatasou Str, 117 42 Athens, Tel. (+30210 9211200-10), Fax:(+30210 9233977)
<http://www.iobe.gr>

1. BRIEF OVERVIEW – MAIN CONCLUSIONS	13
The global economy is at a turning point – the adopted economic policies in the Eurozone and the USA will have a decisive influence on global growth in 2013.....	13
The contraction in Greece stands at -6.6% in 2012, from -7.1% in 2011	14
The Greek economy will continue to contract in 2013, albeit at a weaker rate than in the previous year	15
The execution of the budget is emphatically on target in 2012, due to the fall of expenditure and the lower interest payments after the PSI	16
Unemployment will continue to increase in 2013, albeit at a milder rate, with long-term unemployment as a critical indicator.....	17
Significant reduction of inflation in 2012 to 1.5%, with further disinflation in 2013	18
Special IOBE study: «The impact on the Greek Economy from leveraging its cultural heritage»	18
2. ECONOMIC ENVIRONMENT.....	19
2.1 Trends and Prospects of the World Economy	19
The Global Economic Environment	19
The Economics of the EU and the Euro area	25
2.2 The Economic Environment in Greece	33
A) Economic Sentiment.....	33
B) Fiscal developments in the third quarter of 2012.....	40
C) Developments in the labour market and the competitiveness of the Greek economy	46
3. PERFORMANCE AND OUTLOOK.....	51
3.1 Macroeconomic developments	51
Developments in the first nine months of 2012	51
Medium-term outlook	55
3.2 Developments and outlook in key sectors of the economy	67
3.3 Export Performance of the Greek Economy.....	76
3.4 Employment - Unemployment	79
3.5 Consumer Prices.....	87
Recent Developments.....	87
Medium-term Outlook.....	89
3.6 Balance of Payments.....	92
Current Account	92
Capital Account	93
Financial Account	93
Assessment.....	95
4. IMPACT ON THE ECONOMY OF GREECE FROM LEVERAGING ITS CULTURAL HERITAGE	99
4.1 Introduction	99
4.2 The initiative to leverage Greece’s cultural heritage	99
4.3 Impact on the Greek economy from leveraging the cultural heritage	102
4.4 Summary - Conclusions.....	104
5. APPENDIX: KEY ECONOMIC INDICATORS	107

FOREWORD

This is the fourth report that IOBE is publishing for 2012 as part of its periodic series on the Greek economy. The publication takes place in the aftermath of prolonged and crucial negotiations, in Greece and at international level, for the design of the fiscal consolidation and structural reforms programme in the coming two years and for securing the sustainability of the country's public debt. As all IOBE quarterly bulletins, the report contains **four sections** and an **appendix** with key structural indicator. The report contains an introductory text, regarding **the prospects for recovery in Greece after the recent political decisions and the prerequisites for the materialisation of these prospects**. The remaining sections of the report are structured as follows:

The first section presents a **brief overview** of the report's main points. **Section two** examines the general economic conditions, containing: a) an analysis of the **global economic environment in late 2012 and 2013**, based on the latest reports of the European Commission and other international organisations; b) an outline of the **economic climate** in Greece, as compiled in the latest IOBE business surveys; c) a presentation on the **budget execution** during the first eleven months of 2012 and a brief analysis of the 2013 budget; d) an analysis of the developments in the labour market, based on the 'Okun's law', assessing the trends of the Greek economy's competitiveness.

Section three focuses on the performance of the Greek economy during the first nine months of 2012 and contains forecasts for 2013. It includes an analysis of the current **macroeconomic environment** and its medium-term outlook, the **developments in key production sectors** until October, the **export performance** of the Greek economy during the first nine months of the year, the developments in the **labour market** for the same period, the course of **inflation** from January to November and, finally, the course of the **balance of payments** from the beginning of the year until October.

Section four presents a **special study of IOBE** on the potential contribution to the Greek economy of a plan to leverage the country's cultural heritage.

The report refers to and is supported by data, which were available up to 31/12/2012. IOBE's next quarterly report on the Greek economy will be published in early April 2013.

POSITIVE OUTLOOK FOR RECOVERY YET NO ROOM FOR COMPLACENCY

The thoughts of the Foundation for the prospects of the country in 2013 focus on building confidence in the future of the Greek economy. Not only because optimism usually comes at the beginning of each new year, but because the country is indeed at a turning point, where some unambiguously positive data has come to the surface. The taming of the contraction, the consolidation of positive balances, the halting of the unemployment growth rate constitute goals that have not yet been achieved, yet they have started to seem more feasible.

A key challenge, therefore, in this Quarterly Bulletin is to record and emphasise the conditions needed to ensure the **economy's recovery** at an accelerated pace. In the meantime, an equally important goal is to **avoid any sense of complacency**. The positive data that emerge might be solid, yet the risks that are still lurking are equally real and serious.

The 4th quarter of 2012, to which the current Bulletin refers to, was a period of recurring meetings that took place both on the Greek political scene and parliament and in the international political and economic space, in the Eurogroup or IMF summits, where each of the decisions to bail out the Greek economy were made in the last moment! However, the decision to grant the huge instalment exceeding €50 billion, signifies the strongest manifestation to date of the will of Europe, but also of our country, for Greece to remain in the Eurozone. The positive assessment of the markets for the reduced risk of the Greek securities is confirmed by the refusal of the foreign bond holders to participate in the recent exchange process and by the significant losses incurred by those who bet in favour of Greek default.

The above decision of major importance was followed by a significant disbursement and the emergence of some, albeit small, liquidity in the market. The decision of the European Central Bank to accept as collateral Hellenic Republic securities was also critically important, as it decreases the Greek banks' borrowing cost, and by extension the interest rate at which they lend to the enterprises, by 2 percentage points.

It is also worth to mention that the primary deficit improved, standing at €1.5 billion (0.8% of GDP) in the first eleven months of the year from €6 billion in the same period of the previous year (2.9% of GDP), which was achieved despite the deep contraction and the incapacity of the state agencies to collect public revenue in full. The improvement in the current account, which came both from a fall of demand and from gains in competitiveness, as shown in reputable international rankings, was also significant. The anticipated increase of tourist flows, as signalled by the course of early bookings for 2013, is also of course a piece of good news. In addition, the overall economic climate, as captured in the business and consumer surveys conducted by IOBE, has improved notably in the past two months.

Regarding the recovery outlook, the recent developments in the banking sector allow for some cautious optimism with respect to the expected extent of the recession and the anticipated recovery. The continuous return of deposits to the banking sector since the past

summer undoubtedly constitutes a "vote of confidence" by millions of savers regarding the reliability of the Greek banks; provided that it continues and expands, it can create the conditions for gradual reinstatement of the banks' access to the interbank market. The bank financing of the economy can trigger a recovery, which subsequently should be supported by a set of medium-term growth policies.

The above facts create a notably more favourable short-term prospects for the Greek economy and substantiate the anticipation of positive change in the quarterly GDP growth rates in late 2013 or early 2014. Given, however, that in 2013 there will be a carry-over contraction from 2012 by about 3%, the contraction rate for 2013 overall is estimated at about 4.5%. Most probably, the contraction during the first two quarters will be rather intense, by more than 4.5%, while afterwards it is expected to ease substantially.

The upgrade of the long-term credit rating of Greece by 6 grades (from SD to B-) by Standard & Poor's and a similarly positive statement by Goldman Sachs are definitely "good news", which led prominent researchers on Greece to make especially positive forecasts for the state of the Greek economy in 2020.

Other foreign banks and international audit companies, which continue to consider Greece as a high risk zone, are challenging the above positive messages. A typical example of this is the recent report by Moody's (19 December), which insists on maintaining the credit rating grade C, describing the debt exchange on 8 March and then on 12 December as, in effect, credit events the repetition of which cannot be ruled out.

These and other similarly cautious statements are not lacking argumentation. As noted also in the main part of the current bulletin, the Greek economy is entering 2013 with the outlook of a milder, yet continuing for a sixth year in a row, contraction. The key reason for this is the fall of private consumption, which under the current economic model takes up $\frac{3}{4}$ of GDP, due to the new drastic reduction of income that was part of the contractual obligations of the country, in order to secure the disbursement of the instalment. The growing exports, impaired by the stagnation or mild recession in the Euro zone, which is hindering the acceleration of the global economy, cannot compensate for this reduction. Concern is also expressed in this report on the unemployment outlook, given that some indications (such as the drastic increase in the long-term unemployed in 2012) suggest that the extensive current unemployment has began to affect structural unemployment.

These facts lead to the formulation of the key issue at the beginning of the new year. If the key issue for the 2nd quarter of 2012 was to restore the country's **credibility** and in the 3rd was to boost our **confidence** in the future, today all efforts should focus on **acceleration of the economy's recovery**. Indeed, the key emphasis should be placed on the acceleration element, as the stronger the recovery signs that will appear in 2013, the weaker the recession will be, forming stable launch pads for stronger growth afterwards.

On the other hand, equally important challenge for the coming months is to **avoid any sense of complacency**. It should not be forgotten that the disbursements of the next instalments to Greece that are scheduled to take place in January, February and March are conditioned on fulfilling specific terms, which should pass through the processes of the unprecedented for the domestic political scene coalition governance. Broader understanding of the importance of the proposed measures, the social cohesion and mainly the strict adherence of the government to the principles and the criteria of social justice are prerequisites for the success of the government's effort. A decisive action against the problem of tax evasion and a broader and deeper tax reform will perhaps be the most convincing example of social justice. The tax exsanguinations of always the same section of the population has pushed the levels of tolerance and endurance to extreme limits and tax evasion can no longer be accepted to continue. The political system seems to have started to realise that the time for action on this issue is now. The consensus between representatives of the whole political spectre – both from the current government and the opposition – on the needed reforms, expressed during the latest event of IOBE regarding the tax system, is a brilliant example of this realisation.

Returning to the key challenge today – the recovery – IOBE has repeatedly stated in its recent reports that investment is the decisive factor for its start. Investment in public works, investment in the Greek private sector, investment from direct inflow of capital from abroad and investment that would come as a result of privatisation.

Regarding the **investment in public works**, actions which will mobilise significant funds from the NSRF and the European Investment Bank and will restart significant investment projects in infrastructure, such as roads, seem to be on track.

Still, **private investment** will constitute the key recovery driver. The main obstacle for carrying out private investment is the dramatic lack of liquidity. The outflow of deposits in the past three years, the isolation from the interbank market and the PSI programme have significantly weakened the banking sector's capacity to provide liquidity to the real economy. Furthermore, the delay of arrear repayment of the public to the private sector has also deprived valuable liquidity from the economy, on top of the funding problems that this has created for certain aspects of the welfare state, such as healthcare.

Certain recent developments for the first time create reasonable expectations that this situation can be reversed. The recapitalisation will restore the capital adequacy of the banking sector and will strengthen its solvency. If this is the first step, the coming mergers in the banking sector and the creation of fewer, yet stronger, players is the second one. To these we should add the liquidity injection to the banks from the recent bond repurchase. Significant boost of liquidity will also come from the repayment of arrears of the public to the private sector, as a significant part of the instalment that the country will receive in late Janu-

ary will be spent for this purpose. The repurchase of the treasury bills that the banks hold today will also have a positive impact on liquidity.

In the medium term, significant reversal of the liquidity problem will also come from the reasonably anticipated return of deposits after the realistic response (at last) to the alarmism for return to drachma. Of course, the return of deposits is not going to take place overnight. Time and a continuous struggle will be needed to consolidate the country's credibility. The combination of deposit returns and the first indications of recovery could create multiplicative positive effects, as the banking system will strengthen its capital base and will prove capable of overcoming its problems.

The adoption of structural reforms will contribute decisively to the attraction and encouragement of investment from the direct **inflow of capital from abroad**. Reforms in the markets for products / services that facilitate the existing and new entrepreneurship, but also the implementation of the recent laws and decisions that support entrepreneurship and investment (e.g. simplification of licensing for the enterprises, law for the improvement of the business environment, finalisation of the regional land use plans) and most reforms that are included in the economic adjustment programme, could emphatically boost investment activity. They can contribute decisively to the recovery of the Greek economy and at the end to the exit from the crisis. There are already a few initial signs of significant investment initiatives, which are expressed under the form of a partnership between public and private entities. As examples we can mention the success of Cosco in the port of Piraeus and the partnership of HP and TRAINOSE, together with the natural gas pipeline TAP. Bold actions in the above directions will mobilise the Greek society to adopt change as the model of development of the country and to consolidate the global community's belief that the country has finally decided to turn the page, to embrace entrepreneurship and to remove decidedly all obstacles that until today discouraged the foreign investors.

IOBE in its reports has repeatedly stressed the importance of **investments which come as a result of the privatisation programme**. It is estimated that the programme of public asset development could attract up to €60 billion of new investment - on top, that is, of the initial payment, which will be used for debt repayment. This can lead to an increase of GDP by up to 1% per annum, higher employment by 50 thousand new jobs and an increase of tax revenues by 3% of GDP. Given both the commitment of the government in the direction of privatisation and the recent acceleration of the relevant procedures, this can reasonably be considered as a significant source of new investment in the medium term. Here too social cohesion and broader understanding of the importance of privatisation for the future of the economy and particularly for tackling unemployment are particularly important.

Finally, we refer to the rhetoric question that is often asked lately, namely whether IOBE is "seeing light at the end of the tunnel".

Before we venture any answer, we should stress that when the Greek economy will overcome today's crisis, its size and structure will be very different from what used to be the case in the past. IOBE is referring to this prospect as the emergence of a new model of development for the country. A new model of development for Greece must involve a radical reallocation of economic activity, increasing production in branches that produce internationally competitive tradable products, as opposed to the non-tradable sector that used to be the engine of growth in the past. Investment and the activity of the productive - business sector will certainly have a central role in this prospect. Nevertheless, what matters is not only the volume of investment, but also their direction, and here on this subject the adoption of structural reforms has decisive importance.

The significant improvement of the balance of payments in the last two years and the lifting of obstacles to entrepreneurship that has already taken place and is reflected in improvement of the ranking of the country by 11 positions in the ranking of the World Bank's Doing Business report constitute the first indications of a momentum that can and should be strengthened.

So, a few light rays have become faintly visible. And the light will grow strong as the country proceeds steadily and credibly along the path prescribed by the current economic policy framework. Without complacency, but with well-founded optimism about the prospects of the Greek economy.

1. BRIEF OVERVIEW – MAIN CONCLUSIONS

The global economy is at a turning point – the adopted economic policies in the Eurozone and the USA will have a decisive influence on global growth in 2013

The growth of the world economy, after the slowdown in the second quarter of 2012, stabilised in the third quarter. The fiscal crisis in the Eurozone and the continuous effort to tackle it, together with the election period in the USA, which had at its core fiscal issues, brought the world economy to a stance of wait-and-see towards the developments in these areas. The political processes in the Eurozone were largely linked with what was happening in Greece. The economic activity in the countries in the remaining geographical zones continued to be subjected to downward pressures from the strict fiscal policies adopted in the Eurozone member-states, through the reduction of the demand for their exports and the uncertainty created by the announcement of new contractionary fiscal policies even in the Eurozone's largest countries, such as for example France. The impact from the above contractionary factors remained strong until late 2012, as the consultations between the EC and the IMF on the sustainability of Greek debt peaked during the specific time period, while in parallel the 2013 fiscal measures in the state budgets of the Eurozone member-states were finalised. In addition, the election uncertainty peaked in the USA in early November, while the extensive damage from Hurricane Sandy slowed down its

growth. The new administration should achieve an agreement to cover the "fiscal cliff" within a short time frame. Under these conditions in the global environment in the second half of 2012, **the expectations on the world economy's growth rates were revised down to 3.1% by the European Commission (against a previous forecast of 3.3%), from 3.8% in 2011.**

In any case, the year 2013 will constitute a turning point for the world economy. Stagnation of the economy is expected in the Eurozone (+0.1% according to the European Commission). On the other hand, in the USA the agreement over the "fiscal cliff" partly lifts the dead-end, while the continuation of the liquidity intervention by the FED and the repair of the damages of Hurricane Sandy will most probably slightly accelerate GDP growth. In contrast, Japan will lose the growth momentum generated in 2012 by the effort to repair the damages from the March 2011 earthquake. Regarding the developing economies, the mixed effects from the course of the developed economies will consolidate their growth at their past year level. However, the implementation of expansionary monetary policies in some of them will boost domestic demand, overcompensating for possible weakening of exports. **The forecast for slight strengthening of the world economy's in 2013 to 3.3%, against a more optimistic forecasts until mid 2012 (3.7%), summarises the above trends.**

The contraction in Greece stands at -6.6% in 2012, from -7.1% in 2011

The easing of the political instability in mid June and the formation of a new government moderated the uncertainty in the country, albeit without any positive effects on economic activity. The reasons for this were: a) uncertainty on the outcome of the negotiations for the fiscal measures that commenced in July and carried on until mid November, b) implementation of the fiscal interventions of the second bailout agreement, c) broader adoption of the structural changes in the labour market and d) acceleration of the growth of unemployment. As a result, the contraction of the Greek economy deepened in the third quarter **(-6.9%), from -6.3% in the preceding quarter and -4% in the same period of 2011. For the first nine months of 2012 the fall of GDP reached 6.6%, marginally lower than in the corresponding period of 2011 (-6.8%).**

Regarding the key GDP components in the third quarter, the trends from the previous quarter remained and in most cases strengthened. **The fall of private consumption by 8.9% remained the key contraction driver**, falling stronger than in the same period of 2011 (-7.8%). **The contraction of investment expenditure intensified anew in the third quarter to reach 30.3% for the first nine months of 2012** (from 13.3% in the same period of the previous year). In contrast, **the reduction of public consumption in 2011 was weaker at 4.0%**, against 6.8% a year before. Significant positive developments were again observed in the **external sector of the economy**, where the balance turned positive for the first time in recent history.

This, together with a **reduction of the deficit in the time period from January to September by 73.4%** in national accounting terms (to 1.9% of GDP from 6.8% in 2011), **was exclusively due to a drop of imports** (-17.4%). The value of exports fell by 1.9%, while in 2011 it was growing by 2.0%.

Regarding the developments in the last quarter of 2012, private consumption is expected to continue falling at a rate similar to that in the previous two quarters, due again to growing unemployment, the fiscal measures and the changes in the labour market, but also due to the uncertainty over the outcome from the negotiations with the "troika" regarding the new fiscal measures and the results from the EC-IMF consultations on the sustainability of Greek public debt. The reduction of public consumption expenditure most likely intensified in order to achieve the fiscal targets, while the delayed payment of the loan instalment from the troika did not cause liquidity problems for the state. The prolonged negotiations in the country and abroad, which also concerned parameters of the business environment (corporate tax system, remuneration) kept the investment climate subdued. Also, the extraordinarily weakened domestic demand during this quarter led to a further contraction of imports, keeping the external sector deficit at a level much lower than in 2011. **Taking into consideration the trends in the key GDP components in late 2012 and their course during the first nine months of the year, the IOBE forecast on the intensity of the contraction of the Greek economy for the whole year remains unchanged from**

its previous quarterly report at 6.6%, slightly lower than the 2011 rate (-7.1%).

The Greek economy will continue to contract in 2013, albeit at a weaker rate than in the previous year

The completion of the negotiations with the troika about the fiscal measures and the structural reforms in 2013-2014, the Eurozone-IMF consultations on the actions that would make the Greek public debt sustainable and on the extension of the fiscal consolidation process in Greece, and subsequently the repurchase of bonds by the Greek government, had a significant direct impact on the Greek economy, which will manifest itself in 2013, as a preamble of more positive developments in the new year. First of all, the international image of the country is improving, as Greece seems to be winning the challenge to regain its credibility. Moreover, the restart of the financing of the Greek state by EFSF and IMF, which allows for the completion of the recapitalisation of the banks, the repayment of arrears of the public to the private sector and the acceptance of Greek bonds by the ECB as collateral for the provision of liquidity at an interest rate much lower than the Emergency Liquidity Assistance, has already been made possible. These developments, together with the upcoming mergers-acquisitions in the banking sector, are expected to lead to restoration of the capital adequacy of the banks, improvement of their solvency and gradual strengthening of their capacity to provide liquidity to enterprises and individuals from about mid 2013. Therefore, the key parameters of the economic environment

(continuation of the fiscal consolidation, funding of the Greek state, stability of the banking system) will consolidate, boosting the confidence in the country and abroad that the Greek economy can restructure and then recover.

The lifting of these uncertainties is expected to improve gradually the investment climate. The investment prospects are also expected to be supported by targeted initiatives and actions by the state: acceleration of the Public Investment Programme, after the low level of execution in the previous year and as the fourth financing framework period is coming to its end, restart of the construction of five large road axes, the activity of the Hellenic Republic Asset Development Fund, and the adoption – implementation of reforms to support entrepreneurship and the investment climate, procrastinated due to the prolonged negotiations in 2012 in the country and abroad and the double elections.

Despite all this, the expected further strong contraction of demand in the current year, mainly in Greece due to the adoption of the scheduled fiscal measures and the continuous rise of unemployment, albeit at a weaker rate, but also in markets with significant share of the international demand for Greek products and services (Eurozone), is expected to constrain the execution of investment plans and to bring **further fall of investment expenditure, yet at a weaker rate than in 2012**. The very low level of production capacity in Industry in late 2012, at around 65%, depicts well the significantly weakened demand. However, this

fact does not negate the significance of the effort to improve parameters and characteristics of the investment environment, so that it can respond well to the challenges of demand revival. In addition, a small growth of investment activity in the last quarter of 2013, when the above and other parameters analysed in this report will be more favourable, cannot be ruled out.

The implementation of the fiscal measures in the current year will mostly have a negative impact on purchasing power and thus on **the consumption of the private sector**, as most of these measures concern income cuts for public sector employees (wage cuts for certain professions, abolition of the 13th-14th salary), pensioners and individuals receiving benefits from the state. Reduction of the income of all individuals will most probably come from the removal of the tax allowance that existed until 2012, as until today it is not clear how the new tax discount will be recognised (during the fiscal year or with the settlement of the tax statements in the following year). The further escalation of unemployment, albeit at a weaker rate than in the previous year, will also continue to restrain consumption. Given the above, **the intensity of the pressures on private consumption in 2013 is expected to be similar to that in 2012.**

Regarding the other element of domestic consumption, i.e. public sector consumption, the achievement of fiscal consolidation primarily through the reduction of public expenditure, as planned in the MTFs 2013-2016, portends **new cuts of**

the consumption expenditure of the public sector. On the other hand, the payment of arrears of the state to the private sector, with the funds drawn from the EFSF and the IMF, is expected to have a restrictive effect on the reduction of public expenditure.

Regarding the developments in the **external sector of the economy**, its balance will improve, mainly as a result of the double-digit contraction of imports due to the rapid weakening of domestic consumption demand. However, small contribution of exports is also possible, from the increasing impact of tourism, as the early indications show stronger flows in 2013 than in 2012. In any case, **the further significant fall of imports in the new year is expected to lead to surplus in the external sector in 2013, for the first time in recent history, which thus will have a positive contribution to GDP.**

Taking into account the above trends in the key components of GDP in 2013, the Greek economy is expected to contract by 4.6%, at a weaker rate than in 2012. This forecast is slightly more pessimistic compared with those of other domestic and international institutions (EC: -4.2%; Ministry of Finance, OECD: -4.5%).

The execution of the budget is emphatically on target in 2012, due to the fall of expenditure and the lower interest payments after the PSI

One month before the end of 2012, the State Budget had a net deficit of €12.9

billion, better by €8.3 billion year-on-year. The significant improvements came almost by half (€4.2 billion) from the primary deficit which did not exceed €1.4 billion, while after the PSI the interest payments also fell significantly by €4.1 billion. However, the satisfactory primary result came exclusively from the expenditure side – as the revenues continued to shrink – through savings of primary expenditure of the Ordinary Budget (€4.4 billion less than in 2011) and significant cuts of the PIP (€0.7 billion). The General Government balance also had a deficit in the period from January to November of 2012, to the amount of €9.7 billion, against €19.9 billion one year earlier.

Further reduction of the General Government deficit is envisaged for 2013, to €9.4 billion (5.2% of GDP) from €12.9 billion in 2012 (6.6% of GDP). Despite the fact that a small reduction of interest payments is expected in the current year, a small primary surplus is expected to be achieved (€748 million or 0.4% of GDP) for the first time after many years, mostly through containment of expenditure as a result of the fiscal policy measures that are included in the Medium Term Fiscal Strategy 2013 – 2016.

Unemployment will continue to increase in 2013, albeit at a milder rate, with long-term unemployment as a critical indicator.

The observed downturn of the activity of the tourist enterprises during the summer and the much deeper than anticipated recession of the Greek economy prevented the traditional positive seasonal effects

from taking place in the third quarter of 2012. As a result, the unemployment rate during that period reached 24.8%, by 7.1 percentage points higher year-on-year. For the first nine months of 2012, unemployment reached 23.7%, against 16.6% in the corresponding period of 2011.

The extensive contraction of demand of the public and private sectors in the last quarter of 2012, due to the factors that were analysed previously, is expected to have worsened further the conditions in the **labour market**. On the other hand, as the theme of the negotiations with the troika in this period were changes in parameters of the business environment (corporate tax system, size of layoff compensations), it seems that most of the enterprises were waiting for finalisation of the relevant regulations in order to make their final employment decisions. It should be noted that according to data from the Manpower Employment Organization, the negative net flow of paid employment in the private sector (hires minus redundancies and contract expirations minus voluntary resignations) slowed down significantly year-on-year in September to November (-51%). Overall, **the estimate for unemployment for 2012 is upped slightly to 24.5%, 6.8 percentage points higher than in 2011 (17.7%)**. The continuation of the recession of the Greek economy in 2013 will inevitably hurt unemployment as well. However, the expected easing of the contraction, the implementation of certain large investment projects, such as the five large motorways, and further adoption of the structural changes in the labour market from the second bailout agreement will

slow down their fall. As a result, **unemployment is expected to reach about 27.3% in 2013.**

Significant reduction of inflation in 2012 to 1.5%, with further disinflation in 2013

The weakening of domestic consumption demand has reflected in the course of inflation in 2012, which in September fell below 1.0%. Despite the upward pressure from the levelling of the excise tax of heating oil and motor diesel in October (1.6%), inflation fell again to 1.0% in the subsequent month. As a result, it stood at 1.6% for the first eleven months of the year, almost two percentage points lower than in the same period of the previous year (3.4%). Therefore, **IOBE's forecast for 1.5% inflation in 2012, from 3.3% in the previous year, which has remained unchanged since June, is expected to be confirmed.** With domestic consumption demand falling significantly in 2013 as well, due to new extensive fiscal measures, increase of unemployment and reduction of public expenditure, disinflation will continue throughout the year. Higher excise tax on heating oil until May and serial hikes in the electricity tariffs will counteract this downward trend, without however overturning it. **Therefore, inflation is expected to reach about 1.0% in the current year.**

Special IOBE study: «The impact on the Greek Economy from leveraging its cultural heritage»

The fourth chapter of the bulletin contains the results of a study by IOBE on the potential impact on the economy from utilisation and promotion of Greece's cultural heritage, through the development of culture tourism as an alternative means to attract foreign visitors to the country. The study focuses on utilisable possibilities and opportunities for the generation of benefits at social and economic level, both in the immediate future and over the long term.

The estimated impact on GDP includes the effects from executing specific culture projects (mainly in the wider area of the Acropolis's archaeological site), from additional revenues during their operation and from an increase of tourist consumption, as a result of increased arrivals of foreign visitors and extension of the duration of their stay. The total impact on GDP from the plan to upgrade our cultural heritage is expected to stand between €530 million and €1.8 billion each year, according to the eventual extent of the plan's investment budget. Correspondingly, the implementation of this initiative could provide a significant boost of employment, with job creation estimated to range between 12 - 38 thousand.

2. ECONOMIC ENVIRONMENT

2.1 Trends and Prospects of the World Economy

The Global Economic Environment

The world economy remained in uncharted waters in late 2012 and early 2013, with its course depending mostly on fiscal developments, both in the Eurozone and the USA. Positive developments in this area during the new year (e.g. agreement on the "fiscal cliff" in the USA, eventual return of the Irish state to the sovereign bond markets) could moderate significantly the uncertainty coming from the fiscal problems that, for the time being, dominate the world economy, to improve the expectations on its course and to create the prerequisites for its revival. However, in late 2012 the world economy's growth seemed subdued, with the recession in the EU constituting the key contractionary factor, while further large contraction in this specific geographical area, as in 2009, cannot be ruled out. Besides, in the recent past the signals for an exit from the crisis and recovery in the EU, as the small growth in 2010 and 2011, have given way to a slowdown of the economic activity, while certain countries have entered a recessionary cycle. A loss of growth momentum is also observed in the developing economies, mostly reflecting the impact from the recession in Europe, which constitutes a key destination for their exports, and weakened domestic demand.

In more detail, five years after the outbreak of the financial crisis in 2008, the

outlook for the world economy has deteriorated once more. In the Euro area, an effort is extended for its fiscal and financial integration, a process where there is common ground, but also some friction between the member states. The American economy continues to grow in the third quarter of 2012, at a weaker rate, however the risk for falling off the fiscal cliff has created heightened caution on its subsequent course and mainly in 2013. Under these global developments and conditions, the European Commission recently revised down its forecasts on the growth of the world economy both for 2012 and the current year: the growth rate of the world economy's GDP is expected to stand at 3.1% in 2012 and 3.3% in 2013, compared with EC's 2012 spring forecasts of 3.3% and 3.7% (Table 2.1).

The austerity measures in many countries with fiscal problems and the slowdown of international trade has led to a deterioration of the economic expectations held by the enterprises and the households. Regarding global trade, the growth rate of exports is expected to stand at only 1.8% in 2012 (from 5.7% earlier forecast), while in 2011 it had reached 7.9%. For 2013 the autumn forecasts indicate growth of exports by 3.4% (against an earlier forecast for 6.5% growth). Regarding global imports, the EC estimates that their growth will reach 3.5% in 2012 and 4.3% in 2013, from 7.7% in 2011. Also, the high and rising unemployment in certain EU countries, which squeezes

the incomes and purchasing power of their population, further exacerbates the expectations, especially on the side of the households.

The deteriorating expectations also reflect the lack of confidence in the adequacy and the effectiveness of the political decisions that are taken to tackle the crisis, mainly in terms of short-term actions, but also regarding the ability to formulate credible long-term strategy to overcome it and to avoid it in the future. This problem stems from the failure to achieve consensus on the needed political solutions. The management of the debt crisis in the Eurozone and the "fiscal cliff" in the USA constitute two elements that generate significant anxiety in the global economy. In addition, political challenges occur in the developing economies as well, both on macroeconomic and structural level, which reveals that, beyond general economic trends in certain geographical areas, specific conditions and problems exist in each country. Decisive political action ought to be taken in order to ensure that the dead-end regarding the fiscal policy in the USA and the persistent instability in the Eurozone will not lead to a further slowdown of the world economy.

In more detail regarding the major world economies, the **US** economy continued to grow in the third quarter of 2012. Its GDP increased by 2.5% year-on-year, while quarter-on-quarter it grew by 0.7% (in the aftermath of 0.3% q-o-q change in the preceding quarter). Nevertheless, the uncertainty regarding the fiscal policy that would be implemented in the coming

months remained heightened in the midst of an election period. The growth of GDP is expected to have slowed down in the second half of 2012 overall, due to the damage on the primary sector's production and the disruption caused by Hurricane Sandy. Private consumption increased modestly in the third quarter (1.8%), while the annual growth rate of business investment lost notably its momentum (4.4% in the third quarter, from 7.1% in the preceding quarter) due to uncertainty regarding the fiscal prospects and the outcome of the Eurozone crisis. In contrast, the housing market improved significantly, with the sale of houses increasing steadily and their prices rising by more than 7% since the beginning of last year. Regarding the external sector of the economy, exports in the third quarter increased by 3% year-on-year (against 4.3% in the previous quarter), while the growth of imports stood at 2.7% (from 3.9% in the second quarter). The slowdown of exports was largely due to the fact that foreign demand was more subdued.

Regarding the labour market, signs of improvement emerged, albeit weak. The unemployment rate fell below 8% in October. Meanwhile, the rate of new job creation can be seen as average. As a result, the labour market recovers at a slow pace.

Regarding the financial conditions, in September the FED announced firstly that it will keep the interest rate close to zero at least until mid 2015 under certain conditions, and secondly that it will carry out a

new round of "quantitative easing". The current US monetary policy seems to have positive results and will continue to have, at least in the medium term, as the prospects for employment growth improve, albeit at a slow pace, while the expectations on the inflation rate are not a cause of concern, for the time-being at least. On the other hand, it is necessary to note that maintaining a loose monetary policy in a long-term horizon poses risks, such as higher inflation, reduced purchasing power and loss of growth momentum.

Regarding the fiscal policy, the deficit should be reduced further in order to attain fiscal sustainability. According to the OECD forecasts, based on the current legislation the primary deficit is expected to fall by about 1.5% both in 2013 and in 2014 (from 8.5% in 2012, to 6.8% in 2013 and 5.2% in 2014). In the short term, a policy of strict and overzealous fiscal consolidation perhaps should be avoided, given the high fiscal multipliers that currently prevail. In particular, in the USA the fiscal discipline should be incorporated in a detailed plan for stabilisation over the medium term. A more restrictive policy in the short term would probably cause a reduction of lending, weak growth of employment, reduction of real income in the economy and slowdown of economic activity or even a recession. However, the achievement of a deal in Congress to avoid the "fiscal cliff" in the turn of 2012 seems to weaken the likelihood of such a development and its impact, even though the deal sets an increase of the tax coefficient for high incomes, but not the automatic cut in pub-

lic expenditure that had been decided in late 2011. Under the conditions formed in the US financial system and provided that the automatic cuts in public expenditure will take place only at a small scale, GDP is expected to increase by 2.1% in 2012 and 2.3% in 2013.

In **Japan**, following the strong growth in the first half of 2012, due to the public expenditure to repair the damage caused by the strong earthquake and tsunami in 2011, GDP increased by only 0.2% year-on-year in the third quarter of 2012 (from 3.4% in the preceding quarter). Quarter-on-quarter, GDP fell by 0.9% in the third quarter (from 0.1% q-o-q growth in the preceding quarter). The loss of recovery momentum came mostly from slowdown of world trade, but also from weakening of domestic demand. In the third quarter of 2012 the annual growth rate of private consumption stood at 1.1%, from 3.2% in the preceding quarter. Overall in 2012, the GDP growth rate is expected to stand at 2.0%.

Regarding the course of GDP in 2013, mild growth of about 0.8% is expected, due to the planned reduction in restoration expenditure and increase in taxes, which will affect private consumption. The fiscal deficit is expected to remain close to 10% of GDP in 2012 and 2013, leading to further significant increase of the already burgeoning public debt. The increase of the consumption tax rate from 5% to 10% until 2015 which has already been decided and the expenditure cuts aim to reduce the primary deficit to about 3.2% in 2015. Hence, a credible plan for

sustainable fiscal stability ought to be drawn in Japan. In addition, the Bank of Japan took additional measures in order to boost the economy. In particular, it kept the interest rate close to 0% and extended the bond purchase programme to 19% of GDP until the end of 2013. Nevertheless, there is a persistent deflation, as the core consumer price index (excluding energy and food) fell by 0.6% in the third quarter of 2012. In October 2012 the government and the Bank of Japan jointly announced that they are committed to take measures for growth and for monetary easing in order to overcome the deflation problem (the target is inflation to reach 1%).

In **China**, the growth rate slowed further down in the third quarter of 2012 to 7.4% (from 7.6% in the second quarter and 8.2% in the first quarter of the year), recording its worst performance in the past few years. The slowdown of the economy came from weakening of both domestic and foreign demand. In particular, the annual growth rate of exports has shrank almost to 0%, however the negative impact from this development is moderated by slowdown of imports as well, which were also almost stagnant in the third quarter. Correspondingly, the growth rate of the domestic industrial production, retail trade and fixed capital investment weakened at about the same rate during the first half of the year. The export activity was confined, as the trade partners of China have either experienced mild growth (Japan and USA) or even recession (Europe). Inflation fell by four points during the year with CPI inflation falling

below 2% in September. The significant drop of the prices of imported products played an important role for the disinflation. This development encouraged the Central Bank of China to reduce the lending rates twice since the beginning of the year, with corresponding reduction in the deposit interest rates, and to take measure of stimulating the liquidity in the real economy. For 2012 overall, the European Commission expects that the growth rate of China will stand at 7.7% and will stabilise at about the same rate in 2013 (revising down its previous forecasts during the previous year for growth by 8.2% in 2013), while in 2011 the growth rate stood at 9.2%.

Russia continues to grow, at slightly lower speed than in the past, as according to the latest estimates the 2012 growth rate will stand at 3.7% (marginal improvement over previous estimates) and 3.9% in 2013, compared with 4.2% in 2011. Domestic demand has weakened, but it continued to drive the economy's growth, counteracting the deteriorating conditions in the external environment, mainly due to the recession in the Eurozone. Strengthening of the labour market and a credit expansion were boosting consumption. The unemployment rate fell further in the past year, reaching its lowest level since 2009 in July (5.4%). The exports of natural gas fell in the first half of 2012 due to contraction of global demand and reduction of its price, while the exports of oil increased in the first quarter of 2012 and remained stable in the second quarter. Inflation reached 6.5% in September (on

an annual basis), while until May it had varied around 3.6%, reflecting the increase in food prices, mainly due to extreme weather phenomena in Russia and the USA and increase of tariffs.

Summarising the trends presented previously, the world economy in late 2012 is in the phase of shallow recovery, with a great number of unpredictable factors threatening its stability. The economic activity is slowing down, while pessimistic sentiment characterises the enterprises and the consumers. The debt and credibility crisis in the Eurozone is playing a significant role in keeping heightened the caution and the anxiety at international level. In addition, the fiscal consolidation in the USA and other developed economies has not been completed, contributing in such a way significantly to the downbeat climate. The structural weaknesses continue to keep economic activity at low levels. As the recovery is getting delayed, the anxiety among governments, enterprises and consumers over the achievement of long-term growth will intensify and the outlook for the world economy will deteriorate.

According to estimates of the German institute IFO, the economic climate indicator for the world economy continued to contract in the last quarter of 2012 as well, as evident in Table 2.2.¹ However, the fall by 2.7 points was notably weaker compared with the third quarter when it had fallen by about 10 points. The fall of

¹ IFO's world economy indicator is calculated from the arithmetic mean of the assessment of the current economic situation and the economic expectations over the coming six months.

the indicator was due to less positive assessment of the current economic situation and weaker expectations on the economic outlook for the coming six months. The economic policy implemented in the European countries has been a key uncertainty parameter and a determining factor for the weakening of the recovery prospects of the world economy, as the anxiety over the effective dealing with the fiscal crisis has resurfaced. The indicator seems to teeter between two possible trends in late 2012: continuation of the mild recovery of the world economy or further triggering of its slowdown, with falling demand being the main economic problem at this time.

The economic climate indicator deteriorated in all major economic regions in the last quarter, albeit at a weaker rate (Table 2.3), except for Latin America, where the indicator improved. In particular, in **South America** the assessment of the current economic situation slightly improved, while the outlook for the future economic growth was much more positive. In this particular economic region the lack of international competitiveness is considered as the most important economic problem. Argentina and Venezuela are facing high inflation, while Peru, Bolivia and Chile are countries with relatively better performance due to the significant increase of private consumption. In Brazil the current economic situation has improved to an extent, reaching again satisfactory levels. Despite all this, the investment expenditure has remained weak, at least for the time being.

In **North America** the economic climate indicator slightly deteriorated quarter-on-quarter (to 80.3 from 81.2). The preservation of unemployment at a high rate is the key reason behind this small deterioration. The problems from the lag in international competitiveness compress the

current economic situation in Canada. In addition, in the USA demand is expected to be restrained to relatively low levels, due to the contractionary fiscal policy that is expected to be adopted in the coming year.

Table 2.1

International Environment – International Monetary Fund (real annual % change)

	2012	2013	2014
GDP			
USA	2,1	2,3	2,6
Japan	2,0	0,8	1,9
Developing Asia (except China)	6,2	6,3	6,7
of which			
China	7,7	7,7	7,8
India	5,0	5,8	6,6
Euro area	-0,4	0,1	1,4
EU-27	-0,3	0,4	1,6
Accession countries	2,4	2,6	3,5
Commonwealth of Independent States –CIS	3,8	4,0	4,3
of which			
Russia	3,7	3,9	4,0
MENA	3,2	3,1	3,8
Latin America	2,9	3,7	4,4
Of which			
Brazil	1,5	3,9	4,0
Subsaharian Africa	5,0	5,0	5,5
Global Economy	3,1	3,3	3,9
World Trade			
Worldwide imports	3,5	4,3	5,9
Exports extra EU-27	1,8	3,4	5,5

MENA (Middle East & North Africa): Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates, Yemen.

Sub-Saharan Africa: All countries excl. African MENA countries.

Source: European Economic Forecast, Autumn 2012, European Commission, November 2012

The major problems that the US economy is considered to be facing are unemployment (even though the news from the US labour market is better than previously anticipated), the fiscal deficit and insufficient demand.

In **Western Europe** and the Eurozone, the assessment of the current economic situation and the expectations over the coming six months continued their down-

ward trend, falling by about 6 points. In particular, the indicator reached 83.4 from 89.3 in the preceding quarter, remaining significantly below its long-term average (105.7). The fiscal deficits are noted as the major problem for the Eurozone, followed by insufficient demand and then unemployment. Correspondingly, in Western Europe, the state budget deficits and reduced demand are considered as the most pressing issues.

In **Asia** the current economic situation is assessed as quite satisfactory, while the optimism over the economic outlook has weakened. In particular, the economic climate in Asia slightly deteriorated, mainly due to less positive expectations for the coming six months. The assessment for the current economic situation has remained unchanged, albeit at unattractive levels. The indicator reached 81.6, from 83.3 in the preceding quarter. This level is significantly below the long-term average for the period from 1996 to 2011. Insufficient demand was noted as the major economic problem at this time, with lack of confidence in the government policy coming next. Indonesia and the Philippines were the countries with the best performing indicator in Asia.

In China, both the assessment of the current economic situation and the economic outlook over the coming months have become more pessimistic. The pessimistic economic climate in China is offset by more optimistic sentiment in India, which however is hampered by inflationary pressures, with inflation surpassing the average for the Asian states. In quite a few Asian countries the levels of current private consumption and investment are considered weak. In Japan the deterioration of the trade relations with China was recorded as an important economic problem.

The Economies of the EU and the Euro area

The contraction in the Eurozone carried through to the third quarter of 2012, as GDP contracted by 0.6% year-on-year, according to Eurostat data (in the aftermath of a 0.5% contraction in the second quarter). At EU-27 level, the rate of GDP contraction reached 0.4% in the third quarter (against 0.3% year-on-year contraction in the second quarter). Quarter-on-quarter, GDP fell by 0.1% in the Euro area and increased by 0.1% in EU-27,² while in the second quarter it had fallen by 0.2% quarter-on-quarter in both economic regions. The majority of EU-27 member states (14 countries to be precise) were in a recession in the third quarter of 2012. The countries with largest contraction were Greece (-7.2%), Portugal (-3.4%), Slovenia (-2.9%), Italy (-2.4%) and Cyprus (-2.3%), while in contrast the countries that achieved highest growth rates were Latvia (+5.3%), Estonia (+3.4%), Lithuania (+3.3%), Slovakia (+2.5%) and Poland (+1.9%).

The crisis in the Eurozone persists mainly due to three interacting negative factors that boost each other and the overall instability. The fears over the solvency of banks and states fuel each other due to the significant amount of state guarantees that has been issued to the banks, and the large bank holdings of sovereign bonds of countries with existing or emerging fiscal problems. In addition, the

² Eurostat, News Release 174/2012

anxiety about the increase of public debt in many Eurozone member-states and in general over their fiscal health has boosted the uncertainty. The unfolding of such a negative scenario would cause deterioration of the credit ratings of these countries by the market. The likelihood of an exit of a member-state from the monetary union, which would lead to con-

tagion to other countries and subsequently to a strong turmoil in the world economy, is supported by some with the unfavourable fiscal figures. The continuously rising unemployment is a third potential source of negative developments, as it can threaten the effective implementation of the reforms and the preservation of social cohesion and tolerance.

Table 2.2

IFO – Estimations for the global economy (Index, 2005=100)

Quarter/Year	III/10	IV/10	I/11	II/11	III/11	IV/11	I/12	II/12	III/12
Economic Climate	98,6	106,8	107,7	97,7	78,7	82,4	95,0	85,1	82,4
Current Situation	95,3	102,8	108,4	99,1	86,0	84,1	87,9	78,5	76,6
Expectations	101,8	110,5	107,0	96,5	71,9	80,7	101,8	91,2	87,7

Source: IFO, World Economic Survey, WES Vol.11, No. 04/ November 2012

Table 2.3

IFO - Economic Climate Index in economic zones (Index, 2005=100)

Quarter/Year	IV/10	I/11	II/11	III/11	IV/11	I/12	II/12	III/12	IV/12
North America	82,8	104,6	98,7	81,2	69,5	87,9	95,4	81,2	80,3
Western Europe	105,2	113,2	115,1	105,2	81,4	82,4	99,3	89,3	83,4
Asia	95,6	105,3	101,8	94,7	77,2	74,6	90,4	83,3	81,6

Source: IFO, World Economic Survey, WES No. 04/ November 2012

Regarding the course of GDP overall for 2012, the most recent estimates by the European Commission³ for EA-17 point to a recession of about 0.4%, while marginal growth of about 0.1% is anticipated in 2013, for the time being. In EU-27 the recession is estimated to be slightly weaker compared with the Eurozone (-0.3%) in the previous year, while the GDP growth rate in 2013 is estimated to

be higher (+0.4%). At the level of member-states for 2012 overall, GDP contraction is expected in Greece (-6.0%), Portugal (-3.0%), Italy, Cyprus and Slovenia (-2.3%), Spain (-1.4%), Hungary (-1.2%) and the Netherlands (-0.3%). For all these countries, except the Netherlands, the recession is expected to continue in 2013 as well, albeit at a weaker rate.

In contrast, Poland (+2.4%), Lithuania (+2.9%), Latvia (+4.3%), Slovakia

³ European Economic Forecast, Autumn 2012, European Commission, November 2012

(+2.6%) and Estonia (+2.5%) are expected to register the largest growth rates. Nevertheless, it should be noted that the GDP forecasts for the majority of the EU-27 member-states was revised downwards.

Structural reforms have already been adopted in many countries, but they have to be fully implemented in order for their positive impact to materialise. The immediate and complete implementation of structural reforms mainly in the Eurozone is possible to bear fruit relatively quickly in terms of stronger growth, increased employment and improved balance of the current account. Therefore, ambitious reforms are needed in all the countries with the aim of boosting significantly their growth prospects and to make fiscal consolidation less painful overall for society. In the Euro area, the fiscal austerity should be limited to incorporating the current fiscal commitments. Also, the fiscal policy should be determined through a coordinated effort between the member-states in order to restore confidence.

In addition, the establishment of strong institutions, such as independent fiscal councils or the setting of credible fiscal rules could constitute an additional instrument for supporting fiscal discipline in the long term. The restoration of the confidence of the markets in countries that are hit by the persistent debt crisis is more feasible in this way, rather than with guarantees that a country's fiscal policy can supply on its own. The recent establishment of mechanisms for the management of public debt in the Euro-

zone (ESM, direct intervention in the secondary market by ECB) is considered as a notable success, as it signifies that it can evolve into a solution to the weaknesses of the architecture of the monetary union, buying time in the mean time. The markets reacted positively to these developments. Despite all this, the effectiveness of this mechanism ultimately depends on the progress with the implementation of reforms in the countries needing help, as well as in the disposition of the credit countries to agree to the use of common resources.

Furthermore, the progress to the creation of a ground-breaking banking union mechanism is considered necessary in order to facilitate the substantial resolution of the vulnerabilities of the indebted countries and the banking sectors, with a view of ensuring Eurozone's coherence. This mechanism should have the authority to supervise the banks at a European level, to formulate procedures for the immediate resolution of a cross-border crisis and to institute a common deposit guarantee mechanism. Any delays in the start of the banking union will likely have negative impact on the sustainability of the Eurozone. In addition, it is important to resolve the lack of capital in the banks of the Eurozone in the coming years. The achievement of a sustainable solution by the ECB, which will improve the fiscal conditions in the countries hit by the crisis, will largely depend on whether the policy of economic stabilisation and the reform efforts exerted in the Eurozone will manage to restore the confidence of

the investors, the businesses and the consumers.

Returning to the recent developments, the further reduction of private consumption and the contraction of investment constituted the main reasons for the contraction of economic activity in the third quarter of 2012. In particular, **private consumption** in EA-17 fell year-on-year by 1.3%, at a stronger rate than in the previous quarter (-1.0%). Similar trends were observed in EU-27, where private consumption fell by 0.7% year-on-year in the third quarter, while in the previous quarter it had contracted by 0.6%. According to the latest EU estimates, private consumption in 2012 overall has fallen by 1% in the Euro area (from an increase by 0.2% in 2011), while it is expected to keep falling in 2013 (-0.4%). This implies that the forecasts have worsened, as the previous EC forecasts predicted a contraction of private consumption by 0.6% in 2012 and an increase by 0.5% in 2013. The downward shift of the private consumption forecasts is substantiated with pressures on consumers' disposable income in the coming months due to contraction of employment and limited remuneration growth. Besides, the acceleration of uncertainty due to the debt crisis resulted in an increase of the households' propensity to save, deteriorating the consumption's outlook.

Public consumption in the same quarter marginally fell by 0.1% in the Eurozone (compared with 0.2% contraction in the second quarter), while in EU-27 it increased by 0.3% (from no change in the

previous quarter). Contraction in the EA-17 is also expected in terms of public consumption by 0.2%, while stronger reduction is expected in 2013, due to the reduction of public expenditure that is included in the fiscal consolidation programmes. Correspondingly, in EU-27 public consumption is expected to remain unchanged in 2012 and to contract in 2013 (-0.4%).

The contraction of **investment** has accelerated both in EA-17 and EU-27. In particular, in the Eurozone the gross fixed capital formation fell by 4.2% in the third quarter year-on-year (compared with a contraction by 3.8% in the second quarter of 2012). Correspondingly, in EU-27 investment contracted by 3.2% in the third quarter (from -2.6% in the previous quarter). The uncertainty seems to play a catalytic role for the withdrawal of investment initiatives. Other factors that had a negative impact on the course of investment included disappointing profitability of the enterprises and credit crunch conditions. For the year overall, the European Commission revised down its investment forecast, estimating that investment expenditures will fall by 3.5% in EA-17 (from a previous forecast for a contraction by 1.5%), predicting at the same time reduction by 0.6% in the subsequent year (from 1.9% growth). In EU-27 for 2012 overall the investment expenditure is expected to fall by 2.2%, while marginal increase (0.1%) is predicted for 2013. The contribution of investment to GDP growth is expected to be negative (by 0.8 and 0.6 percentage

points of GDP in EA-17 and EU-27 respectively), for the first time since 2008-2009.

Exports, which constituted the key growth driver in 2011 (when they had increased by 6.5%), slowed down in the third quarter of the year, with the annual growth rate in EA-17 reaching 2.9% (from 3.4% in the second quarter of 2012). Correspondingly, in EU-27 exports increased by 2.7% in the third quarter (from an increase by 3.0% in the previous quarter of the year). For 2012 overall the exports of goods and services in the Eurozone are expected to have increased by 2.5%, while the export growth rate is expected to recover again in 2013 (+3.2%), as the member-states are expected to benefit from the weakening of the exchange rate and strengthening of their international competitiveness. Correspondingly, in EU-27 for the year overall, exports are expected to increase by 2.2% and by 3.4% in 2013.

On the other side of the trade balance, **imports** in the third quarter of 2012 continued to decline in EU-17, reflecting the deterioration of the economic environment and the consequences from the weakening of consumer demand and the fall in investment. In particular, in the time period under examination, imports contracted by 0.9% year-on-year (while the annual contraction in the second quarter had stood at 0.6%). The corresponding change of imports in EU-27 was also negative in the third quarter of 2012 (-0.3%). The fall of imports is explained mainly by the contraction of private con-

sumption, growth of import prices and the consequences from the depreciation of the euro against the dollar in the first six months of 2012. For 2012 overall, imports are expected to decline by 0.5% in EA-17 (from +4.2% in 2011) due to the fall of consumption and investment, nevertheless they are expected to return to growth in 2013 (+2.1%). In contrast, according to preliminary estimates in EU-27 imports marginally grew in 2013 (+0.1%), while for 2013 they are expected to grow stronger than in the Eurozone (+2.4%). Nevertheless, given that domestic demand will be reduced, net exports will continue to be a key and critical growth driver in 2013.

In 2012 the conditions in the labour market worsened further in EA-17 and EU-27, reflecting the deterioration of the general economic situation and the heightened uncertainty. Since the beginning of last year until August 2012 the **unemployment** rate reached 11.4% in the Eurozone (increase by 1.5 percentage points year-on-year) and 10.5% in EU-27 (increase by 1 percentage points), while the number of unemployed increased by about 2.1 million in both regions. For 2013, the deterioration of the economic outlook is expected to have a negative impact on the labour market as well, as the enterprises would become even more cautious in their decision to hire new employees, while quite a few of them are following disinvestment strategies in order to respond to the crisis, which brings about reduction of their manpower.

Table 2.4

Main Macroeconomic Figures, EU-27, Euro area (annual % changes)

	EU-27*			Euro area		
	2012	2013	2014	2012	2013	2014
GDP	-0,3	0,4	1,6	-0,4	0,1	1,4
Private Consumption	-0,6	0,0	1,2	-1,0	-0,4	1,0
Public Consumption	0,0	-0,4	0,4	-0,2	-0,4	0,6
Investment	-2,2	0,1	2,8	-3,5	-0,6	2,5
Employment	-0,4	-0,2	0,6	-0,8	-0,5	0,4
Unemployment (% of labor force)	10,5	10,9	10,7	11,3	11,8	11,7
Inflation	2,7	2,0	1,8	2,5	1,8	1,6
Goods and Services Exports	2,2	3,4	5,3	2,5	3,2	5,2
Goods and Services Imports	0,1	2,4	4,9	-0,5	2,1	5,0
General Govern. Balance (% of GDP)	-3,6	-3,2	-2,9	-3,3	-2,6	-2,5
General Govern. Debt (% of GDP)	86,8	88,5	88,6	92,9	94,5	94,3
Current Account Balance (% of GDP)	-0,2	0,4	0,6	0,9	1,2	1,3

Source: European Economic Forecast, Autumn 2012, European Commission, November 2012

The **inflation** rate in the third quarter of 2012 remained at 2.5% in the Eurozone, as in the preceding quarter. Inflation in the current phase mainly reflects hikes in indirect taxation in quite a few member-states, changes in the oil prices and growth of the food prices. For 2012 overall, the autumn forecasts of the European Commission envisaged a small fall of the inflation rate in EA-17 to 2.5% (from 2.7%) and to 1.8% in 2013, reflecting the weakening of consumption demand.

Regarding the **fiscal performance**, the fiscal policy will remain restrictive, especially in the European periphery. For 2012, the **deficits** are expected to have fallen to 3.3% of GDP in EA-17 (from 4.1% of GDP in 2011), as a result of various fiscal consolidation programmes that are implemented in many countries. On the other hand, the sluggish recovery of the economy and the increased interest expenditure are expected to raise the

debt-to-GDP ratios in 2012 to 92.9% of GDP in EA-17 (from 88.1% in 2011).

The persistence of the recession in the Eurozone is reflected in the course of the leading indicators, such as the **indicator of economic activity**,⁴ which continued to depict negative expectations by the enterprises and the households. The negative sentiment reflects the pervasive uncertainty about how the debt crisis in the Euro area is being dealt with and the lack of credible and drastic long-term solutions. In more detail, the economic activity indicator €-COIN for the Euro area stabilised in November 2012 at its October level, but has remained negative (-0.29). However, compared with September (-0.32), it marginally improved. It

⁴ The Center of Economic Policy Research (CEPR) in cooperation with the Bank of Italy each month calculates the €-COIN leading indicator of economic activity for the Euro Area. The indicator provides a 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.

is important to note that the indicator has remained negative since November 2011, portending the preservation of the GDP contraction in the Euro area in the final quarter of 2012 as well.

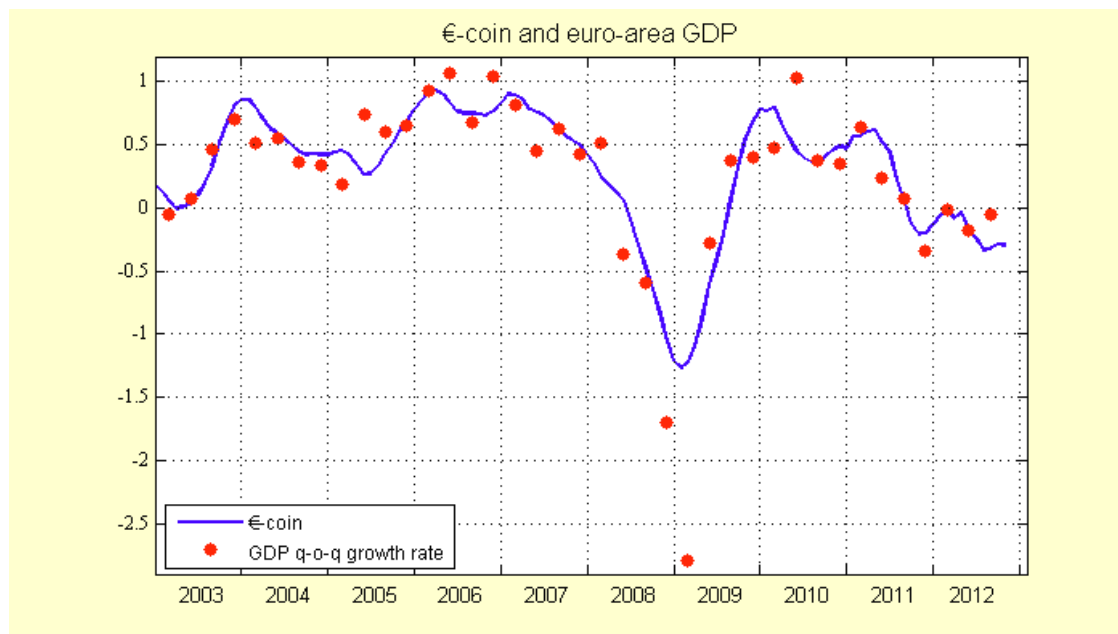
The **Economic Sentiment Indicator** of the European Commission confirms the fact that the expectations in the EU are weak. In particular, as evident from the table that follows, in November the indicator slightly increased in the Euro area, by 1.4 points (to 85.7), compared with October (84.3), while in the European Union it increased by two points (from 86.1 in October to 88.1 in November). It should be noted, however, that the indicator had been falling continuously since February 2012. Besides, indications of stagnation in real investment in 2013 emerged from the industrial investment survey. In the European Union the economic sentiment indicator improved in November in all sectors, apart from Con-

struction, where it has remained unchanged. In the Euro area, in contrast, the improvement of the indicator was driven by Industry and Retail Trade, which offset the deterioration recorded in Construction and the stagnation in the Services sector.

In addition, the **consumer confidence** indicator improved in the European Union in November, increasing by 0.5 from October, yet in the Euro area it fell in the same time period (-1.2). In effect, the expectations of the consumers over the future economic situation were less pessimistic in the European Union and remained unchanged in the Euro area. The consumers in the EU were also more optimistic regarding the economic situation of their household and their savings over the next 12 months, in contrast with the consumers in the Euro area. Lastly, the unemployment expectations deteriorated both in the Euro area and in the EU.

Figure 2.1

€-COIN Index (CEPR)



Source: CEPR (www.cepr.org)

Table 2.5

European Commission– Economic Sentiment indicator EU-27 & Euro area (1990-2010=100)*

Month	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-10	Sep-11	Oct-11	Nov-11	Dec-11
EU27	105,5	107,0	106,8	104,7	104,9	104,1	101,9	97,1	93,6	93,6	92,6	91,6
Euro-area	106,3	107,6	106,7	105,6	105,1	104,9	102,5	98,1	94,6	94,4	93,5	92,8

Μήνας	Month	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12
EU27		92,8	94,0	93,2	93,2	90,4	90,4	89,0	87,0	86,2	86,1	88,1
Euro-area		93,5	94,5	94,4	92,8	90,5	89,9	87,9	86,1	85,2	84,3	85,7

* Since May 2010, the economic activity classification of the enterprise data used for the estimation of the Economic Sentiment indicator and its components, has switched from NACE Rev. 1.1 to NACE Rev. 2. that corresponds to the national STAKOD (ΣΤΑΚΟΔ) 08.

Source: European Commission (DG ECFIN), November 2012

2.2 The Economic Environment in Greece

A) Economic Sentiment

The IOBE economic sentiment studies offer significant indications on the developments in the economy in the last few months, from the perspective of both the enterprises and the consumers. Besides, the key statistics constitute leading indicators for various economic magnitudes and can be used to predict near-term development and even the course of GDP. In more detail:

In October and November the economic sentiment indicator gave out mixed messages. On the one hand, the prolonged negotiations with the troika for the fiscal consolidation measures and the structural reforms had a negative impact on economic activity, despite the gradual improvement of the international rhetoric about Greece. On the other, the passing of the new measures through the Hellenic Parliament seems to have had a calming effect to some extent, despite the significant burden that these measures will bring upon a significant part of society, which can be explained with the fact that this lifted some of the uncertainty regarding the prospects of the fiscal consolidation process.

Despite the fact that the November results do not incorporate the positive effect from the outcome of the 26th November Eurogroup, it seems that at least for a part of the population the passing of the new measures and the end of the

prolonged negotiations were assessed positively, in the sense that their anxiety over the course of the country in the near future was meliorated. Nevertheless, among the consumers, the fear of unemployment has remained exceptionally widespread. Meanwhile, a small deposit repatriation to the domestic banking system was observed, while the households' intensely negative intentions-to-save indicator also improved, however this does not mean that their pessimism has weakened significantly.

In more detail, the **Economic Sentiment Indicator of Greece in October and November of 2012** slightly increased quarter-on-quarter to reach 77, at about the same levels year-on-year. **At the European level, the sentiment deteriorated marginally quarter-on-quarter in the Euro area, remaining unchanged in the EU. The indicator reached 85 and 87, lower year-on-year by 9 and 6, in the Euro area and the EU respectively.**

The business sentiment in Greece slightly improved in the two months under investigation, compared with the preceding quarter, in Industry, Construction and Services, deteriorating only in Retail Trade. The consumer confidence indicator fell on average in the two-month period, compared with the preceding quarter, despite its hike in November.

Year-on-year, the average indicators have fallen in Services and Retail Trade, while in contrast business sentiment recovered

in Industry and even more so in Construction. In more detail:

The **Consumer Confidence Indicator** in Greece, following its increase as a result of the elections and the reheating of the consumer expectations in the third quarter, returned to a contraction trend to reach -76 on average in October-November (from -69 in the corresponding quarter of the previous year), yet standing above its level from the same period of the previous year (-83). In November alone, the indicator increased, without overturning the overall trend, with the Greek consumers remaining steadily the most pessimistic in Europe in the past 3 years or so. The corresponding average of the European indicators fell by 2 points quarter-on-quarter to reach -24 and -26 in the EU and the Euro area respectively, down on their past year performance (-21 and -20 respectively).

The constituent indicators also followed mixed trends in the two-month period under investigation, compared with the preceding quarter, with all positive changes recorded in November. As a result the very dismal expectations of the Greek consumers about the financial situation of their household and the general economic situation over the next 12 months eased in November, after a sharp fall in September and October. On average since September the share of the consumers who were pessimistic about the financial outlook of their household reached 80%, with only 4% expecting improvement of their finances in the coming months. More than 4/5 of the con-

sumers have been expressing negative expectations regarding the economic situation in the country since September, while the intention to save indicator marginally improved with about 1/10 of the households considering as probable the likelihood of saving in the next 12 months. The unemployment expectations over the next 12 months remained exceptionally dismal, as more than 4/5 of the Greek consumers in the October-November were expecting unemployment to increase, a slightly lower share compared with the corresponding period of the previous year (92%).

Additionally, the percentage of consumers reporting that they were "in debt" slightly increased to 18% on average (from 16% in the preceding quarter), while only 1/10 of the consumers declared that they were saving small or large amounts. Lastly, the share of consumers reporting that they were "just making ends meet" fell to 52% (from 55%), while the percentage of those declaring that they were "dipping into their savings" reached 19% (from 15%).

Regarding the expectations in key sectors of the Greek economy, in **Industry** the Business Climate Indicator slightly increased in October-November, compared with the third quarter to reach 81 (from 79), up also on its past year performance (76). This result indicates a trend of mild weakening of the pessimism in the sector in the past few months. Regarding the key activity indicators, the short-term expectations on production levels remained negative, yet improved slightly, with the

indicator falling on average to -2 (from -8). The assessment of order-book levels and demand was also less pessimistic (at -45 from -51), while the assessment for the stocks of finished products slightly fell, with the relevant indicator reaching +6, significantly down on its past year average (+15). Among the remaining indicators, the assessment of the export order-book levels improved, while the expectations on their future course remained positive overall, without significant changes. The negative balance of employment expectations deteriorated to -19 (from -13 in the third quarter), better than their past year level (-28). The utilisation rate of the production factors remained unchanged at 64-65%, close to its level from the corresponding period of 2011 (66%). Lastly, the number of months of assured production reached 4.3 on average, unchanged year-on-year.

The Confidence Indicator in **Retail Trade** reached 54 on average in the two months under examination, from 63 in the preceding quarter and 61 in the same period of 2011. This fall came from a deterioration of all key activity data and mostly from a reduction of the indicators linked to their current and future sales. In particular, the assessment of the enterprises on their current sales fell by 14 points quarter-on-quarter to reach -68, while the negative expectations of the enterprises on their short-term sales fell further by 9 points to -56, with 62% of the enterprises assessing their sales as reduced compared with the preceding period. The inventories indicator slightly improved to -2

(from -6), down year-on-year (from +3), revealing more that the inventories were not being replenished rather than being liquidated. The negative expectations on orders to suppliers also deteriorated (to -57 from -49), while the employment expectations in the sector slightly improved to reach -37, down year-on-year (-18).

Lastly, deflationary expectations have steadily dominated in the sector, with 28% of the respondent once more expecting prices to fall, while only 6% were expecting prices to increase. A quarter-on-quarter decline was observed in all constituent branches, except Household Appliances, where the indicator remained unchanged. The deterioration of expectations was stronger in Food-Beverages-Tobacco and Textiles-Clothing-Footwear, where the indicators lost 25 and 19 points respectively.

The business expectations in **Construction** improved in October-November, compared with the preceding quarter, with the indicator reaching +55 from +48, higher year-on-year as well (from 39). The intensely negative expectations on the level of planned activities marginally eased, remaining however very low, at -72, albeit higher than in the same period of 2011 (-88).

The negative employment expectations indicator improved by 14 points to reach -24 (from -38 in the corresponding two months of 2011), while the strongly negative assessment of the enterprises of their current activity level slightly eased (to -28 from -31). The months of activity ensured

by current backlog have remained relatively stable in the past five months (at 9.4 in October-November, from 9.1 months), at levels slightly up year-on-year (from 7.9 months). Regarding the price expectations, 2/5 of the enterprises in the sector have steadily maintained deflationary expectations since the beginning of the year, while the share of enterprises expecting prices to increase fell to 13% (from 18%).

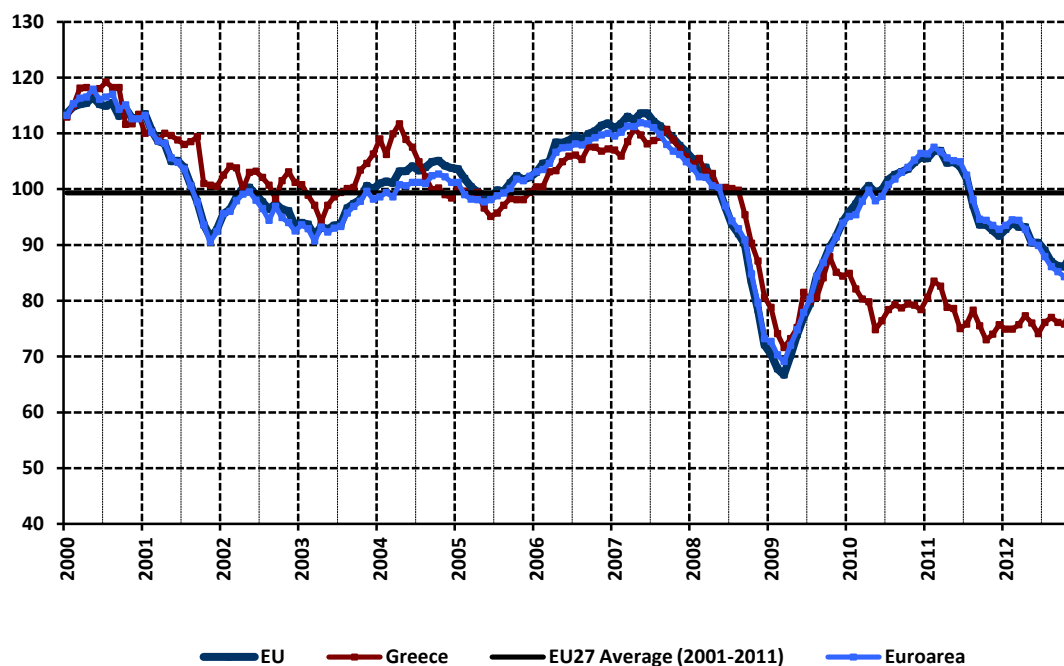
The share of businesses reporting that they were not facing any obstacles to their construction activities fell to only 8% (from 12%). Among the remaining enterprises, 41% stated as the main obstacle insufficient funding, 29% low demand and 18% factors such as the state of the Greek economy in general, the recession, high taxation, lack of projects, delays in payments by the State, large discounts etc.

At branch level, the expectations improved in the period under examination, compared with the previous quarter, in Public Works and even stronger in Private Construction, where the indicator had taken exceptionally low levels in the preceding quarter.

In **Services**, the business climate indicator slightly fell in the two-month period October-November to 52 from 56 in the preceding quarter, down also on its past year performance (59). The reduction came from deterioration of the assessment on the current levels and the expectations on the future course of demand. In particular, the assessment of the en-

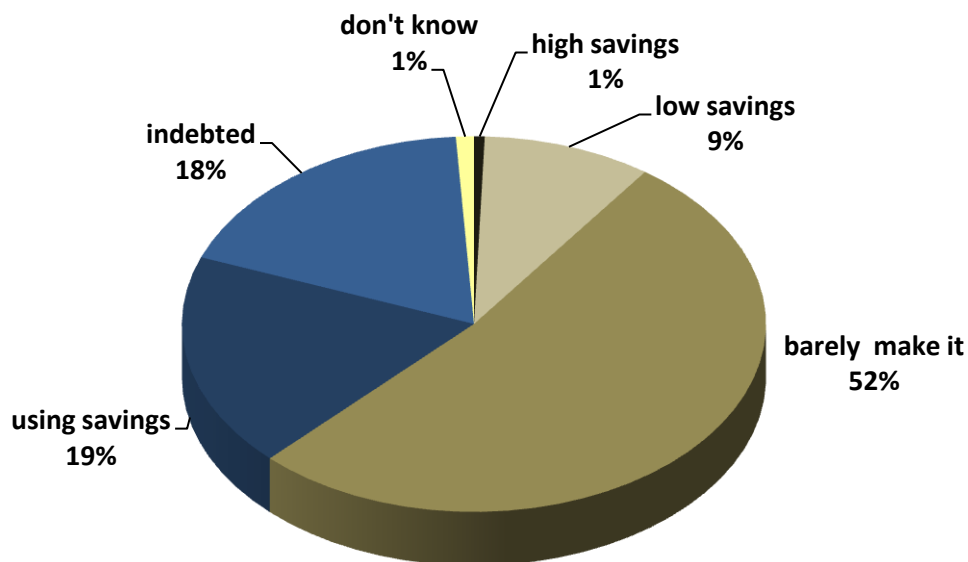
terprises of the current demand in the sector lost 9 points to reach -38, while a similar development was observed regarding the expectations on near-term activity, where the indicator reached -41 from -28. The assessment of the enterprises of their business situation ameliorated to reach -26 (from -34), offsetting only in part the above negative development. The employment expectations deteriorated, as 1/3 of the enterprises were portending further negative developments in the labour market and only 3% were expecting an improvement. The price expectations remained deflationary, with the share of respondents expecting prices to fall standing at 26% (from 28% in the third quarter), while only a marginal 1-2% of the enterprises has steadily held inflationary expectations since July. Lastly, the share of enterprises reporting that their business activity was being conducted without obstacles slightly fell to 11% (from 13% in the third quarter), while 44% of the respondents indicated as main obstacle insufficient demand, 29% reported lack of working capital and further 14% indicated factors connected with the overall economic situation and the crisis, borrowing difficulties, high taxation, arrears, the global economic environment, Athens' rundown centre, a crime surge, etc. Among the constituent branches, in October-November business expectations deteriorated significantly only in Hotels-Restaurants (to 70 from 86), which however was enough to offset the slightly positive changes in the indicators of the remaining branches.

Figure 2.2
Economic Sentiment Indicators: EU27, Euro Area and Greece
(1990-2011=100, seasonally adjusted data)



Source: European Commission, DG ECFIN

Figure 2.3
Consumer survey data on their household's financial situation
(July – September 2012 average)



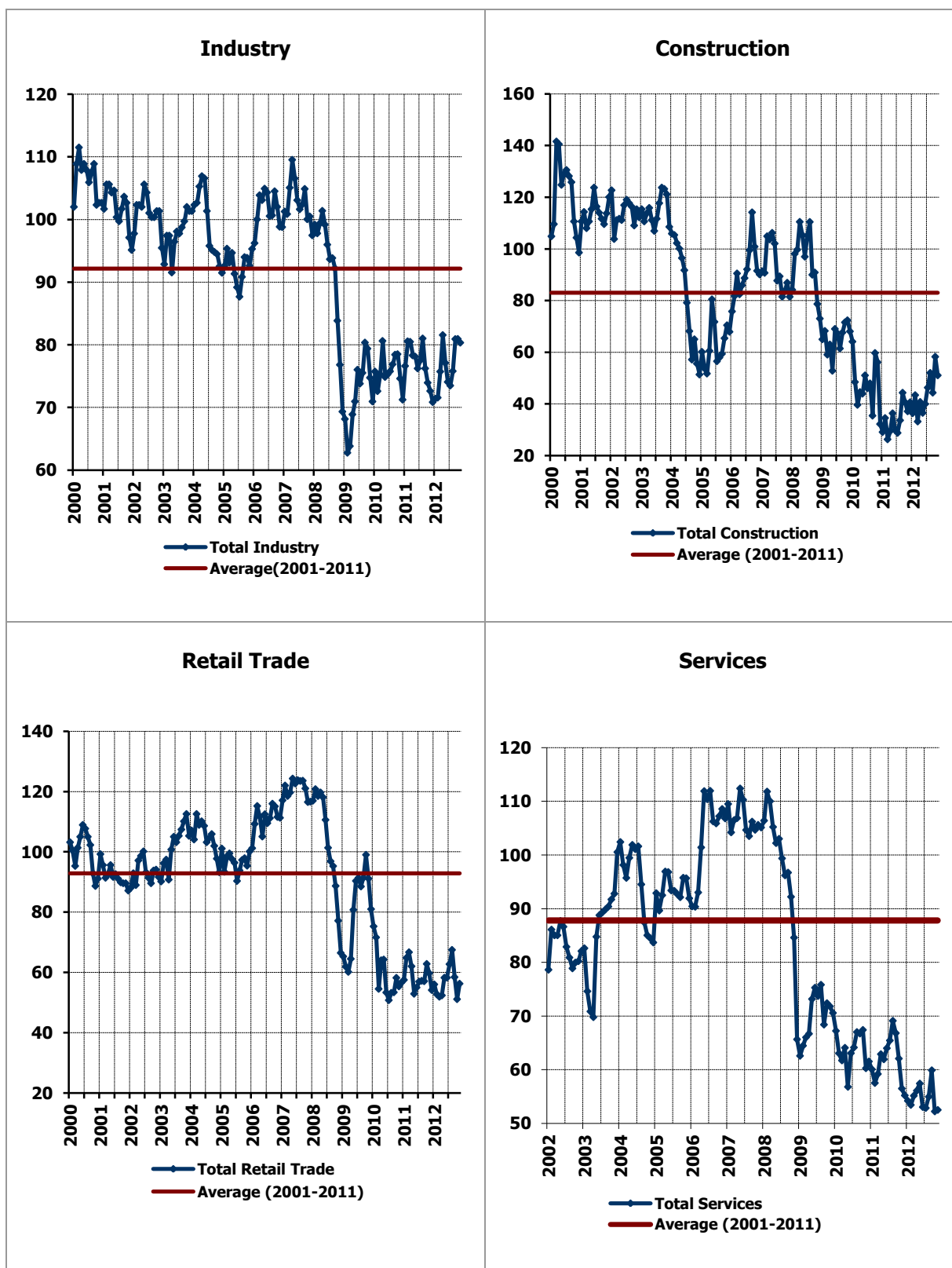
Source: IOBE

Table 2.6
Economic Sentiment Short-Term Indices

Month/ Year	Economic Sentiment Indicator ¹		Business Confidence Indicators ² (Greece)				Consumer Confidence Indica- tor ¹ (Greece)
	EU-27	Greece	Industry	Construction	Retail Trade	Services	
2002	97,3	102,0	101,2	114,0	93,3	82,8	-27
2003	95,4	100,1	97,9	115,0	102,0	85,5	-39
2004	103,3	104,8	99,1	81,5	104,8	94,6	-26
2005	100,8	98,1	92,6	63,0	96,8	93,6	-34
2006	108,3	104,9	101,5	91,1	110,8	103,7	-33
2007	111,0	108,4	102,8	92,5	120,8	106,6	-28
2008	93,3	97,4	91,9	95,2	102,5	97,8	-46
2009	79,3	79,7	72,1	65,5	80,4	70,1	-46
2010	101,2	79,3	76,2	45,2	59,5	62,9	-63
2011	100,3	77,6	76,9	34,2	58,9	61,7	-74
Feb-11	105,5	80,6	76,6	29,1	57,5	60,1	-72
Mar-11	107,0	83,5	80,6	34,6	64,8	57,5	-67
Apr-11	106,8	82,6	80,5	26,3	66,7	59,2	-66
May-11	104,7	78,8	78,3	29,4	62,0	62,9	-70
June-11	104,9	78,6	78,1	36,4	52,9	61,9	-69
July-11	104,1	75,0	76,2	29,9	55,0	64,0	-75
Aug-11	101,9	75,8	77,5	28,8	56,9	65,4	-77
Sept-11	97,1	78,3	81,0	33,7	57,2	69,1	-71
Oct-11	93,6	75,5	76,2	44,3	57,1	66,8	-74
Nov-11	93,6	73,0	74,0	40,6	62,8	62,1	-84
Dec -11	92,6	74,0	72,6	37,1	59,7	56,5	-82
Jan-12	91,6	75,7	70,9	40,7	54,1	55,2	-82
Feb-12	92,8	74,9	71,4	36,4	56,0	54,2	-80
Mar-12	93,9	74,9	71,6	43,4	52,7	53,4	-84
Apr-12	93,2	75,7	75,7	33,2	51,9	55,2	-79
May-12	93,2	77,3	81,6	40,8	52,4	56,1	-79
June-12	90,4	76,0	77,1	36,5	58,2	57,4	-76
July-12	90,4	74,1	74,1	40,0	58,2	53,0	-70
Aug-12	89,0	76,1	73,5	46,3	62,7	52,9	-65
Sept-12	87,0	77,0	75,8	52,0	67,4	54,9	-65
Oct-12	86,1	76,1	80,9	44,3	58,4	59,9	-76
Nov-12	86,1	75,8	80,9	58,3	51,1	52,2	-78
Dec-12	88,1	79,0	80,3	51,06	56,2	52,5	-74

Sources: ¹ European Commission, DG ECFIN, ² IOBE

Figure 2.4
Business Confidence Indicator¹



In the calculation of the indicators is used a base period, instead of a base year. So the fields of Industry, Construction and Retail Trade sectors have a common base period (1996-2006 = 100) and in the Services sector is used the period (1998-2006 = 100) since there is no data before 1998. This change allows the accurate mapping of fluctuations of expectations in a long time, while giving the possibility of constructing comparable sub sector indices. **Source:** IOBE

B) Fiscal developments in the third quarter of 2012

The fiscal position of the country improved notably during the fourth quarter of 2012 and as a result the fiscal consolidation since 2009 can be seen as spectacular. In particular, the net deficit has fallen by nine percentage points of GDP since 2009 in total. The extended fiscal consolidation effort would have had even better results, if it were not for the negative impact from the recession of the economy. According to estimates by the European Commission, the consolidation of the deficit, adjusted for the economic cycle, exceeded 13 percentage points of GDP in the past three years.

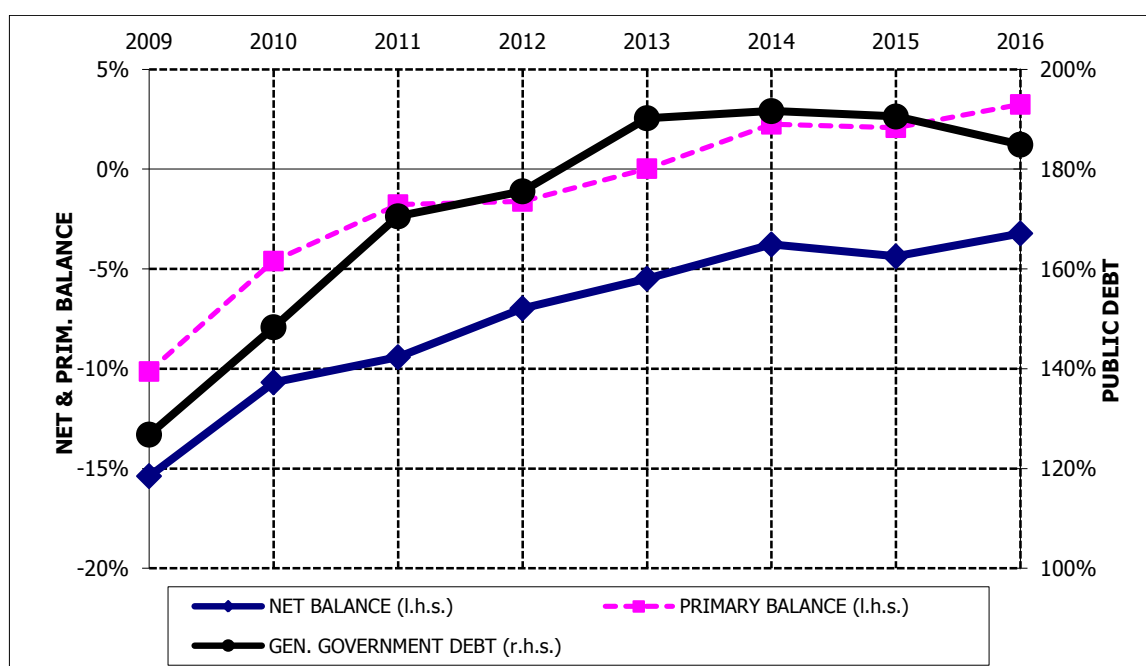
The Medium-Term Fiscal Strategy 2013-2016 (MTFS) was approved with Law No.

4093/12-11-2012, which envisaged a series of interventions, aiming to bring the deficit to 3.2% in 2016, to generate primary deficits and arrest the growth momentum of public debt, as evident in Figure 2.5. The MTFS 2013-2016 is clearly front-loaded, with the total of the fiscal consolidation essentially taking place in its first two years. The measures are distributed by about $\frac{3}{4}$ on the expenditure side and $\frac{1}{4}$ on the side of revenues.

On the expenditure side, the largest part of the consolidation (about 50%) is carried out through reduction of the expenditure on wages and pensions (Table 2.7). Despite these interventions, the MTFS also envisages an extensive privatisation programme, to the amount of €9.5 billion for the four-year period.

Figure 2.5

Fiscal Targets of MFPF 2013-2016 (% of GDP)



Source: Medium term fiscal policy framework 2013-2016, Minfin., November 2012

According to the Budget that was voted right after the adoption of the MTF, the 2013 net deficit is envisaged to reach €9,442 million (5.2% of GDP), against €12,882 million in 2012 (6.6% of GDP).

While the reduction of interest is expected to be small, the generation of a small primary surplus (€748 million, or 0.4% of GDP), for the first time in many years, is of crucial importance.

Table 2.7

MFPF's distributions 2013-2016

€ εκατ	2013	2014	2015	2016	TOTAL
WAGES-PENSIONS	5.854	767	215	136	6.972
OTHER EXPENDITURE	1.738	1.395	211	38	3.382
REVENUE	1.782	2.024	103	-19	3.890
TOTAL	9.374	4.186	529	155	14.244

Source: Medium term fiscal policy framework 2013-2016, Minfin., November 2012

Table 2.8

State budget's Revenues

(mil.€)	2011	2012	2013	2012/ 2011	2013/ 2012
TOTAL STATE BUDGET REVENUE	53.932	52.393	50.559	-2,9%	-3,5%
ORDINARY BUDGET NET REVENUE	50.159	47.706	45.423	-4,9%	-4,8%
TAX REFUNDS	5.283	3.689	3.800	-30,2%	3,0%
O.B. REVENUE BEFORE TAX REFUNDS	55.442	51.395	49.223	-7,3%	-4,2%
TAX REVENUE	48.951	47.050	44.307	-3,9%	-5,8%
DIRECT TAXES	20.318	20.840	19.877	2,6%	-4,6%
Income Taxes	12.934	13.081	11.042	1,1%	-15,6%
Property Taxes	1.172	2.750	3.176	134,6%	15,5%
Direct Tax Arrears	1.911	2.100	3.307	9,9%	57,5%
Other Direct Taxes	4.301	2.909	2.352	-32,4%	-19,1%
INDIRECT TAXES	28.633	26.210	24.430	-8,5%	-6,8%
Transaction Taxes	17.790	15.758	14.368	-11,4%	-8,8%
Consumption Taxes	10.131	9.673	9.336	-4,5%	-3,5%
Indirect Tax Arrears	373	461	435	23,6%	-5,6%
Other Indirect Taxes	339	318	291	-6,2%	-8,5%
NON TAX REVENUE	6.491	4.345	4.916	-33,1%	13,1%
DRAWINGS FROM EU	274	247	236	-9,9%	-4,5%
NON-RECURRING REVENUE	1.977	1.886	2.428	-4,6%	28,7%
LICENSING & PUBLIC RIGHTS	1.157	32	86	-97,2%	168,8%
OTHER	2.003	2.180	2.166	20,2%	0,6%
PUBLIC INVESTMENT PROGRAMME	3.773	4.687	5.136	24,2%	9,6%

Source: State budget introductory report, 2013, Minfin., November 2012

In particular, the State Budget envisages for 2013 a further significant reduction of tax revenue by about €2.8 billion, which in part is offset by an increase of the Public Investment Budget (PIB) and non-recurring revenue (Table 2.8). The increase of non-recurring revenue would come from an increase of the return of the profit from the holding of Hellenic Republic bonds by the central banks of the Eurosystem by about €700 million.

Regarding expenditure, the State Budget envisages a significant reduction of the expenses for wages and pensions of the public sector, together with cuts in the consumption and other expenditure.

Significant savings are also envisaged in the grants to the social security funds, by €1.3 billion. On the other hand, the Budget includes a significant increase of the contingency reserve, while PIB remains unchanged (Table 2.9).

In this context, i.e. strong fiscal consolidation and deeper than anticipated recession, the Eurogroup made a number of decisions on 27th November. Inter alia, it approved the disbursement of a loan tranche to the amount of €49.1 billion⁵ to Greece (€34.4 billion were already paid in December), reduced the interest rate in the cross-country loans by 100 basis points and the guarantees cost by 10 b.p. (with an annual benefit of about €670 million) and extended by 15 years the loan repayment duration, while the consolidation programme was extended by two years. Note that a gradual return of

⁵ Refers to the share of EFSF. Additional €3.3 billion are expected to be approved within January by the IMF.

the profits of the European central banks from the Greek bonds was also decided, though the corresponding amounts were not incorporated in the MTFS.

GENERAL GOVERNMENT FISCAL RESULTS

(January-November)

A month before the end of the previous year, the balance of General Government had a deficit of €9.7 billion, against €19.9 billion in the same period of 2011 (Table 2.10). More than half of this large improvement came from primary surplus, which stood at €2.3 billion (against €3.6 billion deficit in the previous year), while the remaining came from interest payments. In particular, the course of the primary balance is depicted in Table 2.10. The expenditure before grants fell significantly by €8.1 billion. The largest improvement was observed in Social Security Funds (includes hospitals as well), while the State Budget expenditure also fell, by €1.5 billion. Grants (before ESA adjustments) of the State Budget to the remaining General Government entities fell by €3.7 billion. On the other hand, revenues fell by €1.1 billion.

EXECUTION OF THE STATE BUDGET

(January-November)

According to the data announced by the General Accounting Office, the Budget had a net deficit of €12.9 billion, lower year-on-year by €8.3 billion (Table 2.11).

Table 2.9

State budget expenses

	2011	2012	2013	2012/ 2011	2013/ 2012
<i>mil. €.</i>					
STATE BUDGET TOTAL	76.752	68.706	62.652	-10,5%	-8,8%
ORDINARY BUDGET TOTAL	70.144	61.856	55.802	-11,8%	-9,8%
INTEREST PAYMENTS	16.348	11.735	8.900	-28,2%	-24,2%
PRIMARY EXPENDITURE TOTAL	53.796	50.121	46.902	-6,8%	-6,4%
Salaries and Pensions	21.607	20.410	18.243	-5,5%	-10,6%
Social Security expenditure	19.119	17.624	16.313	-7,8%	-7,4%
Consumption expenditure	2.431	2.606	2.115	7,2%	-18,8%
Other expenditure*	3.117	3.541	3.132	13,6%	-11,6%
Earmarked Revenue	7.522	5.637	5.999	-25,1%	6,4%
Contingency Reserve		303	1.100		263,0%
Public Investment Programme	6.608	6.850	6.850	3,7%	0,0%

Source: State budget introductory report, 2013, Minfin., November 2012

Table 2.10

Primary balance (General government Jan-Nov, 2011- 2012 in mil. €)

2011	REVENUE	EXPENDITURE	GRANTS	PRIMARY BALANCE
STATE BUDGET	46.503	29.615	22.845	-5.957
ENTITIES	2.524	3.420	-2.679	1.783
L.A.O.	3.101	5.817	-3.859	1.143
S.S.F.	22.090	38.708	-16.307	-311
TOTAL	74.218	77.560	0	-3.342
ESA adjustments	0	1.227	-924	303
TOTAL	74.218	78.787	-924	-3.645
2012	REVENUE	EXPENDITURE	GRANTS	PRIMARY BALANCE
STATE BUDGET	45.860	28.088	19.191	-1.419
ENTITIES	3.043	3.443	-2.049	1.649
L.A.O.	2.982	5.743	-3.045	284
S.S.F.	21.233	34.596	-14.097	734
TOTAL	73.118	71.870	0	1.248
ESA adjustments	0	-1.171	104	-1.067
TOTAL	73.118	70.699	104	2.315
2012/11	REVENUE	EXPENDITURE	GRANTS	PRIMARY BALANCE
STATE BUDGET	-643	-1.527	-3.654	4.538
ENTITIES	519	23	630	-134
L.A.O.	-119	-74	814	-859
S.S.F.	-857	-4.112	2.210	1.045
TOTAL	-1.100	-5.690	0	4.590
ESA adjustments	0	-2.398	1.028	-1.370
TOTAL	-1.100	-8.088	1.028	5.960

Source: General Government's execution report, November 2012, Minfin., December 2012

This improvement came almost by half (€4.2 billion) from the primary balance, while after the PSI the interest payments also fell significantly by €4.1 billion. Despite the continuous revenue shortfall, which approached €1 billion, the savings from primary expenditure of the Ordinary Budget (€4.4 billion) and the significant cuts of the PIB (€0.7 billion) contributed to the improvement of the primary deficit, which stood at €1.4 billion, against €5.7 billion in the previous year.

As evident in Table 2.12, the revenues of the State Budget fell by almost €1 billion since the previous year, a shortfall that came both from tax and non-tax revenue sources. The year-on-year increase in the collection of direct taxes was exclusively due to sharp increase of property taxes, while indirect taxes fell by €2.3 billion, with the largest deviation observed in VAT, whose collection fell by 11.6%. The

execution of the budget expenditure continued to improve, as evident from the data shown in Table 2.13. Overall, primary expenditure of the Ordinary Budget fell significantly by €5.2 billion, exceeding the annual target. While the expenditure for wages and pensions were executed better than expected, the social expenditure continued to fall short of the envisaged reduction target, mainly due to increased needs for grants to the social security funds. The operating and other expenditure, which includes grants to entities other than the social security funds fell overall by 4%, against an initial target of 9.8% reduction. Lastly, earmarked revenues, which largely concern the financing of local authorities, fell at a very large rate, generating savings to the amount of €1.5 billion.

Table 2.11

State budget's execution 2012, January – November

	2011	Change 2012/11	2012
	2011	Change 2012/11	2012
I. State Budget net revenue (1+2)	46.805	-945	45.860
1. Ordinary Budget net revenue (A+B-C)	44.161	-1.258	42.903
A. Revenue before tax refunds	48.085	-2.219	45.866
B. Special revenue form licensing and public rights	785	-777	8
C. Tax refunds	4.709	-1.738	2.971
2. Public Investment Programme revenue	2.644	313	2.957
II. State Budget expenditure (1+2)	68.002	-9.289	58.712
1. Ordinary Budget expenditure (A+B+C)	63.715	-8.630	55.085
A. Primary expenditure	46.421	-4.431	41.990
B. Other primary expenditure	1.751	-90	1.661
C. Interest payments	15.542	-4.109	11.433
2. Public Investment Programme expenditure	4.287	-659	3.627
State Budget Primary Balance	-5.655	4.235	-1.419

Source: State budget's execution report November 2012, Minfin, December 2012

Table 2.12

State budget Revenues 2012, January – November

	2011	2012	Μετα- βολή 2012/11
(€ εκατ.)			
TOTAL STATE BUDGET REVENUE	46.805	45.860	-945
ORDINARY BUDGET NET REVENUE	44.161	42.903	-1.258
TAX REFUNDS	4.709	2.971	-1.738
O.B. REVENUE BEFORE TAX REFUNDS	48.870	45.874	-2.996
TAX REVENUE	43.554	42.198	-1.356
DIRECT TAXES	18.011	19.007	996
Income Taxes	11.686	11.953	267
Property Taxes	732	2.612	1.880
Direct Tax Arrears	1.769	1.655	-114
Other Direct Taxes	3.824	2.787	-1.037
INDIRECT TAXES	25.543	23.190	-2.353
Transaction Taxes	16.466	14.551	-1.915
Consumption Taxes	8.432	7.923	-509
Indirect Tax Arrears	336	422	86
Other Indirect Taxes	309	294	-15
NON TAX REVENUE	5.316	3.676	-1.640
DRAWINGS FROM EU	147	89	-58
NON-RECURRING REVENUE	1.566	1.523	-43
LICENSING & PUBLIC RIGHTS	785	8	-777
OTHER	2.818	2.056	-762
PUBLIC INVESTMENT PROGRAMME	2.644	2.957	313

Source: State budget's execution report November 2012, Minfin, December 2012

Table 2.13

State budget's spending 2012, January - November

	2011	2012	Μετα- βολή 2012/11
(mil. €)			
STATE BUDGET TOTAL EXPENDITURE	68.002	58.712	-9.289
INTEREST EXPENDITURE	52.460	47.279	-5.180
STATE BUDGET PRIMARY EXPENDITURE	48.173	43.652	-4.521
ORDINARY BUDGET PRIMARY	19.718	18.363	-1.355
SALARIES & PENSIONS	12.545	11.910	-635
Wages	1.240	548	-692
Other allowances	5.933	5.905	-28
Pensions	16.550	15.158	-1.392
SOC. SECUR., MEDIC., SOC. PROT.	14.040	13.273	-766
Grants to Social Security Funds	655	696	42
Social Protection	764	438	-326
Grants to OAED	1.092	750	-342
Other Healthcare Expenses	7.306	7.012	-294
OPERATIONAL-OTHER	1.530	1.395	-135
Transfers to other entities	1.360	1.351	-9
Consumption Expenditure	2.665	2.604	-61
Conditional Expenditure	1.751	1.661	-90
Other Expenditure*	4.598	3.119	-1.479
EARMARKED EXPENDITURE	4.287	3.627	-659

Source: State budget's execution report November 2012, Minfin, December 2012

C) Developments in the labour market and the competitiveness of the Greek economy

i) Introduction

According to the latest available estimates and forecasts, the GDP of the Greek economy declined by 22% in total in the period from 2008 to 2012, while in the same period employment fell by 15.8% and the unemployment rate increased by 16 percentage points, reaching 23.5% of the labour force on average for 2012 from 7.5% in 2008. Such a cumulative contraction of GDP, loss and destruction of jobs, and unemployment growth has never happened in any EU country (not even in Latvia), and neither of course in the USA during the latest crisis.

The fiscal consolidation and the simultaneous effort to balance the current account through recovery of competitiveness had strong contractionary impact, much larger than initially anticipated. The fiscal multipliers that were used in the forecasts of EC-ECB-IMF had been clearly underestimated. IOBE had noted at the time that the combination of restrictive fiscal policy and internal devaluation, in an economy such as the Greek one that belongs to a monetary union, would be especially harmful for economic activity and employment. We had also noted that the fiscal policy has a particular burden on economic activity and makes the reduction of the debt-to-GDP ratio even more difficult when the private sector is in a deleveraging phase and the economic units are experiencing severe liquidity

constraints, resulting in expenditure that is supported almost exclusively from current income, which indeed has fallen drastically.

Nevertheless, as already noted at several points in the Bulletin, IOBE is expressing a cautious optimism regarding the short-term outlook of the Greek economy, expecting that the quarterly GDP growth rates will turn positive in late 2013 or early 2014. However, even though there is some optimism regarding the future course of GDP, the same cannot be said about employment and unemployment. In the remaining of this section we focus on the examination of the impact of the recession on labour market dynamics. In addition, a more general analysis is made on the effectiveness of the adopted policy of internal devaluation and the improvement of the international competitiveness of the Greek economy.

ii) The recession changed the labour market dynamics

In the period from 2008 to 2012, employment has responded to the changes in economic activity with an elasticity short of one (estimated at around 0.7). Based on the international standards and the experience of other developed economies, the employment growth rates in Greece are seemingly in line with the GDP growth rates. However, until recently in Greece, employment was responding to the changes in activity with a lag and the elasticity was in general very low.

Comparing the changes in total employment with the GDP growth rate based on

the annual national accounting data, the elasticity of employment is constantly rising during the crisis years: from 0.2 in 2009 to 1.3 in 2012. This phenomenon is even more pronounced when we examine the relationship between contracted labour and activity and in particular when the analysis concerns employees in the so-called business sector. The marginal job losses in the Public Sector bias the estimates for those categories of employees that lifted all the burden of unemployment.

In order to acquire a better sense of these issues, we estimated a simple regression for the relationship between the annual growth rate of total employment and the annual rate of GDP growth, using quarterly data for the period from the first quarter of 2001 until the third quarter of 2012. The elasticity for the whole period was estimated to equal 0.58. However, the rolling regression of employment on activity returned an elasticity of 0.13, when the estimation period stops at the first quarter of 2009, gradually increasing afterwards to 0.58 with the extension of the estimation period until the third quarter of 2012.

Subsequently, the unemployment dynamics during the current great depression and the examination of the factors that affect it were analysed through the prism of the so-called 'Okun's law'.

The Okun's law links the change of the unemployment rate with the deviation of the GDP growth rate from its potential rate of change. In its most common version, as presented in macroeconomic

textbooks, it connects the change of unemployment with the change in activity and states that in order to reduce unemployment by one percentage point, GDP should increase by 2 percentage points. In other words $\Delta u = a + b \cdot \Delta Y$ with $b \approx -0.5$. There is some evidence for the law's validity mainly for the US, UK and other developed economies.

For Greece, the value of b for a rather long period (1960-2000) had been estimated to stand between -0.2 and -0.3, implying that GDP should increase by 4-5 percentage points in order to reduce unemployment by one percentage point.

The Okun's law was estimated anew with quarterly data for the period from the first quarter of 2001 until the third quarter of 2012 and b took the value of -0.43. In addition, in a rolling estimation of the Okun's law, the value of b from the beginning of the estimation period until the first quarter of 2009 was only -0.1, for it to gradually grow until reaching -0.43 in the third quarter of 2012.

iii) Labour market hysteresis

The first finding from the presented estimates is that certain empirical regularities observed until now, regarding the relationship between changes in employment, unemployment and GDP, have ceased to hold during the recession period. Employment now reacts significantly stronger than in the pre-crisis period. If the Okun's law were used to forecast unemployment during the crisis it would have failed completely. The forecasting failure of the law raises a serious of questions: Did the

Okun's law collapse during the crisis? If the economy recovers, would this recovery be enough to bring unemployment back to reasonable levels? Why does employment react so strongly to changes in activity? What changed so much in the Greek labour market that it now behaves as the very flexible labour markets of the developed economies?

Various arguments can be put forward that provide part of the answers to the these questions, such as: Interruption of legal economic activity and adoption of informal employment forms. Interruption of employment due to disappointment from the prolonged recession. Mismatch between labour demand and the skills of the employees. And finally, an impact to some extent from the ongoing structural reforms in the labour market.

What bothers us most, however, is that the current unemployment itself seems to have started to affect permanently the structural part of unemployment, a phenomenon known as hysteresis. Hysteresis is a hypotheses that was proposed by Blanchard and Summers (Hysteresis in Unemployment, NBER WP 2035, 1986) during the 1980s in an attempt to explain European unemployment. We believe that hysteresis phenomena characterise the Greek labour market today and the long-term unemployed serve as the channel of impact. The number of long-term unemployed increased dramatically in Greece in 2012 and now covers a half of the total unemployed. These people look less and less for jobs, while the demand by the enterprises for the labour that they could

supply is falling. As a result, they gradually get cut off from the labour market, the pressure they exert on the market weakens and they pass from cyclical to structural unemployment.

In order to limit unemployment the economy should recover, however this is not sufficient, as only the cyclical element of unemployment will be absorbed. The significant structural element would require other policies as well. The unemployment problem has many dimensions, the structural and institutional reforms that are being implemented by the government leave some room for optimism, but the adjustment will take time.

iv) Did competitiveness really improved so much based on relative labour cost measures?

The developments in the labour market that were described and in particular the faster contraction of employment than GDP led to particular evaluations regarding the progress of the Greek economy in restoring its competitiveness and hence the effectiveness of the internal devaluation policy.

The view that the competitiveness that was lost during 2001-2009, based on relative labour cost measures, has largely recovered and in 2013 will fully recover, seems to dominate in the public discourse. This view can also be found in the recent intermediary report on the monetary policy of the Bank of Greece and the European Commission's first review of the second adjustment programme of the

Greek economy. In these reports, but also often in the public discourse, it is stressed that the programme's target to reduce the labour cost per unit of GDP by 15% from 2012 to 2014 is now undoubtedly achievable and most probably the final outcome will exceed the initial target.

We believe that indeed the competitiveness, based on labour cost measures, has improved satisfactorily and some of the losses from the previous decade have been recovered. However, in our view the reports' assessment is exaggerated, as it is based on a mechanistic application of the relevant calculations that distort the undercurrent real developments. The short-term cyclical fluctuation of the GDP-employment ratio, known as apparent productivity, do not reflect so much an impact from technological progress and the introduction of innovations in the production activity. Productivity in the short-term is a magnitude that records the imperfect reaction of employment to the fluctuations of demand, rather than the medium-term effects of technological changes in production. In the recent period employment overreacted to the changes in demand and as a result productivity increased, which in turn led to a reduction of the unit labour cost and improvement of the competitiveness based on labour cost measures. The labour cost competitiveness indeed increased, however this was due mainly to a large drop of the nominal wage. The part of the improvement that is attributed to increase of productivity should be evaluated and taken out from the final result, in order to

obtain a realistic understanding of the developments.

Furthermore, the progress in the competitiveness based on relative price measures, which is more important for the achievement of the ultimate goal – sustainable balance of the current account – is much more limited and in general is not subjected to much discussion.

The internal devaluation policy is progressing, albeit at a slow pace. The improvement in the balance of payments is a result almost exclusively from the fall in final demand and not in relative prices. The required reorientation of domestic demand to domestically produced goods and the transfer of resources to sectors with internationally tradable goods has not been achieved yet. However, the deflation in 2012 based on the GDP deflator and the fall of prices in services constitute the first encouraging signs for its ultimate success.

3. PERFORMANCE AND OUTLOOK

3.1 Macroeconomic developments

Developments in the first nine months of 2012

The contraction of the Greek economy slightly accelerated in the third quarter of 2012 to reach 6.9%, from 6.3% in the preceding quarter, its worst performance for the first three quarters of the year.⁶ The new strengthening of the GDP's fall was expected due also to the relatively high level of GDP in the third quarter of 2011, compared with the preceding quarters, when it had fallen by 4.0%. Of course, the persistence of the deep contraction is not only due to the above technical effect. Despite the end of the prolonged election instability in mid June and its negative repercussions on the domestic economic environment with the formation of the three-party government, the economy did not improve for a number of reasons, the most important of which were: a) start of the negotiations over the fiscal measures in July, as envisaged in the second loan agreement, which continued throughout the third quarter and beyond, b) completion of the implementation of the fiscal interventions that were included in the second bailout agreement, c) more extensive adoption of the structural changes in the labour markets and despite this d) further acceleration of the unemployment growth rate. As a result, **the GDP contraction**

in the first nine months of 2012 reached 6.6%, stronger than anticipated by international organisations for 2012 overall (OECD: -5.3%, IMF: -6.0%), yet slightly weaker year-on-year (from -6.8%).

The trends in the key GDP components from the second quarter of the year consolidated and in most cases strengthened in the third quarter, by an extent that exceeded the initial expectations. Nevertheless, **the weakening of the household consumption and the contraction of investment expenditure remained the key drivers of the recession of the Greek economy** for one more quarter and hence for the first nine months of 2012 overall. Indeed, the contraction of investment strengthened significantly, exceeding its rate from earlier during the year. Sudden acceleration was also observed in the reduction of the state's consumption expenditure, which is reflected in the achievement of the fiscal targets, but also in the increase of the arrears to its suppliers. The external sector of the economy achieved a surplus in the third quarter, for the first time at least since 2000, limiting further the deficit for 2012 overall. However, the fact that imports were lower than exports was exclusively due to the extensive contraction of the former, as exports slightly contracted year-on-year.

In greater detail, **the fall of domestic consumption, i.e. overall of private and public sectors, strengthened in**

⁶ Quarterly National Accounts (preliminary data), EL.STAT., December 2012

the third quarter to 8.8% to reach 7.9% for the first nine months of 2012, slightly stronger year-on-year (-7.6%). The contraction came mostly from weakening of household consumption demand, which reached 8.4% in the third quarter and 7.7% for the first nine months, the same rate as in the period from January to September of 2011. Notably less pronounced was **the reduction of public consumption in the first nine months of 2012, which reached 4.0%** against 6.8% in the preceding year. In fact, **the largest reduction of the public sector's consumption expenditure was observed in the third quarter, when it reached 10.7%.**

The contraction of investment accelerated further in the third quarter of 2012 to reach 36% year-on-year, for the first time at least since 2000, resulting in overall contraction for the first nine months by 30.3%. The caution with respect to the unprecedented in the past few decades for the Greek political scene coalition government and the waiting stance regarding its deeds, together with the generation of further uncertainty from the negotiations on the new measures, did not allow for an improvement of the unfavourable since early 2012 investment climate. Besides, there was not much progress in the third quarter in the implementation of the bylaws regarding the facilitation of investment that had been adopted during the first half of the year. The size of investment during the third quarter was affected also by the significant reduction of inventories, which

reached €1.5 billion. No fixed capital category deviated from the overall contraction trend: **the largest drop in the first nine months of 2012 was observed in investment in Transport Equipment and Housing, by 34.2% and 32.0% respectively**, followed by Metal Products – Machinery (-14.8%) and Other Products (-3.6%), while investment in Other Construction fell only marginally. In contrast, investment in agricultural equipment increased (+4.9%), strengthening their trend from the previous year (+1.5% in the first nine months of 2011). In the same period of 2011, the strongest contraction was observed in Other Construction (-26.1%), followed by investment in Transport Equipment (-19.4%).

The balance of the economy's external sector continued to improve, limiting its negative impact on GDP. As a result of the surplus that was recorded in the third quarter, to the tune of €2.2 billion in national accounting terms, its deficit in the first nine months of 2012 overall was lower by 73.4% year-on-year, to reach only €2.6 billion. Accordingly, its deficit did not exceed 1.9% of GDP, from 6.8% in 2011 and 13.6% in 2008. Nevertheless, **the reduction of the external sector's deficit did not come from a boost of exports, which fell in the first nine months of 2012, but exclusively from a drastic contraction of the demand for imports**, whose reduction in the same period reached 17.4%, three times stronger year-on-year (-5.8%), accelerating significantly in the third quarter (-20.4%). As in the previous two

quarters, the fall of imports of goods was stronger than the reduction of the imports of services (19.2% and 9.8% respectively for the first nine months).

The downward trend in exports that emerged in the second quarter (-3.1%) strengthened in the third (-4.5%) and as a result exports in the first nine months of 2012 fell by 1.9% year-on-year. The volume of exports is similar with that observed in the first nine months of 2011, yet in the previous year they were growing by 2.0%. The weaker demand by 5.0% for the exports of services explains the overall reduction, as the export of goods slightly increased (+1.3%).

In production terms, **domestic value added fell by 6.3% year-on-year in the first nine months of 2012 (from 6.6% contraction in the same period of the previous year).** The slump in fixed capital formation in construction is reflected, as earlier in the year, in the **production of the construction sector, which has steadily recorded the largest contraction among the key sectors of the Greek economy since the beginning of the year (15.1% on top of its vertical drop by 28.4% in 2011).** It was followed by Wholesale & Retail Trade – Transport – Accommodation & Food Services (-13.6%) and Art – Entertainment – Recreation Activities (-12.8%), sectors that were particularly exposed to the fluctuations of consumption demand. Next came Financial – Insurance Activities and Information – Communications sector (-8.4% and -6.5% respectively). Real Estate Activities

was the only sector with rising production, albeit only marginally at 0.3%.

The prolonged election flux and the unfavourable forecast on international tourist flows before the summer months prevented the manifestation of favourable seasonal impact on employment in the summer months, as had been the case in the past. Quite the opposite, the fall of employment continued at a similar rate as in the first half of the year (8.3%). **As a result, the unemployment rate reached 24.8% in the third quarter, up by 7.1 percentage points year-on-year. Hence, the average unemployment rate for the first nine months of 2012 stood at 23.7%, exceeding its level from the same period of the previous year also by 7.1 p.p.**

The persistence of the intense weakening of domestic private consumption in the third quarter, the significantly lower year-on-year tourist flows and the large cuts in public consumption expenditure led, in the absence of tax hikes, to a further bout of disinflation, yet of a small intensity: **the average inflation rate in the third quarter of 2012 was 1.3%**, lower quarter-on-quarter by 0.2 p.p. and almost half of its level from the same period of 2011 (2.4%). For the first nine months overall, inflation reached 1.6% on average, 1.9 p.p. lower year-on-year.

In summary, the uncertainty in Greece and abroad regarding the developments on the fiscal front in the country and the intense instability in its political environment, with the frequent changes and re-

shuffles at government level, as already noted in the previous quarterly reports of IOBE, were the key drivers of economic activity during the first nine months of 2012. The heightened caution that these create, together with the restrictive – for

the time being at least – impact of the fiscal and structural change on GDP do not allow for weakening of the contraction and unemployment from the high rates that they currently record.

Table 3.1

Main Economic Volumes-Quarterly National Accounts (constant 2005 prices)

Year/ Quarter	GDP		Final Consumption		Investment		Exports		Imports	
	mil. €	Annual rate of change	mil. €	Annual rate of change	mil. €	Annual rate of change	mil. €	Annual rate of change	mil. €	Annual rate of change
2001	165.023	4,2%	146.095	4,1%	38.908	-3,9%	39.522	0,0%	59.274	4,2%
2002	170.700	5,2%	153.724	5,2%	39.399	1,3%	36.205	-8,4%	58.532	-1,3%
2003	180.847	2,4%	157.479	2,4%	46.687	18,5%	37.262	2,9%	60.267	3,0%
2004	188.746	3,8%	163.422	3,8%	45.578	-2,4%	43.712	17,3%	63.682	5,7%
2005	193.049	3,8%	169.662	3,8%	41.321	-9,3%	44.807	2,5%	62.741	-1,5%
2006	203.688	4,1%	176.612	4,1%	50.048	21,1%	46.739	4,3%	69.711	11,1%
2007	210.895	4,3%	184.176	4,3%	56.524	12,9%	50.066	7,1%	79.820	14,5%
a' 2008	49.525	0,1%	47.982	3,1%	11.243	-11,4%	10.170	5,7%	19.863	2,6%
b' 2008	53.148	0,1%	48.142	3,3%	12.864	-0,6%	12.955	4,6%	20.806	10,5%
c' 2008	55.247	-0,1%	47.219	2,9%	11.894	-9,5%	16.902	5,2%	20.771	4,8%
d' 2008	52.522	-0,9%	46.091	2,2%	14.671	-17,4%	10.871	-9,3%	19.095	-12,4%
2008*¹	210.443	-0,2%	189.436	2,9%	50.672	-10,4%	50.899	1,7%	80.535	0,9%
a' 2009	47.439	-4,2%	45.860	-4,4%	9.258	-17,7%	8.296	-18,4%	16.017	-19,4%
b' 2009	51.254	-3,6%	47.727	-0,9%	9.072	-29,5%	10.368	-20,0%	15.961	-23,3%
c' 2009	53.607	-3,0%	47.941	1,5%	8.526	-28,3%	13.378	-20,9%	16.279	-21,6%
d' 2009	51.543	-1,9%	47.396	2,8%	11.135	-24,1%	8.973	-17,5%	16.004	-16,2%
2009*	203.843	-3,1%	188.924	-0,3%	37.992	-25,0%	41.014	-19,4%	64.261	-20,2%
a' 2010	46.972	-1,0%	46.939	2,4%	7.305	-21,1%	8.310	0,2%	15.707	-1,9%
b' 2010	49.816	-2,8%	44.856	-6,0%	8.979	-1,0%	10.826	4,4%	14.828	-7,1%
c' 2010	50.064	-6,6%	43.437	-9,4%	7.916	-7,2%	13.677	2,2%	14.829	-8,9%
d' 2010	46.916	-9,0%	40.884	-13,7%	10642	-4,4%	10.328	15,1%	14932	-6,7%
2010*	193.768	-4,9%	176.116	-6,8%	34.842	-8,3%	43.142	5,2%	60.297	-6,2%
a' 2011	42.840	-8,8%	41.632	-11,3%	7.180	-1,7%	8.282	-0,3%	14.274	-9,1%
b' 2011	45.889	-7,9%	41.433	-7,6%	7.576	-15,6%	10.922	0,9%	14.051	-5,2%
c' 2011	48.072	-4,0%	41.932	-3,5%	6.229	-21,3%	14.278	4,4%	14.406	-2,9%
d' 2011	43.201	-7,9%	38.424	-6,0%	8.138	-23,5%	9.801	-5,1%	13.141	-12,0%
2011*	180.001	-7,1%	163.421	-7,2%	29.124	-16,4%	43.282	0,3%	55.871	-7,3%
a' 2012	39.956	-6,7%	38.450	-7,6%	4.612	-35,8%	8.622	4,1%	11.776	-17,5%
b' 2012	43.015	-6,3%	38.433	-7,2%	6.029	-20,4%	10.580	-3,1%	12.128	-13,7%
c' 2012	44.755	-6,9%	38.237	-8,8%	3.987	-36,0%	13.636	-4,5%	11.390	-20,9%

* provisional data

Source: : ELSTAT, Quarterly National Accounts, December 2012.

Medium-term outlook

The developments in Greece during the last quarter of 2012 were marked for one more quarter by the negotiations, consultations and developments surrounding the fiscal issues of the country. In particular, these developments were: a) continuation of the negotiations with the troika that began in July for the finalisation of the fiscal measures and structural reforms in 2013-2014 and extension of the fiscal consolidation period to 2015-2016; b) subsequent passing of the 2013 State Budget and the Medium Term Fiscal Strategy 2013-2016 through parliament; c) consultations between the leaders of the Eurozone member-countries and IMF on the terms of disbursing the next tranche of the loan to Greece, which led to the Eurogroup decision of 26th November; d) execution of the bond repurchase by the Greek state and subsequently approval of granting the EFSF part of the loan tranche.

With the above processes, one more year with many events and development, domestic and global, centred on Greece's public finances came to a close: The year started with negotiations for the second bailout, which mainly included the new loan agreement and the additional fiscal measures for 2012, together with the PSI programme for a reduction of the value of the Greek bonds held by investors that were not part of the world economy's official sector. Their finalisation in mid February and the ratification of the second bailout by the Greek parliament ameliorated somewhat the concern regarding the viability of Greece's public finances. Nevertheless, the success of

the adopted measures and strategies depended largely on the outcome of the programme to exchange the old Greek bonds with new and with EFSF securities, which began immediately after that and ended in late March, causing in the mean time concern over its outcome. Additionally, the fiscal measures of the second bailout caused, apart from social reaction, sharp disagreement between the three parties that had formed a coalition government in November 2011, which resulted in the withdrawal of one of these parties from the coalition. In this tense, unstable socio-political environment, parliamentary elections were called right after the completion of the bond exchange programme, heightening further the uncertainty regarding the economic policy that the country would follow and its outlook. The inability to form a government after the 6th May elections, which had been expected already from the polls data, compounded this uncertainty until the next round of elections that took place on 17th June. The subsequent formation of three-party government with a long-term horizon and the central political strategy of keeping the agreements with the European partners and the official lenders to the country, and the continuation of the fiscal consolidation process eased the election uncertainty. Nevertheless, the lack of experience and mentality of the parties in Greece to work together in a coalition government in the past few decades led the world politico-economic factors to take a waiting stance, which was reflected in the often mutually contradicting statements by foreign officials and experts on Greece.

The caution regarding the coherence and the functionality of the new government began to intensify as the duration of the negotiations with the "troika" on the 2013-2014 fiscal measures was growing, due to disagreement between the parties supporting the government regarding the measures that had to be taken, but also due to the changes of the negotiations' content by the troika, e.g. through expansion of the areas where interventions were needed (labour issues in the private sector in September). Of course, as already noted in the previous quarterly bulletin of IOBE, the formation of coalition government, particularly in a country without such a precedent in its recent history has brought extensive changes to the parties that form it and to the way the executive power is exercised, which were not easy to absorb and complete in the limited time period since the 17th June elections and until the start of the negotiations with the troika. As the appropriate conditions for their gradual, unimpeded completion were not present, negative repercussions emerged, such as the prolonged negotiations between the parties that participate in the government on the concretisation of the fiscal measures.

The negotiations with the troika lasted for several months to come to an end in the final quarter of 2012, keeping high the mistrust globally on the ability of Greece to continue and complete its fiscal consolidation, but also propping up the concern within the country's borders on its future and on the impact of the imposed measures. The doubts on finding a viable solution for Greece's public

finances and their impact were preserved almost until the end of the year due to: a) assessment differences between EU and IMF on the interventions that would make the Greek debt viable, which were bridged, at least for the time being, with the 26th November decision and b) the process of direct purchase of bonds by the Greek government, with a major significance for the reduction of Greek debt, whose outcome was not predetermined.

It is clear from the above that throughout 2012, due to the extensive negotiations between the Greek government and the troika, the subsequent processes at international level regarding the sustainability of the Greek public debt and the two elections with the prolonged election period, which essentially started in November 2011, the prerequisites for relative normalisation and improvement of the economic environment in Greece were absent. Its key features, such as public debt sustainability, on which the operation of basic tenants of the economy's private sector depend as well, government stability, the tax system for individuals and legal entities, the income policy of the state (public sector – pensioners), the labour relations in the private sector, the social security system, and even the monetary stability, remained uncertain for large period of 2012, some of which for the most part of its duration. Meanwhile, the above factors did not allow for the implementation of the structural reforms that were included in the updates of the first economic adjustment programme and in the second programme itself, and of the laws and bylaws to boost entrepreneurship

through amending its wider regulatory framework. As a characteristic examples of the above we can mention the finalisation of 12 regional land-use plans, which according to the second economic adjustment programme should have been completed in the third quarter of 2012, and the law of business-friendly Greece (Law No. 4072/2012).

The stability in most of the above parameters and their improvement when there is room for this with the appropriate long-term planning for their materialisation, informing all the relevant stakeholders about them and their strict implementation are needed in order to improve the economic climate in any country. Therefore, this should be the main goal of the fiscal and reform strategy in the coming years in Greece, as the fiscal measures in 2013-2014 have already been decided and in the review of the second economic adjustment programme there is, as has been the case before, a time-table for the reforms.

In case of deviations from the above or ex-post amendments, the expectations of the economic agents (households, enterprises) will be shaken. If the deviations or amendments are extensive, mainly with regards to the needed fiscal measures, as has been the case in Greece in the recent past and in 2012 with the continuous negotiations, debates on measures and the elections, then a significant part of the trust in the adopted fiscal and reforms policy is lost. The households and the enterprises, apart from any damage that they suffer from these setbacks, gradually acquire mistrust, which is developing into one of the

strongest brakes on the expansion of economic activity, even when real progress is achieved in many of the aforementioned features of the economic environment. Those that design and/or execute economic policy should prevent the negative impact from repetitive shortfalls, changes and delays, on the expectations of the economic agents. Of course, those that cause this, within or outside a country, have their share of responsibility for the subsequent strong disruption of the economic environment.

The Greek economy is largely in this position today. Its recovery prospects have suffered not only from the direct effect of the adopted strong fiscal measures in 2010-2012, but also from the caution that they have generated, firstly with the inconsistency in their effectiveness that has continuously led to additional fiscal interventions and secondly with the very large delays in the implementation of structural reforms in the economy and the functioning of the State.

The course of the economic sentiment indicator of the European Commission, which in Greece is compiled by IOBE can be explained not only with pessimistic expectations, but also in part with the existence and the impact of the distrust in the economic and reform policy on the economic climate and the economic activity. Throughout 2012 the indicator remained at low levels, notably above its all-time record, without much fluctuations or sudden jolts, despite the adoption of extensive measures in February and November and the intense pre-election uncertainty. In fact, the indicator reached its highest level in the last 20

months. Its mild fluctuation, albeit at low levels, despite the downward pressure from situations and events that could have caused its fall, could be considered to depict, beyond the existent pessimism, a continuous stance of wait-and-see on the outcome of the consultations and the developments, and the expectation that, overcoming any complications occurring in the negotiations, certain features of the economic environment will consolidate or at least their future course will become known in the next 2 to 3 years. Subsequently, the implementation of plans and the decision-making in this time period, at individual, household or company level, will become feasible. Nevertheless, the presence of sources of uncertainty throughout 2012, mainly due to the negotiations, was a stumbling block for the finalisation of these features, which would have probably allowed in part for containment of the adverse economic climate.

The mixed picture on economic activity that emerges from the trends in its key components from the latest available data, such as stabilisation / weakening of the contraction or return to growth in some of them, but also deepening of the contraction in others, reflect uncertainty and perhaps a likelihood that the Greek economy and society are at a turning point. In more detail, industrial production was growing in two of the last three months with available data (August to October 2012): it increased for the first time since 2007 in August by 2.7% and by 2.0% in October. Production in certain mining activities, generation and distribution of electricity, pharmaceuticals

and mainly the manufacture of coke and refined petroleum products, have grown continuously, while sparse growth has been observed in the manufacturing of food products, basic metals and non-metallic minerals. In most of the remaining branches the contraction was weaker year-on-year. In the same time period, the contraction of new industry orders slightly weakened. In fact, in October they increased by 11.9%, due to the strengthening of foreign demand (+21.6%), a turn that cannot be considered permanent for the time being. In contrast, the contraction of the turnover in the construction sector during the third quarter strengthened to reach 36.3%. A key cause for this is the quagmire of civil engineering activities (-39.6%), together with a reduction in the other key activity in the sector – construction works – that stood at around 23% for a second consecutive quarter.

Regarding the course of activities in services, which reflect closer the trends on the economy's demand side, the fall of the volume of wholesale trade slowed down to 8.4% in the third quarter of 2012, from 15.3% in the previous quarter and 17.4% in the first quarter of the year. On the other hand, the contraction of the volume index of retail trade except fuel and lubricants, after its weakening during the summer sales period in July and August to 9.0%, returned to two-digit rates in September. Regarding the developments in the tourist sector – one of the most important sectors of the Greek economy – the turnover in Accommodation – Food Services fell by 11.5% in the third quarter of 2012, no-

tably less than in the previous quarters. On the other hand, it did not stabilise year-on-year as it had done in the previous year. Given first the modest fall of the international tourist arrivals at the largest airports of the country during these particular months (-1.0%), together with the marginal increase in the tourist receipts of the balance of payments (+0.3%), the lower turnover is due to the much lower demand for tourist services by the Greek residents.

The overall weakening of the domestic consumption demand in the third quarter of 2012, and in the subsequent months until the end of the year is reflected in the course of inflation. It stood at 1.3% on average in the third quarter, from 2.4% in the same period of 2011, falling below 1.0% in the last month of this period. The average rate would have been lower if it had not increased to 1.7% in August, due to the lowest base level of comparison of the consumer price index in the same month of 2011. The weak consumer demand is reflected in the inflation trends towards the end of 2012: despite reaching 1.6% in October, due to the anticipated upward impact from the levelling of the excise duty on motor diesel and heating oil, inflation fell to 1.0% in the following month, close to its August level.

The continuous weakening of employment also exerts pressure on income and thus on the consumption activities of the economy's private sector. Employment contracted in the third month of 2012 by 8.3% year-on-year. As a result, unemployment reached 24.8% of the labour force, seven percentage points higher

year-on-year, a growth rate similar to that observed in the preceding quarters.

The apparent, from the disinflation and the significant hike of unemployment, further weakening of household consumption demand in the second half of 2012 seems to have constituted the key driver of the GDP trend in that period, given the particularly high share of the private sector's consumption expenditure in GDP (71.6% in the first three quarters of the year). The households' propensity to consume curbed, as discussed previously, the uncertainty on the fiscal measures in 2013-2014, as large part of the measures concerned wages, transfer payments and tax system elements that affect the income of all individuals. Therefore, the implementation of the adopted measures beginning from early 2013 will further reduce the households' disposable income and purchasing power. The wider effort to curb public expenditure in order to balance the primary account of the General Government, as envisaged in the Medium Term Fiscal Strategy 2013-2016, will preserve the contraction of public consumption in the new year. On the other hand, after the completion of another particularly adverse year in the area of investment, due to the uncertainty that dominated in the country for the aforementioned reasons, different developments are expected in 2013, following the completion of the banks' recapitalisation, the recovery of their access to liquidity from the ECB and the implementation of the programme of concessions / privatisation of the state-owned assets.

In greater detail regarding the course of the key GDP components in late 2012 and 2013, private consumption, under the influence of the above factors (high and rising unemployment, insecurity on the measures for the coming years) and the progress in the implementation of labour market regulations that were included in the second economic adjustment programme (lower minimum wage, especially for those under 25 years of age, suspension of the three-year wage maturation, reduction of automatic contract extensions) is estimated to have continued to contract strongly in the last quarter of 2012, at about the same rate with the two preceding quarters. As a result, **its contraction in 2012 tends to reach around 8.7%, from 7.7% in the previous year.**

During the current year, the implementation of new fiscal interventions from January will generate further pressures on the income of public sector employees (reductions in special wage categories, abolition of the 13th and 14th salaries), pensioners and all those receiving state benefits. An income reduction of all individuals will come as a result of the abolition of the tax allowance that existed until 2012, irrespectively of the fact that up to a certain income level the ultimate tax burden will not change with the new tax system. Of course, the expected growth of unemployment, albeit at a weaker rate than in 2012, as discussed further down, and the structural changes in the labour market, whose implementation gradually expands, will continue to have contractionary effects.

As a result of the impact of the above factors, the consumption in the private sector is expected to contract strongly in 2013, at about the same rate as in 2012.

Regarding the other component of domestic consumption expenditure – public consumption – the significant delay in the disbursement of the due tranche from the second loan agreement with the troika that had already brought a reduction of consumption expenditure in the public sector in the third quarter of the previous year, had perhaps a similar impact in the last quarter as well. The overall reduction of state payments for consumption purposes during this period of 2012 has been made possible by the fact that in the corresponding quarter of 2011 the expenditure was higher than in the preceding quarters. **The acceleration of the cuts in the second half of 2012 will result in public consumption lower by 6.5% than in 2011, when its reduction was slightly lower (-5.2%).**

The continuation of the fiscal consolidation in the coming two years, mainly through a reduction of public expenditure, understandably will reduce consumption expenses. This particular approach is reflected in the Medium Term Fiscal Strategy 2013-2016. The planned rollout of the Central Electronic Public Procurement Registry to the central government entities from 2013 could contribute to its success. In this regard, **the reduction of public consumption in 2013 will most probably be larger than in 2012.**

The reduction of public expenditure has also had an impact on **public investment**. The financing of the Public Investment Programme (PIP) is planned to reach €6.85 billion in 2013, exactly equal to the payments for 2012 that were revised down in the 2013 Budget (from €7.3 billion initially). Nevertheless, taking into account the significant under-execution of PIP in the first 11 months of 2012, which did not exceed €3.6 billion (52.9% of the revised target) and the fact that it is used to balance deviations in the other elements of the State Budget, just as in 2010-2011, it is estimated that the PIP expenditure in 2012 was quite lower from the target, while shortfall, albeit to a lesser extent, will also be observed in 2013. The increase of PIP expenditure in 2013 will come from the fact that the fourth planning period (2007-2013) is approaching its end, therefore the absorption of the allocated community funding becomes urgent in this time period, and from increased use of the increased EU share in the co-financed projects, which, given the fact that the PIP revenues that mostly come from the Structural Funds are significantly short of their 2012 targets (at 63% in the first eleven months), is estimated to have had a limited impact in 2012.

The restart of the funding of the five large road projects is expected also to boost the contribution of the public sector to the recovery of investment. The favourable interventions of the state in the domestic investment environment in the new year also include the activity of the Hellenic Republic Asset Development

Fund, which however will bear fruit mostly in its last quarter, according to the schedule in the 2013 Budget, while its positive impact will manifest itself from 2014 onwards.

Regarding the overall **domestic investment environment**, the anticipation of the finalisation of the measures for 2013-2014, which also concerned major factors for the entrepreneurial activity (profit tax rates, compensations) and subsequently of the assurance of the sustainability of the public debt and the financing of the Greek state, as already discussed, remained its key driver in the last quarter of 2012. The completion of the relevant processes and actions in mid December allowed for the continuation of the recapitalisation of the Greek banks with the first part of the due tranche of the loan by EFSF, and the readmission of bonds of the Hellenic Republic by the European Central Bank as collateral for providing liquidity to their holders, at a much lower borrowing rate than that of Bank of Greece's Emergency Liquidity Assistance (2% against 4%). These developments, combined with the forthcoming mergers and acquisitions in the banking sectors will facilitate the recovery of the banks' capital adequacy and the gradual boost of their ability to provide liquidity to the enterprises and the individuals, however the positive impact of these processes on the Greek economy is expected to transpire after mid 2013. Hence, in the past quarter from October to December, the investment expenditure continued to fall sharply, with a likely slowdown from the accumulation of inventories that is traditionally

observed at the end of each year. As a result, **the contraction of investment in 2012 is estimated to have reached around 27%.**

Despite the fact that the fiscal measures and the state of the banking system in Greece are expected to improve notably in 2013, boosting the credibility of the Greek economy, which in turn would allow for improvement of the investment environment, while the role of the public sector in the investment activity will strengthen, the further strong fall of demand, mostly domestic, but also in markets from which a significant part of the international demand for Greek products and services comes from (Eurozone), is expected to restrain the implementation of investment plans in 2013. The extraordinarily low demand and its impact on production and the propensity to invest are reflected in the low utilisation rate of the production capacity in industry, which, according to IOBE's Business Surveys, has remained at very low levels, around 65%, close to its historic minimum. As a result, investment will continue to contract in 2013 for a sixth year in a row.

Of course, the positive facts and the developments that were presented above will moderate the fall of investment expenditure. In addition, the weakening of demand from traditional export destinations for domestic products and services will be offset in part by increasing exports to rapidly developing Asian economies and perhaps to Russia and North America, as analysed in the external sector's trends further down. The implementation of adopted political decisions

to facilitate new entrepreneurship and investment (e.g. simplification of the licensing of companies, law for the improvement of the business environment) and mainly the implementation of reforms that are included in the second economic adjustment programme for the promotion of investment projects that were delayed due to the negotiations and the elections, will also contribute to the facilitation of mature investment projects and the encouragement of nascent investment initiatives. Under the joint influence of these favourable factors in the last quarter of 2013, a small increase of investment cannot be ruled out. Nevertheless, **the multitude of counter-acting forces that act on the investment field will result in a fall of investment at a single digit rate in 2013, around 7-9%.**

Regarding the economy's external sector, the cause of the significant improvement of its balance in the first three quarters of 2012 – the rapidly falling demand for imports, as exports fell overall in this period – continued to have a very favourable impact until the end of the year. The continuous downward trend of imports in 2013, at a lower speed than in the previous year, will lead to a new improvement of the balance in the current year.

In greater detail, the weakening of the demand for imports, mainly for products, due to the contraction of income, will intensify from late 2012 and in the first half of 2013, due to the negative impact of the increase of the excise duty on the heating oil's demand, as already noted in the previous quarterly report of IOBE.

The high taxation has shifted the demand to alternative heating sources, limiting in such a way the imports of oil, which is reflected in the balance of payments data for October (-4.0% against +27.9% a year before). In addition, the investment slump has a negative impact on the import of machinery and equipment. **Under the influence of these restrictive factors, imports fell in 2012 by about 19%.** Further contraction of individual income and the economic results of the enterprises in 2013, combined with a weaker growth of unemployment and the higher excise duty on heating oil, will result in weakening of the demand for imports in the current year to a marginally double-digit rate.

The sharp slowdown of the Eurozone economies, which absorb large part of Greece's exports (more than 41%), in early 2012 that developed into a mild recession in the remainder of the year, constituted the key cause for the fall of exports since the second quarter of the year. The likely small deepening of the GDP contraction towards the end of 2012 has most likely led to a slightly sharper reduction of exports during this period. The simultaneous expansion of exports to the USA, the countries of the Commonwealth of Independent States and South-East Asia, has moderated the reduction, but has not been sufficient to overturn it. **As a result, the exports are expected to fall by 2.4% in 2012. Nevertheless, the vertical drops of imports has resulted in a significant reduction of the external sector's deficit in national accounting terms to about 1.8% of GDP in**

2012, from 7.0% in the previous year.

The continuation of the recession in the Eurozone will exert further contractionary pressure on Greek exports, mainly of products, in 2013 as well. The stability of the world economy's growth does not portend particularly positive developments in the current year in the export destinations that increased their share since the previous year (USA, CIS, S.E. Asia). A small boost of exports might come from tourist flows, where preliminary indicators show year-on-year growth. In any case, the further significant reduction of imports in the new year is expected to lead to **external sector surplus in 2013, for the first time in recent history.**

Summarising the estimates on the evolution of key GDP components, private consumption has maintained a steeply negative trend in the last quarter of 2012, as in the previous two quarters, for almost the same reasons (unemployment growth, fiscal measures, changes in the labour market), while the reduction of public consumption expenditure strengthened in order to achieve the fiscal targets. Meanwhile, the delay of the receipt of the loan tranche from the troika did not lead to liquidity problems for the state apparatus. The prolonged negotiations for the fiscal planning in 2013-2014, the subsequent consultations between the EU and the IMF over the terms to continue the financing of Greece and the start of their implementation (repurchase of state bonds) that was completed in mid December, kept the investment climate in the last quarter

of 2012, as in the preceding quarters, besieged by caution about the forthcoming politico-economic developments, in Greece and abroad. Nevertheless, the extraordinarily weakened domestic demand during this quarter magnified the contraction of imports, maintaining the external sector deficit to a level much lower than in 2011. **Taking into account these trends in the GDP components in the final quarter of 2012 and their course during the first nine months of the year, which was presented in the beginning of this section, IOBE's estimate on the intensity of the Greek economy's contraction overall for the year that passed has remained unchanged from its previous quarterly report at 6.6%, i.e. slightly weaker than in 2011 (-7.1%).** This estimate is similar to that of the Ministry of Finance in the introductory report of the 2013 budget (-6.5%) and less favourable compared with the latest forecasts by OECD and the EC (-6.3% and -6.0% respectively, Table 3.2 and 3.3).

In **2013**, the private sector consumption will receive further strong pressures, of similar extent as in the previous year, mainly from a reduction of income due to the new fiscal measures and from further growth of unemployment. The achievement of fiscal consolidation primarily through reduction of public expenditure implies further cuts of the public sector consumption expenses, at about the same rate as in 2012.

On the other hand, the completion of the negotiations with the troika, the recent

actions at Eurozone level for securing the sustainability of Greek public debt and the restart of the financing of the Greek state, which allow for the completion of the recapitalisation of the banks and the acceptance of Greek bonds by the ECB as collateral for the provision of liquidity, imply that key parameters of the investment climate would improve, as previously discussed. The implementation of the structural reforms, delayed for long time periods in 2012, due to the domestic political developments and the negotiations with the troika, will also contribute to this in the new year. Despite the improvement of the conditions at the fiscal area and in the banking system, together with the improvements of the regulatory framework, the weakening of domestic demand and the subdued global demand will keep investment falling for one more year, yet at a clearly weaker rate than in the previous year. Nevertheless, their small increase in the last quarter of 2013 cannot be ruled out. The balance of the external sector of the economy will improve further, mainly due to the fall of imports, yet a contribution of exports is also likely, resulting in transformation of its impact on GDP from negative to positive. **As a result of the dynamic of the key GDP components in 2013, the contraction of the Greek economy will ease compared to 2012 to reach 4.6%.** This estimate is slightly more pessimistic compared with the forecasts of other domestic and international organisations (EC: -4.2%, MinFin, OECD: -4.5%).

Table 3.2
Domestic Expense & Gross Domestic Product – European Commission Forecasts
(Constant prices, year=2005)

	2011	2012	2013	2014
<i>Annual percentage changes</i>				
Gross Domestic Product	-7,1	-6,0	-4,2	0,6
Private Consumption	-7,7	-7,7	-6,9	-1,6
Public Consumption	-5,2	-6,2	-7,2	-3,1
Gross Fixed Capital Formation	-19,6	-14,4	-3,3	5,7
Exports of Goods and Services	0,3	0,8	2,7	4,8
Imports of goods and services	-7,3	-10,0	-6,0	-0,5
Employment	-5,6	-7,9	-2,1	1,4
Compensation of employees / head	-3,4	-6,8	-6,8	-1,2
Real Unit Cost of Labor	-1,8	-8,6	-4,7	-0,5
Harmonized Index of Consumer Prices	3,1	1,1	-0,8	-0,4
<i>Contribution to real GDP change</i>				
Domestic Demand	-10,1	-9,0	-6,7	-0,8
Net Exports	2,4	3,3	2,5	1,5
House Inventories	0,6	-0,3	0,0	-0,0
<i>GDP percentage</i>				
General Government Balance	-9,4	-6,8	-5,5	-4,6
Current Account Balance	-11,7	-8,3	-6,3	-5,2
General Government Debt	170,6	176,7	188,4	188,9
<i>Percentage</i>				
Unemployment (% of civilian labor force)	17,7	23,6	24,0	22,2

Source: European Economic Forecast, Autumn 2012, European Commission, November 2012

Table 3.3
Comparison of forecasts on selected Economic Indices for years 2011-2014
(Constant 2005 market prices, annual % changes and levels)

	MFIN			EU			OECD			IMF		
	2012	2013	2014	2012	2013	2014	2012	2013	2014	2011	2012	2013
GDP	-6,5	-4,5	0,2	-6,0	-4,2	0,6	-6,3	-4,5	-1,3	-6,9	-6,0	-4,0
Final Demand	:	:	:	-7,0	-4,6	0,4	-9,2	-6,2	-3,9	:	:	:
Private Consumption	-7,7	-7,0	-1,6	-7,7	-6,9	-1,6	-8,1	-5,4	-4,3	-7,2 ¹	-5,7	-1,1
Harmonized Index of Consumer Prices (%)	1,1	-0,8	-0,4	1,1	-0,8	-0,4	1,0	-0,2	-0,8	3,3	0,9	-1,1
Gross Fixed Capital Formation	:	:	:	-14,4	-3,3	5,7	-18,0	-9,5	-1,2	-17,0 ¹	-6,6	5,8
Unemployment (%)	22,4	22,8	21,4	23,6	24,0	22,2	23,6	26,7	27,2	17,3	23,8	25,4
General Government Balance (% GDP)	-6,6	-5,2	-3,8	-6,8	-5,5	-4,6	-6,9	-5,6	-4,6	-9,1 ²	-7,5	-4,7
Current Account Balance (% of GDP)	:	:	:	-8,3	-6,3	-5,2	-5,5	-4,6	-2,3	-9,8	-5,8	-2,9
Gross Public Debt (% of GDP)	175,6	189,1	189,1	176,7	188,4	188,9	176,7	188,6	195,2	165,4 ²	170,7	181,8

¹ Data taken from Greece, Request for Extended Arrangement under the Extended Fund Facility, IMF, March 2012

² Fiscal Monitor, IMF, October 2012

Sources: Medium term Fiscal Strategy Framework 2013-2016 and Draft Budget 2012, Ministry of Finance, November 2012– European Economic Forecast, Autumn 2012. European Commission, November 2012 - OECD Economic Outlook No. 92, November 2012 – World Economic Outlook, IMF, October 2012

The extensive reduction of demand, both in the public and the private sector, in the final quarter of the previous year is expected to have worsened the conditions in **the labour market** for one more quarter. On the other hand, as the scope of negotiations of the troika during this period included certain changes in parameters of the business environment, including labour issues (tax system for companies, size of layoff compensation), it seems that many of the enterprises were waiting for the finalisation of the relevant regulations in order to make their final decisions, including those concerning their manpower. Hence, a boost of unemployment in late 2012 is quite likely, yet at a weaker rate than in the third quarter, where the growth was unprecedented for a summer period, during which employment has been benefiting from seasonal factors. **Subsequently, the estimate for unemployment for 2012 overall is upped to 24.5%, 6.8 percentage points above its 2011 level (17.7%).** The persistence of the recession of the Greek economy in 2013 will inevitably harm employment too. Nevertheless, the expected weaker GDP contraction and the wider adoption of the structural reforms in the labour market that were included in the second economic adjustment programme will slow down its growth. As a result, **unemployment is expected to reach 27.3% in 2013.**

The weakening of domestic demand in the last quarter, especially of that coming from households for consumption purposes, is reflected in the course of

inflation, as previously discussed: it increased due to the hike of the excise duty of heating oil in October to return to its August rate in November (1%). Given this trend and the fact that in the first eleven months the inflation rate stood at 1.6%, **the forecast for 2012 overall has remained unchanged at 1.5%, from 3.3% on average in 2011.** With the domestic consumption demand largely falling in 2013 as well, for the aforementioned reasons, the disinflation will continue throughout the year. The hike in the excise duty of heating oil, the serial increases in electricity tariffs and the increase in public transport fares in the fourth quarter of this year will counteract this trend, without being able to overturn it. As a result, **inflation is expected to reach around 1.0% in the current year.**

In summary, it is clear from the above that, apart from the fiscal measures, the continuous uncertainty about the fiscal stability of the country, its ability to continue to reform its economy (and not only the public administration) and the policy tools with which to achieve its fiscal consolidation and production restructuring, acted as a significant break to economic activity in 2012. This uncertainty stemmed mainly from the prolonged negotiations with the troika, the politico-economic processes at EU-IMF level over the Greek problem, and the two elections, together with the process of policy synthesis from the unprecedented for the Greek reality three-party coalition government that was formed after the second elections. Nevertheless, past failures regarding the effectiveness

of the fiscal measures in the previous year, the keeping of the schedule of radical structural changes that the Greek economy needs and their actual manifestation, have severed the trust of the economic agents, households and enterprises in the adopted economic and reform policy, hampering significantly their expectations. Therefore, the recovery of the trust in the adopted policies not only internationally, but also in the country, is a critical factor for the improvement of the domestic socio-economic climate and for the encouragement / utilisation of the country's productive forces.

As the fiscal measures in 2013-2014 are by now finalised and in the recently updated second economic adjustment programme there is a reform timetable, emphasis should be given on their implementation, and mostly on that of the delayed structural reforms, in order to achieve a gradual lifting of the uncertainty and the pessimism that dominated domestically in 2012. So, its positive repercussions (on fiscal balance, economy's efficiency) can be extracted and highlighted, boosting the confidence in the adopted policy, but also avoiding the need to take additional measures that most probably will harm economic activity and perhaps will have the opposite of the anticipated impact on the fiscal consolidation effort.

3.2 Developments and outlook in key sectors of the economy

This section presents the quarterly indices of activity compiled by the Hellenic Statistical Authority (ELSTAT), which track the course of production in Indus-

try and the turnover of businesses in the sectors of Construction, Commerce and Services. In addition, it presents the corresponding branch indices compiled by IOBE on the basis of the business surveys it has been conducting in Greece since 1981.

Industry

Industrial production in Greece continued to contract during the first ten months of 2012, at the rate of 3.8%, compared with almost double this rate in the same period of 2011 (7.5%). The contraction of the index, which had started in 2008, is thus slowing down. On the other hand, the increase of industrial production that had occurred in the first nine months of 2011 in the Eurozone (5.0% year-on-year) was overturned in 2012, with the relevant index falling by 2.8% year-on-year. In particular, the industrial production increased in two of the three months from August to October 2012, which has the latest available data: it increased, for the first time since 2007, by 2.7% in August and by 2.0% in October.

Year-on-year, the indicator fell by 3.5% in the third quarter. At sector level in Greek industry, the largest contraction was observed in Manufacturing, where the indicator fell by 5.3% (from 7.6% in the corresponding period of 2011), followed by the Electricity sector (-1.8% on top of 10.3% contraction in 2011). In contrast, production in Mining-Quarrying increased by 1.8% (0.1% in 2011) and Water Supply (1.3% against contraction exceeding 2.0% in 2011).

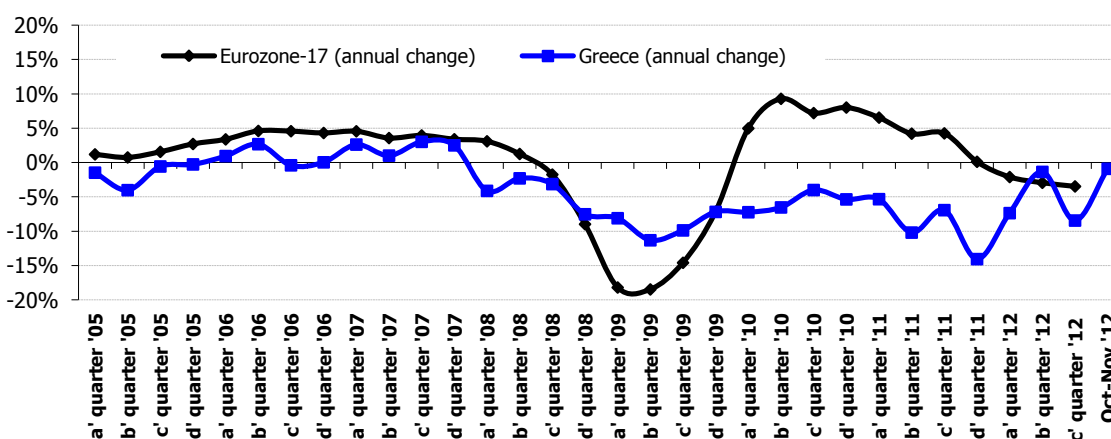
Among the constituent branches of Mining-Quarrying, growth was observed only in Mining of Coal & Lignite, by 9.7%, more than double the 2011 rate (4.8%). In contrast, production in Mining of Metal Ores fell by 12.3% (compared with significant growth by 22.9% in the corresponding period of 2011), but also in Other Mining and Quarrying, where production fell by 12.1% in the aftermath of a similar reduction by 13.4% in the previous year.

The limited demand is exerting pressures on production in 23 of the 24 Manufacturing branches in the first ten months of 2012. Still, its impact on the constituent

branches draws a mixed picture, as in some of them the contraction accelerated year-on-year, while in others it weakened. In more detail, among the major manufacturing branches of the Greek economy, the production of Basic Metals fell by 5.7% (from +6.8% in the corresponding period of the previous year), while a similar contraction was also observed in Basic Pharmaceutical Products, where the indicator fell by 5.3% (against a marginal drop by 0.4% in 2011). The production of Food Products fell by 4.2%, stronger than in 2011 (-0.5%).

Figure 3.1

Production Index in Manufacturing, Greece and Euro Area-17,
% change w.r.t. the same quarter of the previous year (2005=100)



Source: ELSTAT – Eurostat

Among the remaining branches, the largest contraction was observed in Leather Products (-35.6% from -15.3% in the first ten months of 2011), followed by Other Transport Equipment (-31.5% from -30.6% in 2011) and Furniture (contraction by 30.5% from 19.9%). Printing – Reproduction of Recorded Media came next (-23.0%, almost the same as in 2011, -23.7%) and Machinery –

Equipment (-21.8% against a marginal decline by 0.3%). The production of Textiles contracted by 19.0%, slightly weaker than in the same period of 2011 (-21.8%). The contraction continued in Non-Metallic Minerals, yet at significantly weaker rate than in the preceding year (-18.9% against -34.0%), while significantly stronger was the contraction in Chemicals (-12.8% against -2.5%). Next in the contraction ranking for the first ten

months of 2012 came Wood Products (decline by 12.0% against +23.8% in 2011), Beverages (-10.6% from -6.8%) and Motor Vehicles (-10.4% against -7.3% in 2011). In contrast Coke – Refined Petroleum Products was the only sector where production increased in the examined time period by 20.8% (compared with a contraction exceeding 14.8% in the corresponding period of 2011).

In general, the sectors connected with durable consumer goods contracted anew, by more than 18.9% (from a milder reduction by 15.2% in 2011), reflecting both the reduction of consumer household income and the overall pessimism. Capital goods fell by thrice their

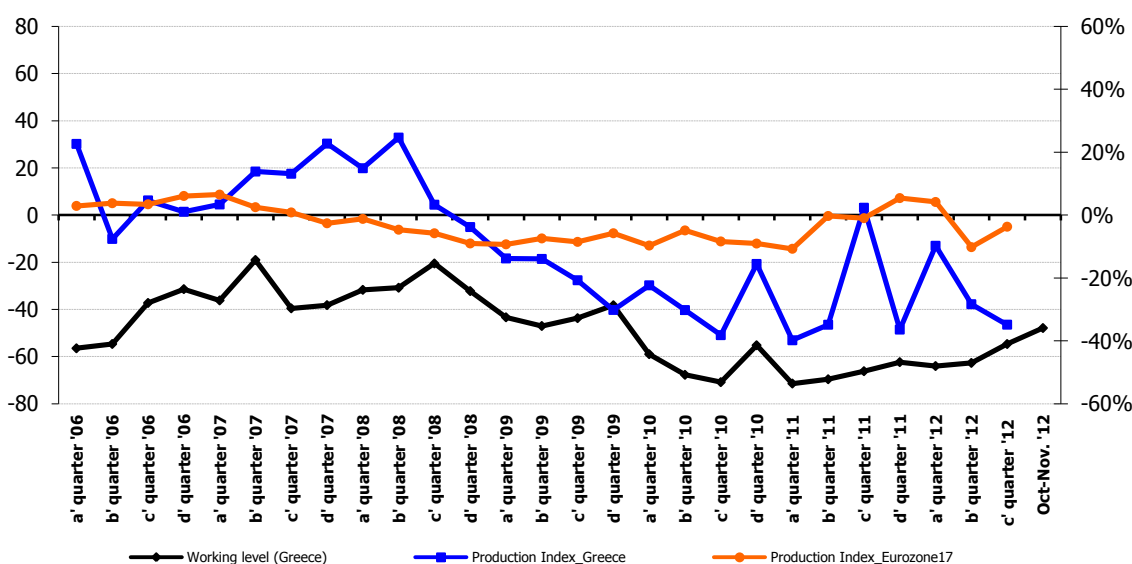
2011 rate (-16.5% against -4.8%), due to the vertical drop of investment, while in contrast growth of production by 5.3% was observed in the energy branches (against reduction by 9.4% in the previous year).

Construction

The production index in Construction contracted significantly year-on-year during the third quarter of 2012. In particular, it fell by 35.3%, while in the third quarter of 2011 the indicator was increasing slightly by 3.0%. It was the worst third quarter for Construction at least since 2005, as the indicator reached its lowest level on record for this particular period of the year (41.35 units).

Figure 3.2

Construction Production Index (annual % changes) in Greece and the Euro area-17
Business Level Index in Greece (1996-2006=100)



Source: ELSTAT – Eurostat

Regarding the sector's constituent indicators, the number of building permits fell by 31.9% in the first ten months of the year (against 28.1% in 2011). At a regional level, the largest reduction was

recorded in Attica (-42.1%), followed by the Ionian Islands (-32.9%), Central Greece (-26.8%), East Macedonia and Thrace (-25.6%), Western Greece (-22.9%), Thessaly (-20.7%), Central

Macedonia (-20.2%, North Aegean (-17.8%), West Macedonia (-17.4%) and Crete (-14.7%). Single-digit contraction was recorded only in Peloponnese (-4.6%) and Epirus (-4.0%). In contrast, a mild increase, which did not exceed 5.4%, was observed in South Aegean.

A similar trend was observed in both the Building Volume and the Surface of New-Built Property indicators, which fell by 20.2% and 19.4% respectively. Regarding the financing of building activities, according to the latest data published by Bank of Greece (December 2012), the interest rates of mortgage loans with duration of more than 5 years reached 3.24%, falling slightly from the previous period. Despite the fact that the average price of residences fell by 10.5% (year-on-year on average for the third quarter of 2012), the intention to purchase real estate has remained subdued as a result of the new tax framework that has made the ownership of property less attractive.

Retail Trade

The recession and in general the economic crisis has reflected notably on the retail trade indicators. In particular, the Volume Index in Retail Trade fell by 11.6% in the aftermath of a 10.1% contraction in the same period of the previous year. Indicative of the sector's dismal state is the fact that turnover decreased significantly in all its constituent branches, without a single exception. In greater detail, the largest reduction during the first nine months of 2012 was observed in Clothing-Footwear (-20.8% against -15.8% in 2011), while the index also fell significantly in Furniture-

Household Appliances (-17.1% against +2.2% in 2011). Significant reduction of demand was recorded in Food-Beverages-Tobacco by 14.9% in the wake of an extensive contraction in 2011 by 12.4%. Meanwhile, the contraction persisted in Automotive Fuels & Lubricants by 14.3%, following a reduction by 13.8% in the corresponding period of 2011. Milder reduction was observed in Supermarkets (-6.7% against -3.8% in 2011) and Department Stores (-5.3% against 3.2% in 2011).

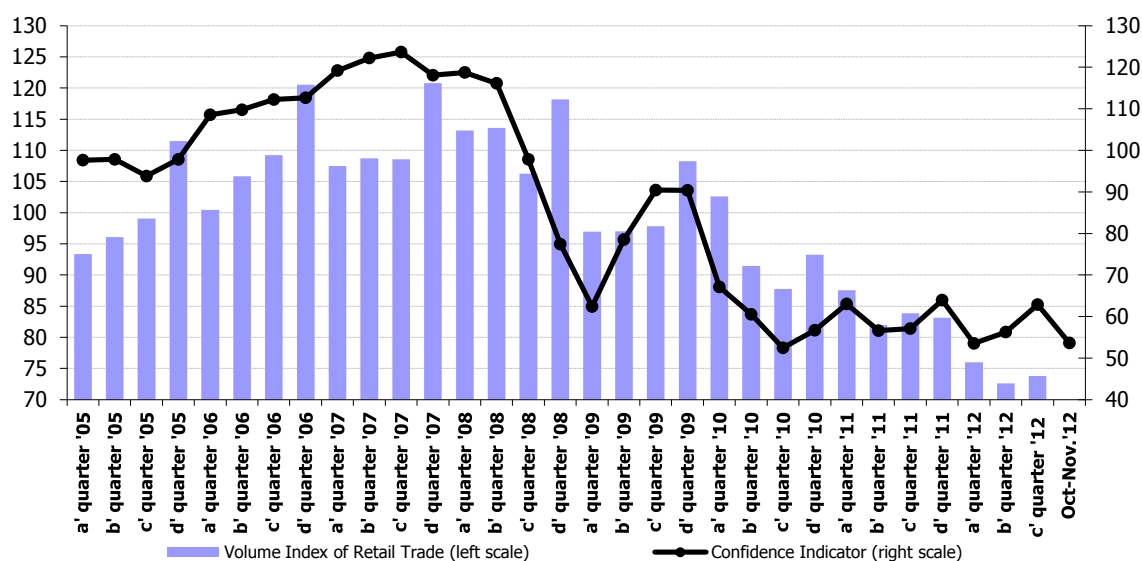
The Retail Trade contraction was reflected in the leading indicators of the **Business Surveys** compiled by IOBE. In Retail Trade overall, the pessimistic sentiment strengthened, as the indicator fell in the first eleven months of 2012 at a faster rate than in the previous year (-4.2% against -0.2%). In particular, in the constituent categories pessimism for the first time in the past three years was observed in Food and Beverages (-10.6% from +4.7% in the previous year). In Department Stores, the pessimism weakened year-on-year, yet it remained high (-12.7% against -36.8% in 2011). In contrast, the expectations in Clothing-Footwear and Household Appliances improved, with the increase in the latter reaching 26%. In Motor Vehicles – Spare Parts the indicator increased in November and December by 20% year-on-year, despite the fact that including October as well results in an increase by 7% overall. In particular, the indicator reached 71.3 in December, from 57.7 in 2011 and 43.7 in 2010, while in the last quarter the indicator reached 66.7 on average from 62.3 in 2011. This im-

provement was due to less pessimistic estimates of the enterprises on their sales in the coming three months and in reduction of their inventories. It should again be mentioned that the market seems to have adjusted to the low levels of economic activity and as a result the assessment and the forecasts on the car sales are "weighted" with the new market conditions (i.e. drastic reduction of income, increase of taxation and explosive increase of uncertainty). As a result, the assessment on current sales in the final quarter remained negative, at about -60 on average, higher compared with the first three quarters of 2012. The indicator on sales expectation over the next three months improved somewhat to -37 on average, from -42 in the last quarter of 2011. A similar trend was recorded in the balance of employment expectations, which marginally improved year-on-year from -65 to -67, while in contrast the expectations on orders slightly deteriorated to -56 from -54 in 2011.

Regarding the official sales data, the sales of passenger cars in 2012 stood at 58 thousand vehicles, from 97 thousand in 2011, a drop by 40.2% against a contraction by 31% in 2011 and 35.8% in 2010. Cumulatively since the beginning of the crisis in 2008, the sales of passenger cars have fallen by 209 thousand, which translated to an annual base implies a fall of sales by 550 thousand in the past 4 years, again compared with 2008. This drastic contraction has caused a significant increase of the unemployment in the sector, with the closure of outlets, while in terms of tax revenues significant losses were recorded in the income from the registration levy, the road tax and VAT. The "cash for clunkers" programme is estimated to have served as a barrier for further adverse developments, while its continuation in 2013 could produce better results, provided that the economic climate is normalised and the rapid contraction is overturned.

Figure 3.3

Volume Index in Retail Trade (turnover in constant prices, 2005=100) and Business Expectations Index in Retail Trade (1996-2006=100)



Source: IOBE

Table 3.4

Annual Changes in the Index of Retail Trade Volume, January -September

Store Categories of Retail Trade	Volume Index (2005=100)				
	Jan-Sep. 2010	Jan-Sep. 2011	Jan-Sep. 2012	Annual Change (%) '11/'10	Annual Change (%) '12/'11
Overall Index	93,6	84,1	74,7	-10,2%	-11,2%
Overall Index (excluding car fuels and lubricants)	92,0	83,9	74,9	-8,9%	-10,6%
Store Subcategories					
Large Food Stores	101,7	97,8	91,3	-3,8%	-6,6%
Multi stores	98,0	101,2	96,3	3,2%	-4,8%
Car Fuels and Lubricants	81,2	70,0	58,7	-13,8%	-16,1%
Food-Drink-Tobacco	88,7	77,7	65,3	-12,4%	-15,9%
Medicare-Cosmetics	108,0	96,9	86,5	-10,3%	-10,7%
Clothing-Footwear	86,5	72,9	56,5	-15,8%	-22,5%
Furniture – Electric household appliances - Household Goods	89,1	75,5	62,8	-15,3%	-16,7%
Books - Stationery- Other gift items	75,8	74,2	63,0	-2,2%	-15,1%

Source: IOBE

Table 3.5

Business Expectation Indexes in Retail Trade (1996-2006=100)

	Jan-Nov. 2010	Jan-Nov. 2011	Jan-Nov. 2012	Annual Change % '11/'10	Annual Change % '12/'11
Food – Drinks - Tobacco	76,7	80,3	71,8	4,7%	-10,6%
Textile-Clothing - Footwear	69	55,7	57,3	-19,3%	2,9%
Household Equipment	56	48	60,5	-14,3%	26,0%
Vehicles – Spare Parts	42,8	61	59,7	42,5%	-2,1%
Multi stores	88,5	55,9	48,8	-36,8%	-12,7%
Retail Trade Total	59,4	59,3	56,8	-0,2%	-4,2%

Source: IOBE

Wholesale Trade

The deep contraction of the volume of retail trade has had a negative impact on the Turnover Index for Wholesale Trade as well. During the third quarter of 2012 this indicator fell by 8.4% year-on-year, in the wake of a contraction by 9.7% in the preceding year. On the other hand, the contraction eased compared with the preceding quarters, as the index had fallen by 15.3% and 17.4% in the sec-

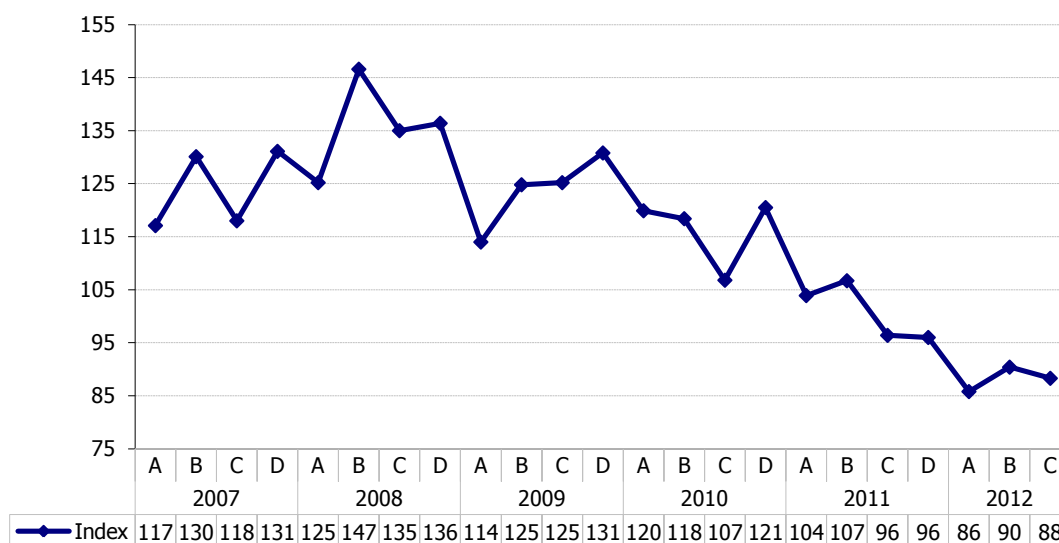
ond and first quarter of 2012 respectively.

Services

The effects of the economic crisis during the first nine months of 2012 are notable in the Services sector as well, where the contraction in the constituent branches intensified, extending the downward trend that had started already since 2009.

Figure 3.4

Turnover Index in Wholesale Trade (2005=100)

**Source:** ELSTAT

In particular, the largest contraction was observed in Other Professional, Scientific and Technical Activities (branch 74), where the index fell by 23.0% (from a contraction by 9.7% in the preceding year). The contraction continued in Advertising and Market Research (branch 73), by 20.1%, as much as in the first nine months of 2011. The contraction of turnover in Publishing Activities (branch 58) continued almost unabated in the first nine months of 2012 compared with the preceding year, as the indicator fell by 19.3% in the wake of a 22.4% contraction one year before.

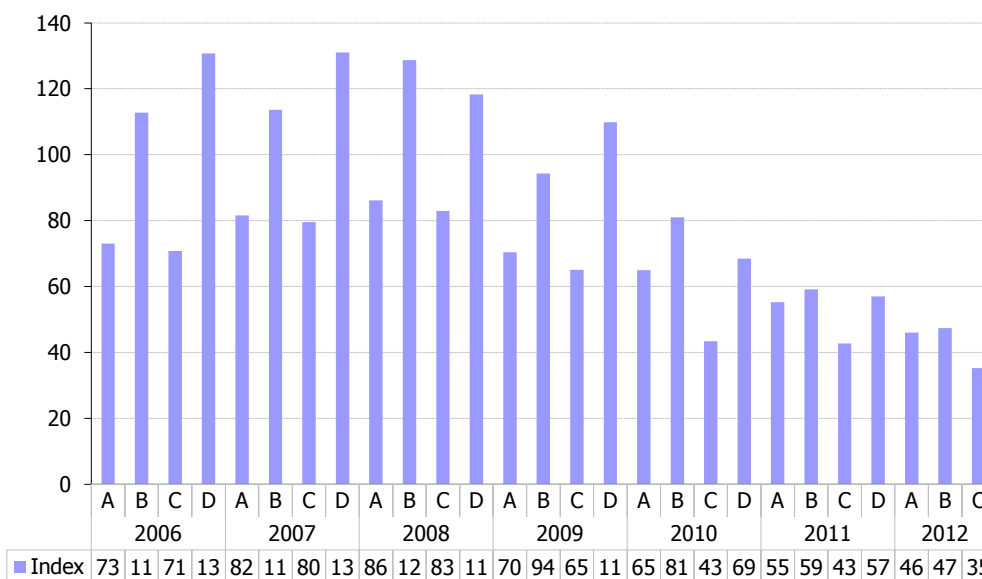
Stronger fall was observed in Information Service Activities (branch 63), which

contracted by 17.6% from -11.3% in the previous year, and in Cleaning Activities (branch 81.2), where the turnover fell by 15.2% (from -10.6% in 2011). In Postal and Courier Services (branch 53) the losses reached 12.9% (from 5.4%).

Milder year-on-year contraction was observed in Architectural and Engineering Activities (-4.9% from -12.7%), Office Support Activities (-4.9% against -12.7%), Security and Investigation Activities (-2.2% compared with almost five times stronger contraction in 2011) and Telecommunications (branch 61), where turnover is only 0.3% lower than in 2011 when it had fallen by 11.6%.

Figure 3.5

Turnover Indicator in Advertising and Market Research- Sector 73 (2005=100)



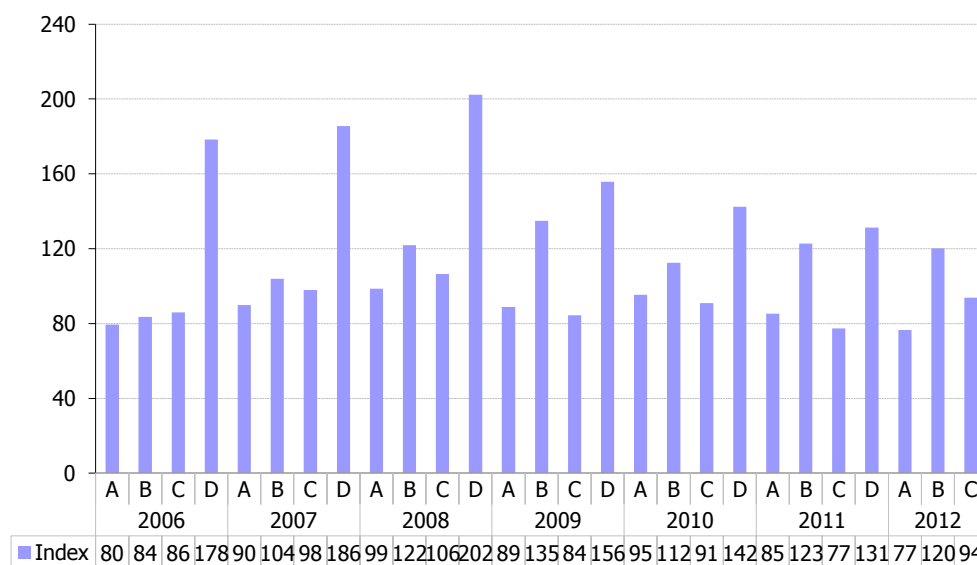
Source: ELSTAT

Lastly, Management Consultancy, Legal and Accounting Activities (branches 69+70.2) modestly commenced a growth trend, at a rate that does not exceed 3.2% (compared with a 3.0% contraction in 2011). The turnover in Tourism

(Hotels and Restaurants), a major sector for the Greek economy, is disappointing. The first nine months of 2012 were the worst for the sector at least since 2005, as the turnover fell by 16.5% year-on-year.

Figure 3.6

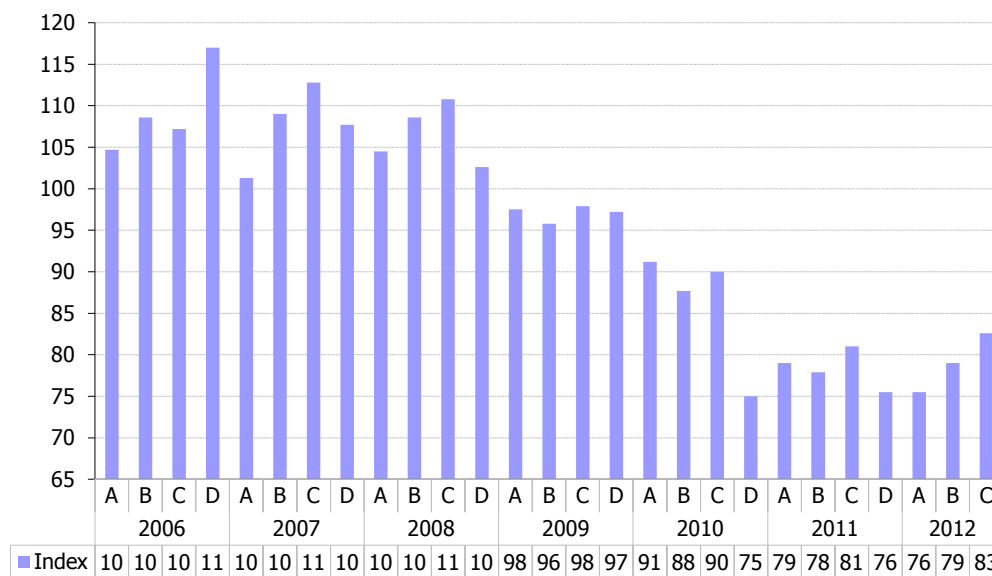
Turnover Indicator in Legal, Accounting and Consulting Services -Sectors 69 & 70.2 (2005=100)



Source: ELSTAT

Figure 3.7

Turnover Index in Telecommunications-Sector 61- (2005=100)



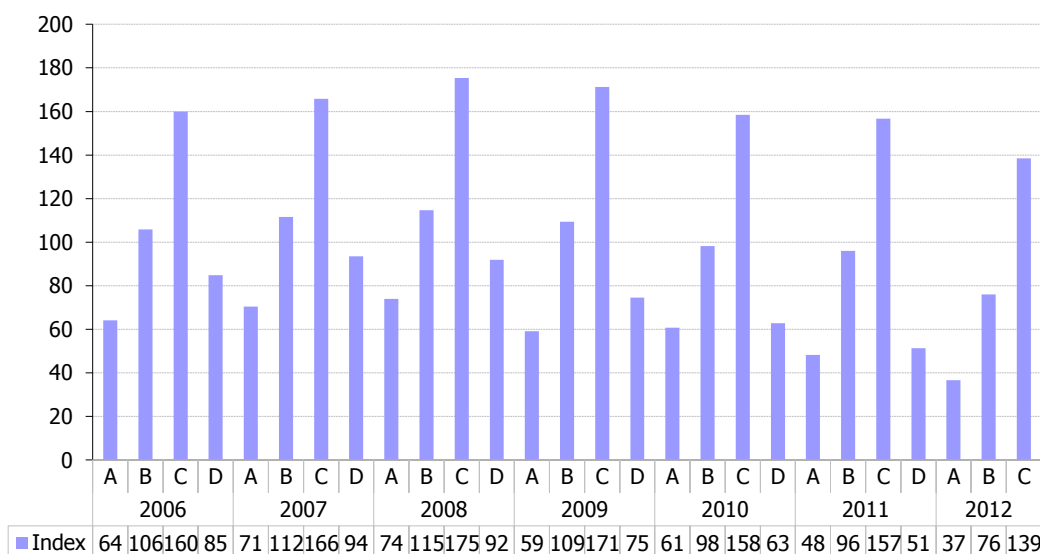
Source: ELSTAT

The business expectations in Services overall deteriorated during the first eleven months of 2012, according to the business surveys compiled by IOBE, with the indicator falling by 12.4%. The pes-

simistic sentiment is more pronounced in the tourism branches (-29.4% against 2.6% growth in the preceding year), banks (-17.5% against -14.5%) and IT services (-8.0% from 5.5% in 2011).

Figure 3.8

Turnover Index in Tourism (Accommodation and Food Service activities) -Sectors 55 & 56- (2005=100)



Source: ELSTAT

Table 3.6

Sectoral Indices of Business Expectations in Services (1998-2006=100)

	Jan. '10- Nov.'10	Jan. '11- Nov.'11	Jan. '12- Nov.'12	Annual Change % '11/'10	Annual Change % '12/'11
Hotels - Restaurants	75,5	77,5	54,7	2,6%	-29,4%
Travel agencies and tour operator, tourist assistance activities	61,9	73,9	69,8	19,4%	-5,5%
Other Services to Businesses	61,8	50	69,1	-19,1%	38,2%
Intermediate Financial Organizations	74,5	64	52,8	-14,1%	-17,5%
Informatics	47,4	50	46	5,5%	-8,0%
Total Services	63,8	62,3	54,7	-2,4%	-12,2%

Source: IOBE

3.3 Export Performance of the Greek Economy

The Greek exports of products in the first nine months of 2012 approached €12.5 billion, increasing year-on-year by 5.3%. In contrast, imports fell by €22.5 billion or 8.7%. Despite the fact that Greek exports reached their highest level in 10 years, the trade deficit stood at €10 billion, with the coverage ratio of the imports by the country's exports standing at around 55%.

The increase in export value in the first nine months of the year came mainly from growth in Agriculture Products and Raw Materials, which were also responsible for a large part of the total value of exports in that period (more than 1/3). The value of exports in these categories increased by €586 million year-on-year, while in the same period of 2011 they had increased by €622 million. In particular, the exports of agricultural products increased by 8.4%, with their value reaching €3.3 billion. This result was largely due to growth in Food-Live Animals by €7.3%, whose value reached €2.6 billion. Significant increase was also

observed in the exports of Beverages-Tobacco by 18.3% year-on-year (+€75 million). Correspondingly, the exports of Raw Materials reached €894 million, raised by 58% and as a result their share in total exports reached 7.2%.

The exports of Industrial Products stood at similar levels year-on-year, increasing marginally by 0.2%, with their value reaching €7.6 billion (about 3/5 of total exports). In particular, the growth in Chemical Products (+2%) and Vehicles – Transport Equipment (+11.6%) was offset by the fall in Industrial goods classified by raw material' (-7%), which have the largest share in this category (2/5).

The value of exports of 'Products and transactions not classified elsewhere' declined by 14.5% year-on-year (to €445 million), while the export value of Fuels more than doubled year-on-year to reach € 186 million.

Regarding destination, the exports of Greek products to the remaining European Union countries fell by 3% (or €165 million) in the first nine months of 2012, with a reduction of the export to the remaining Eurozone member-states as

well, by €180 million (-3.4%). This result came mostly from a fall of exports to Italy, the most significant trading partner of Greece (-9.5%) and Cyprus (-6%), which also absorb a large share of the Greek products, with their value reaching €474 million. Contraction was also recorded in the exports to Germany (-1.6%), whose value reached €1.3 billion. In contrast, exports expanded to the United Kingdom – the 5th largest trading partner of Greece – by 6.6%, with the total export value approaching €612 million.

The exports to Turkey and the USA, the sixth and seventh largest trading partners respectively, grew by 12.1% and 39.5% respectively to reach about €540

million in both destinations. In the Balkan region, the value of exports increased by 4.6%, marginally exceeding €2 billion. In greater detail, exports increased significantly to Bosnia, by about €140 million, and to Serbia (+9.1%), where the export value reached €155 million. In Albania, which is also a major trading partner in the region, the exports increased by 3.6% to reach €269 million. Still, the increase of the exports to these destinations was largely offset by contraction of the exports to Bulgaria and Romania (-3.7% and -7.3% accordingly), the largest trading partners of Greece in the Balkans, with the total value reaching €800 million and €420 million respectively.

Table 3.7

Exports per 1-digit product classification*, current prices (mil. €)

	January - September				
	Value (mil. €)		P.C. (%)	Structure (%)	
	2012	2011	'12/11	2012	2011
Agricultural Products	3.323,2	3.065,0	8,4%	26,7%	25,9%
Food and live animals	2.603,5	2.426,7	7,3%	20,9%	20,5%
Beverages & Tobacco	485,6	410,4	18,3%	3,9%	3,5%
Animal, Vegetable oils and fats	234,1	227,9	2,7%	1,9%	1,9%
Raw Materials	894,2	566,1	58,0%	7,2%	4,8%
Crude materials inedible, except fuels	894,2	566,1	58,0%	7,2%	4,8%
Fuels	185,6	91,0	104,0%	1,5%	0,8%
Minerals, fuels, lubricants, etc.	185,6	91,0	104,0%	1,5%	0,8%
Industrial products	7.598,7	7.581,9	0,2%	61,0%	64,1%
Chemicals and related products	1.798,2	1.763,3	2,0%	14,4%	14,9%
Manufactured goods classified chiefly by raw material	2.899,8	3.119,1	-7,0%	23,3%	26,4%
Machinery and transport equipment	1.711,2	1.533,7	11,6%	13,7%	13,0%
Miscellaneous manufactured articles	1.189,5	1.165,8	2,0%	9,6%	9,9%
Other	445,2	520,8	-14,5%	3,6%	4,4%
Commodities and transactions not classified by category	445,2	520,8	-14,5%	3,6%	4,4%
Total Exports	12.446,9	11.824,7	5,3%	100,0%	100,0%

* Provisional Data

Sources: PEA-ERC-ELSTAT

Table 3.8

Exports per destination, January-September 2011-2012

	Value (mil. €)			Structure	
	2012*	2011*	P.C. (%)	2012	2011
			'12/'11		
OECD (29 countries)	7.028,6	6.991,8	0,5%	56,5%	59,1%
EU-25	6.439,7	6.638,2	-3,0%	51,7%	56,1%
Euro Area-15	5.123,9	5.304,2	-3,4%	41,2%	44,9%
North America	675,5	507,4	33,1%	5,4%	4,3%
Other developed countries	131,5	99,5	32,2%	1,1%	0,8%
Rest OECD (excl. S. Korea)	661,9	595,9	11,1%	5,3%	5,0%
Balkans	2.053,8	1.962,7	4,6%	16,5%	16,6%
Commonwealth of Independent States (CIS)	489,7	391,5	25,1%	3,9%	3,3%
Middle East and N. Africa	992,8	828,2	19,9%	8,0%	7,0%
African Countries (excl. S. Africa)	103,6	104,4	-0,8%	0,8%	0,9%
S.E. Asia	242,1	183,4	32,0%	1,9%	1,6%
Latin America	55,2	32,5	69,8%	0,4%	0,3%
Rest Countries	601,1	481,0	25,0%	4,8%	4,1%
Total	12.446,9	11.824,7	5,3%	100,0%	100,0%

* Provisional Data

Source: ELSTAT - ERC

In North America, the value of exports to Canada fell by €1.4 million (-1.8%), which however was offset by growth in the exports to Mexico by €19 million (+38.7%).

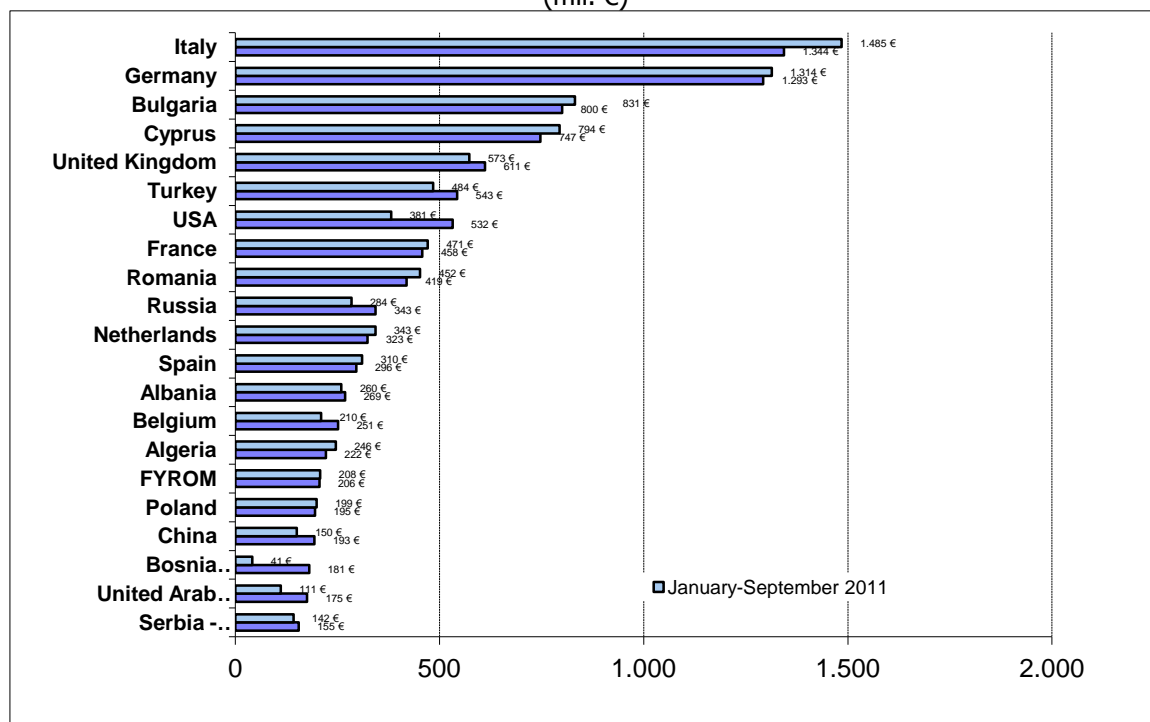
The exports of Greek products to North Africa and the Middle East increased sharply year-on-year to reach €993 million (+20%). The exports to Libya increased significantly (+250%), which most probably reflects economic recovery after the unrest in the country in 2011, to Qatar and to Iraq (+78% and +89% respectively), with the total value of exports in all three countries not exceeding €149 million. Notable growth of exports was also observed in Kuwait (+45%), Bahrain (+59%) and Lebanon (+51%), however these countries have a small share in Greek exports. The largest share of exports among the countries in this region

was held by Algeria, despite their fall by 10% in the first nine months of 2012, and by the United Arab Emirates (+58%), with their total value reaching €221 million and €175 million respectively.

The exports to the countries of the Commonwealth of Independent States increased by €98 million (+25%). This trend is mostly explained with the growth in the exports to Russia (+€60 million or 20%), which take up almost 4/5 of the Greek exports to the specific region. Significant increase was also observed in the exports to Ukraine (+55%) and Moldova (+39%), whose share is rather low though, with their value reaching €83 million and €23 million respectively. Lastly, the exports of Greek products to China continued to grow (+29%), with their value reaching €194 million, yet their share has remained relatively low.

Figure 3.9

Countries with the biggest share on Greek exports (mil. €), January- September 2011 and 2012 (mil. €)



Source: PEA Data Processing; IOBE

In summary, the year-on-year growth of Greek exports by 5.3% in the first nine months of 2012 came mostly from their expansion to North America, North Africa – Middle East and the Balkans. The strengthening of the demand for Greek products in these regions overcompensated for its weakening in the Eurozone and EU-27. The growth of exports is expected to have continued until the end of last year, albeit moderated by the mild strengthening of the recession in the Euro area in that period and by the extreme weather conditions in North America in October. Despite this growth and the significant promotion of Greek products in new markets (CIS, S.E. Asia), the growth rate of exports is expected to decrease slightly in 2013, mainly due to the impact of the debt crisis on demand in the Eurozone member-countries.

3.4 Employment - Unemployment

The unfavourable conditions in the labour market deteriorated further in the third quarter of 2012. According to data from ELSTAT's Labour Force Survey, the unemployment rate during this period reached 24.8%, increasing by 7.1 percentage points year-on-year and by 1.2 percentage points quarter-on-quarter. As a result, **the number of unemployed reached 1.23 million people**, double its number from 2010 and higher by 352.6 thousand (or +40.1%) year-on-year. Accordingly, on average for the first nine month of 2012 unemployment reached 23.7%, from 16.6% in the corresponding period of 2011, while the number of unemployed reached 1.17 million (from 827.2 thousand in the previous year).

In the Euro area the unemployment rate reached 11.2%⁷ (from 9.9% in the previous year). The highest unemployment rate was recorded in Spain (25%), Portugal (16%) and Ireland (15%), even though the unemployment growth rate in these countries was much lower than in Greece. In contrast the developed member-states of the North (Germany, the Netherlands, Austria) achieved unemployment rates below 6%.

The fact that in half of the Euro area member-countries the unemployment rate was below 10%, while in Germany, the Netherlands and Austria it fluctuated around 5% is indicative of the different extent to which the crisis has hit the Eurozone states. As a result of the extraordinarily high unemployment in Greece, for every 1 employee there are 1.2 individuals which are not economically active, while in the Eurozone this rate stands at 1 employee per 0.8 people.

Employment in Greece fell year-on-year by 8.3% in the same quarter and as a result the total number of employed reached 3.74 million, its lowest level in at least 14 years. The percentage drop among foreign nationals (about 1/10 of the employees in the country) reached 19.2%, twice the rate compared with the Greek nationals (-7.3% or 270.1 thousand fewer employees). In the Euro area, employment fell at a much lower rate (-0.7%), with the most significant problems observed in Spain, Portugal and Cyprus (about 4% contraction of employment).

⁷ Average of data that were not seasonally adjusted for July, August and September. The same holds for the figures referring to the Eurozone member-states in the paragraph.

Based on the **employment type**, the share of part-time employment slightly increased year-on-year to reach 7.9%, while in the Eurozone about 1 in 5 employees were working part-time. Hired labour, which covered 63% of total employment in the country fell by 10% (3/4 of the job losses), while among the self-employed the contraction stood at around 5%. Meanwhile, the number of self-employed without additional manpower declined by only 1% (or 8.2 thousand), in contrast with the number of self-employed who had hired employees, which declined significantly by 17% (or 52 thousand). This fact reveals the negative impact of the recession on the very small enterprises, many of which have stopped operating. Significant contraction was also recorded in the number of assistants to family enterprises – the highest share of this type of employment in the Eurozone is observed in Greece – reaching 14% (or 29.9 thousand job losses) year-on-year.

Regarding the characteristics of the labour force, the **unemployment among women** reached 28.9% in the third quarter (almost thrice the Eurozone average), while **among men** it stood at 21.7% (double the Eurozone rate). In absolute terms, unemployment among men reached 618 thousand (+44% year-on-year), against 613 thousand among women (+37%).

Regarding **age**, unemployment seems to be particularly high among those aged 30-44, taking up almost half of the country's total unemployed, having increased by 46% year-on-year. The growth rate is even higher among those aged 45-64 (310 thousand). As a result, 2 out of 3 unemployed

come either from the most productive ages or are approaching their retirement, which impairs their chances to return to the labour market. This explains in part the fact that 64% of the unemployed are out of job for more than 12 months (**long-term unemployed**), whose number has almost reached the total number of unemployed in 2011 (771 thousand). Lastly, unemployment among those **aged below 25** reached the highest rate in the European Union (57% from 45% in the third quarter of 2011), compared with 24% in the Euro area on average.

Unemployment is particularly acute among **individuals with average or lower educational attainment level**. The highest unemployment in the third quarter (41% from 25.1%) was recorded amongst individuals that have not attended school or have not completed primary education (ISCED 1 level). The unemployment rate was also above the overall average (at about 28%) among graduates of technical / professional education (ISCED 5B), while it was at about the same rate as the overall average among those that have completed secondary education (ISCED 3), and those that have completed only primary education (ISCED 2). In contrast, the unemployment rate among university graduates (ISCED 5A) stood at 17.2% (from 13.9% in the previous year), while among holders of postgraduate and doctorate degrees (ISCED 6) it stood at the lowest rate among these categories (12.6% from 9.5% one year previously).

At **regional level**, the unemployment in West Macedonia has doubled in two years to reach 31%, while it was slightly lower in Central Greece (29.6%). The number of

employees in the first region fell by 17% within a year, while the number of unemployed increased by 48% (to 68.5 thousand). In Attica the unemployment rate increased by 8.4 percentage points to reach 26.8%, taking up 2/5 of the country's unemployed. Similar unemployment rate was observed in Central Macedonia, the second most populous region in Greece, where the number of unemployed reached 219 thousand. The unemployment rate was also higher than the country average in Western Greece (27.1%), while in contrast in Thessaly (23.7%), Epirus (23.4%), North Aegean (21.9%), East Macedonia – Thrace and Peloponnese (about 20%) it stood below the country average. In Crete it reached 18%, while in South Aegean and the Ionian Islands it was notably lower (13% and 11% respectively), most probably as a result of the peak of tourist demand during the summer months. In addition, in these regions and in East Macedonia – Thrace unemployment fell quarter-on-quarter. This trend was more pronounced in Crete (reduction of the unemployment rate by 4.5 p.p.), compared with the Ionian Islands and South Aegean (-2.9 and -2 percentage points respectively).

Employment continued to fall in **all three economic sectors**. In the secondary sector, where the problem is more acute, the number of employed once more dropped significantly (-13.8% year-on-year) to reach 624.6 thousand. This contraction came mostly from a similar reduction of employment in Manufacturing and Construction (-15%), resulting in an annual losses of 62 thousand and 37 thousand jobs respectively. The contraction of em-

ployment in the primary sector was weaker (-2.5%), yet it resulted in a fall of the number of employed below the 500 thousand mark. Correspondingly, employment in the tertiary sector fell by 8% (or 227 thousand) to reach 2.62 million.

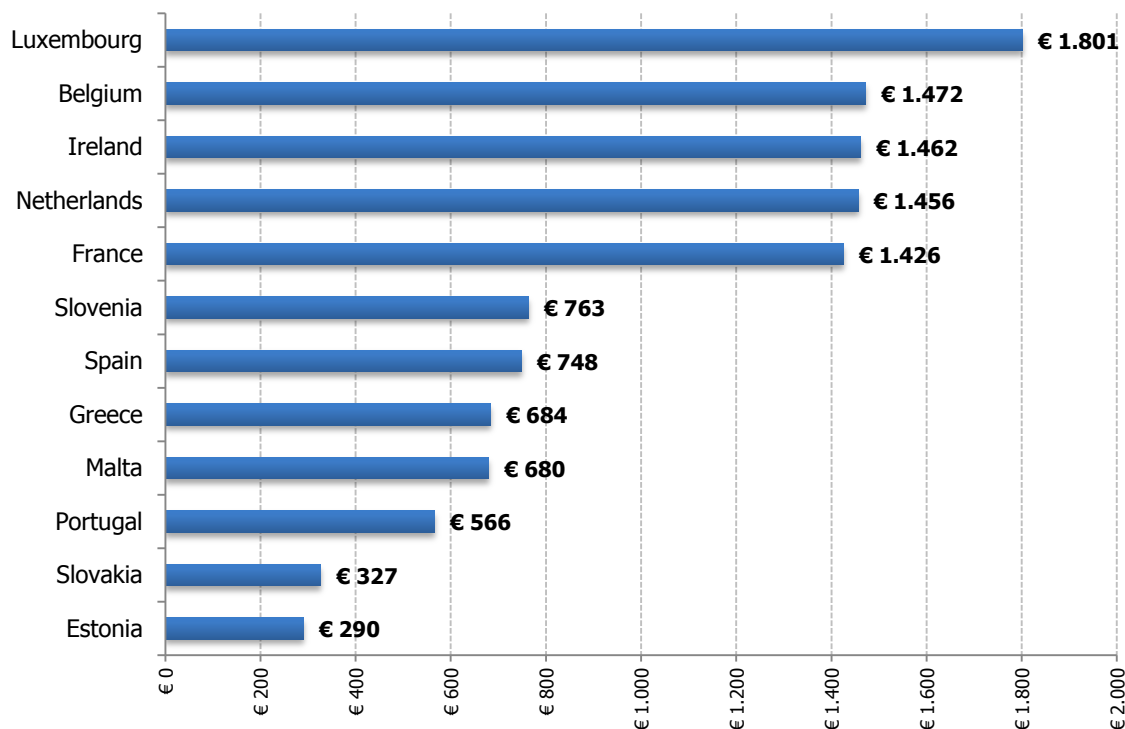
The lower employment in Services was due to contraction in all its major constituent branches. In Trade, the branch with the largest employment in Greece, the number of employed fell by 80.2 thousand (or -11%), while further 91 thousand jobs were lost in Public Administration – Defence – Compulsory Social Security, Accommodation – Food Services, Education and Health Services. In contrast, growth of employment was observed in Professional, Scientific and Technical Activities (+10.4 thousand or +4.9%) and in Supply of Electricity – Natural Gas (+7.5%).

In the third quarter of 2012, the share of employment reached 13.1% in the primary sector (from 12.4% in the same period of 2011), 16.7% in the secondary sector (from 17.8%) and 70.1% in the tertiary sector (from 69.9%).

Based on data from the Manpower Employment Agency, the number of unemployed in the third quarter of 2012 reached 907.5 thousand (784.8 thousand unemployed looking for a job and 122.7 thousand that were unemployed but were not looking for a job). It increased by 18% year-on-year from 771.7 thousand registered unemployed. Overall for the first eleven months of the year, the number of registered unemployed reached 931 thousand on average, having grown by 15% year-on-year (from 809 thousand).

Figure 3.10

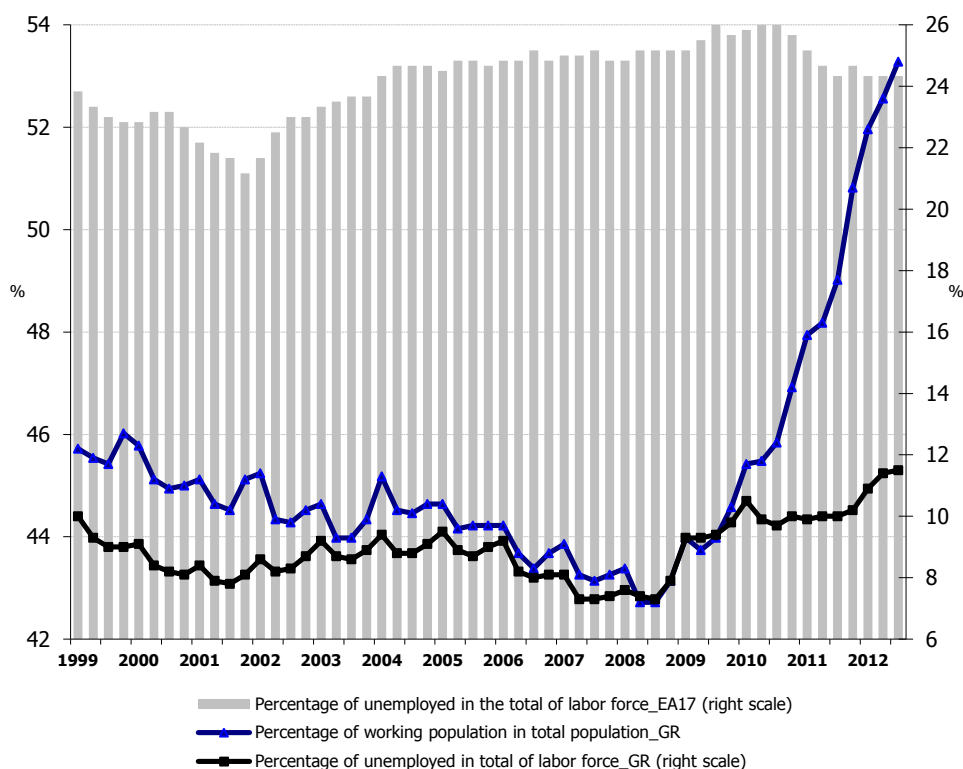
Average minimum wage, EA17, second semester 2012



Source: Eurostat

Figure 3.11

Labour force (% proportion as to population of 15 years old and over) and unemployed (% proportion as to labour force)



Sources: ELSTAT-Labor Force Survey, Eurostat

The minimum wage, according to data from Eurostat, reached €684 on average in the second half of 2012, falling by 22% in a year, as a result of the regulatory interventions in the labour market included in the second economic adjustment programme. It now stands at the 5th lowest level among the Eurozone member-states (Figure 3.10).⁸

In addition, the average monthly salary in Greece in the first nine months of 2012 fell year-on-year by 13%. A similar reduction was observed in Services, while in the primary and secondary sectors the salary contraction reached -7% and -12% respectively.

In summary, the strong contraction of economic activity for one more year in 2012 has reflected on the labour market as well, where employment has fallen sharply and hence unemployment has increased rapidly. These trends most probably carried through to the last quarter of 2012, even strengthening perhaps, as was the case in the last quarter of 2011. As a result, **the unemployment rate for 2012 is estimated to have reached around 24.5% (from 17.7% in 2011).**

The persistent recession of the Greek economy for a sixth year in 2013, with a significant, albeit weaker than in the previous year, intensity will exert further adverse pressures on the labour market.

Nevertheless, the recent fiscal developments, following the 26th November deci-

⁸ No data were available for Germany, Italy, Cyprus, Austria and Finland.

sions for reduction of the Greek debt and the continuation of the EU-IMF financing, have created conditions for gradual weakening of the intensely negative economic climate: the recapitalisation of the banks and the recovery of their access to liquidity from ECB, which is expected to allow for expansion of their credit to businesses from mid 2013, the restart of the infrastructure projects that were interrupted two years ago (e.g. the five large road projects), the implementation of adopted by-laws and recently passed laws to support entrepreneurship and investment (e.g. Law no. 4072/2012 for business-friendly

Greece) whose implementation has not yet commenced, could contribute to the preservation of the existing jobs and mostly to the creation of new jobs, and hence to easing of the unemployment growth trend. Given these economic conditions, **the unemployment rate could increase less in 2013 than in the previous year to reach about 27.3%.**

The steadily unfavourable expectations on the short-term employment prospects in the economy's sectors followed mixed trends, according to data from the Business Surveys conducted by IOBE.

Table 3.9

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

Quarter/Year	Grand Total	Labour Force					
		Total	% of population	Employed	% of labour force	Unemployed	% of labour force
1998	8.680,4	4.525,8	52,1	4.017,9	88,8	507,9	11,2
1999	8.764,5	4.586,1	52,3	4.031,4	87,9	554,7	12,1
2000	8.839,8	4.611,9	52,2	4.088,5	88,6	523,5	11,4
2001	8.906,4	4.580,3	51,4	4.086,3	89,2	493,9	10,8
2002	8.964,3	4.656,0	51,9	4.175,8	89,7	480,2	10,3
2003	9.014,9	4.734,4	52,5	4.274,5	90,3	460,0	9,7
2004	9.063,5	4.818,8	53,2	4.313,2	89,5	505,7	10,5
2005	9.108,1	4.846,5	53,2	4.369,0	90,1	477,5	9,9
2006	9.157,4	4.886,4	53,4	4.452,3	91,1	434,5	8,9
2007	9.207,4	4.916,8	53,4	4.509,9	91,7	406,9	8,3
2008	9.234,1	4.937,3	53,5	4.559,4	92,4	377,9	7,6
2009	9.267,5	4.979,8	53,8	4.508,7	90,6	471,1	9,5
2010	9.306,3	5.017,4	53,9	4.388,6	87,5	628,7	12,5
a' quart. 2011	9.329,4	4.987,0	53,5	4.194,4	84,1	792,6	15,9
b' quart. 2011	9.337,6	4.967,2	53,2	4.156,3	83,7	810,8	16,3
c' quart. 2011	9.346,0	4.957,6	53,0	4.079,3	82,3	878,3	17,7
d' quart. 2011	9.354,5	4.958,7	53,0	3.932,8	79,3	1.025,9	20,7
2012	9.341,9	4.967,6	53,2	4.090,7	82,4	876,9	17,7
a' quart. 2012	9.362,3	4.958,0	53,0	3.837,9	77,4	1.120,1	22,6
b' quart. 2012	9.369,7	4.961,9	53,0	3.793,1	76,4	1.168,8	23,6
a' quart. 2012	9.377,2	4969,9	53,0	3.739,0	75,2	1.230,9	24,8

Source: ELSTAT, Labor Force Survey

In particular:

On average in October and November of 2012, the short-term employment expectations improved slightly compared with the preceding quarter in Construction, remained unchanged in Retail Trade and marginally deteriorated in Industry and Services. Year-on-year, the expectations improved slightly in Industry and more significantly in Construction, while in Retail Trade the negative index doubled, while in Services the expectations did not change notably. In more detail:

In Industry the negative balance of the employment expectations lost 6 points in October-November, compared with the preceding quarter to reach -13. This performance was less adverse, however, compared with the corresponding period of the previous year, when they stood at -28. About 3% of the enterprises in manufacturing were expecting an increase of employment in the coming months (from 4% in the previous quarter), while in contrast 22% of the enterprises (from 17%) were expecting further job losses in their sector in the short term, with the vast majority of the respondents (75%) expecting no change in employment in the short term.

In Construction, the expectations slightly improved again in October-November, both compared with the preceding quarter and year-on-year. In particular, the indicator reached -24, higher by 13 points both quarter-on-quarter and year-on-year. About 2/5 of

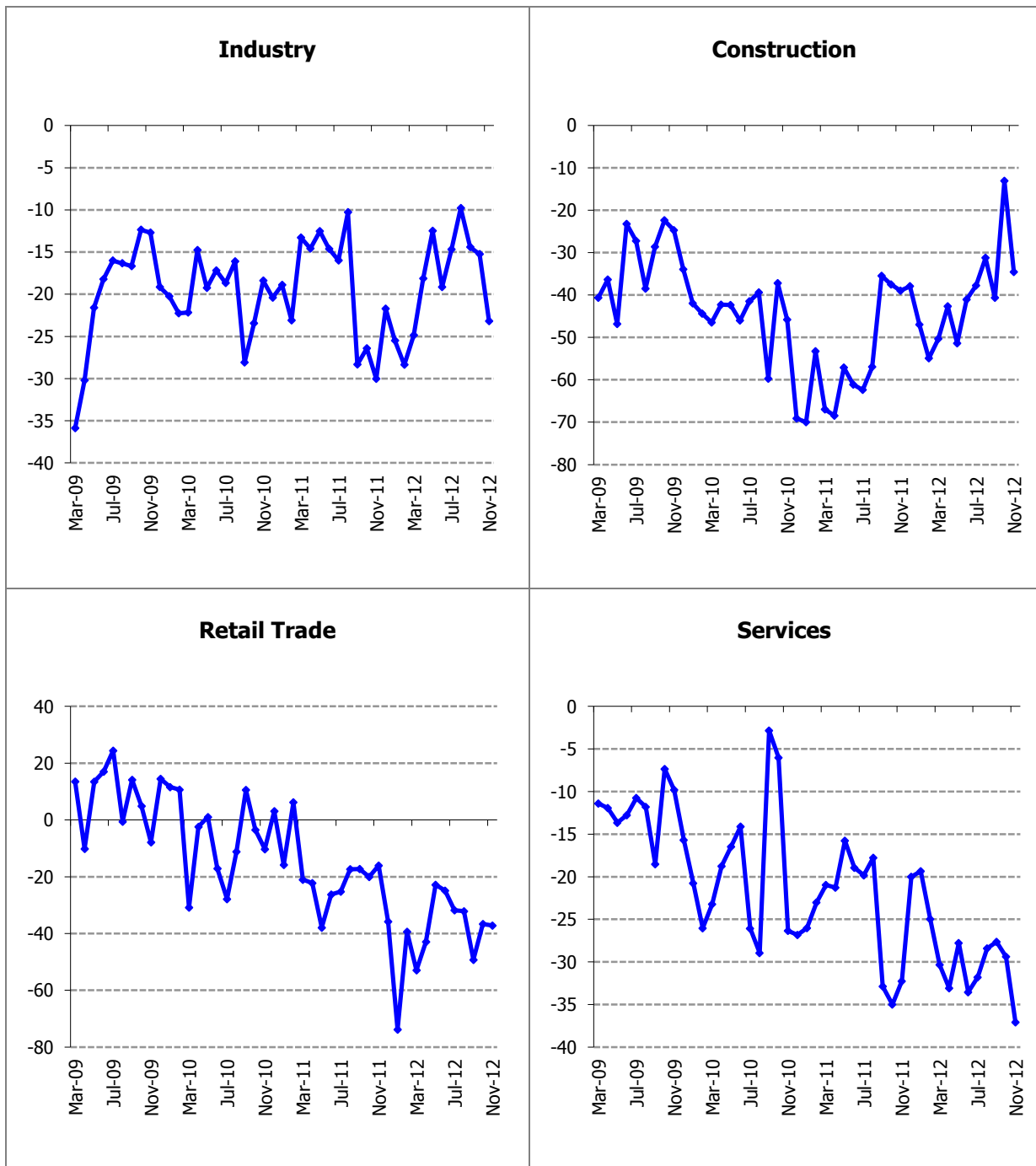
the enterprises in the sector (from 53% in the previous quarter and 45% in the same quarter of the previous year) were expecting fewer jobs in the sector, while in contrast the share of those expecting increase of employment remained at 16%. In both Public Works and Private Building Activity, the indicator increased, remaining low, however, which especially holds for the latter of the two branches (at -15 from -24 and at -47 from -59 respectively).

In Services the negative employment expectations slightly deteriorated in the time period under examination, compared with the preceding quarter. As a result, the index reached -33 (from -29 in the third quarter and -34 in the corresponding period of 2011). Among the enterprises in the sector, 36% were anticipating further drop in employment in the coming months, while the share of enterprises expecting employment growth fell to 3% (from 5%). Regarding the constituent branches of the sector, the employment expectations deteriorated in Hotels – Restaurants and even more so in Travel Agencies, Transport and IT services, while in contrast improvement was observed in Financial Intermediaries and Various Business Activities.

The employment expectations in Retail Trade remained almost unchanged in the period under investigation from their particularly adverse level recorded in the preceding quarter. The balance of expectations marginally increased to -37, doubling year-on-year.

Figure 3.12

Employment Expectations (% difference between positive – negative answers)



Source: IOBE

About 37% of the enterprises in the sector were anticipating further employment contraction, while already since the beginning of the year practically no enterprise has been expecting an increase in the near term. Among the constituent branches, employment expectations deteriorated in Textiles – Clothing – Footwear, Household Appliances and Food – Beverages – Tobacco, while in contrast the indicator improved from very low levels in Vehicles – Spare Parts and Department Stores.

3.5 Consumer Prices

Recent Developments

In November 2012 inflation reached 1.0%, lower both in comparison with October (1.6%) and the corresponding month of 2011 (2.9%). This development came mostly from the large drop in disposable income due to the prolonged recession and from the high unemployment rate. As a result, the inflation rate stood at 1.6% for the first eleven months on average, from 3.4% in the corresponding period of 2011.

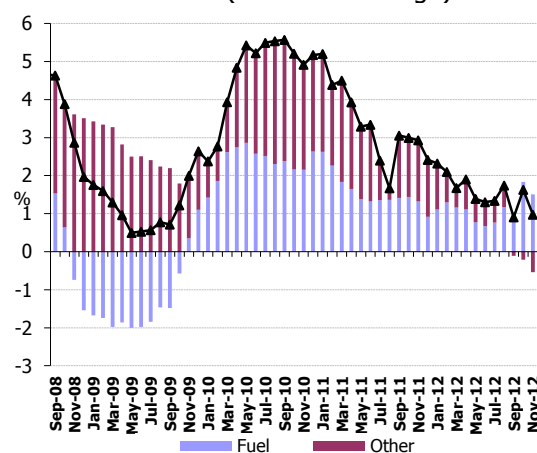
The disinflation can be largely explained with the ease of the inflationary pressures on goods, as the corresponding indicator grew by 2.2% from 4% in the first eleven months of 2011. The prices of services increased by only 0.7%, compared with 2.2% in the previous year. Disinflation was also observed in the price indices for Fuel and Energy, despite the levelling of the excise duty for heating oil and motor diesel in October, which both increased by 12% in the first eleven months of 2012

(from 20% and 18% respectively in the previous year). As a result, the increase of the prices of fuels and heating oil had an adverse impact of 1.5 percentage point, about the same as in the previous year.

Core inflation has been negative for a third month in a row, reaching -0.5% in November, which implies that the prices have been falling in most goods and services, apart from fuel and raw fruits and vegetables that kept the growth of the general price index at positive levels.

Figure 3.13

Contribution of the change of Fuel prices to inflation (annual % change)

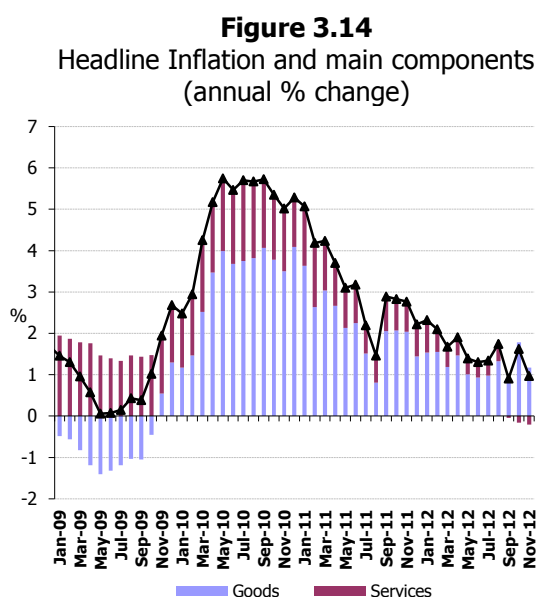


Source: ELSTAT Data Processing: IOBE

As a result, core inflation for the first eleven months of the year stood at 0.4% on average from 1.9% in the previous year.

Persistent deflationary trends were observed in Health, Education, Telecommunications, Entertainment and Durable Goods, where the inflation rate reached -1.5% in the first eleven months, compared with +1.8% in the corresponding period of the previous year.

In contrast, prices continued to increase in Housing (7.6% from 9% in the previous year). Relatively milder inflationary pressures were observed in Food – Non-Alcoholic Beverages, where the average inflation rate stood at 1.7% (from 3% in the previous year), while the inflation rate in Hotels-Restaurants stood at similar levels with those observed in the first eleven months of 2011.

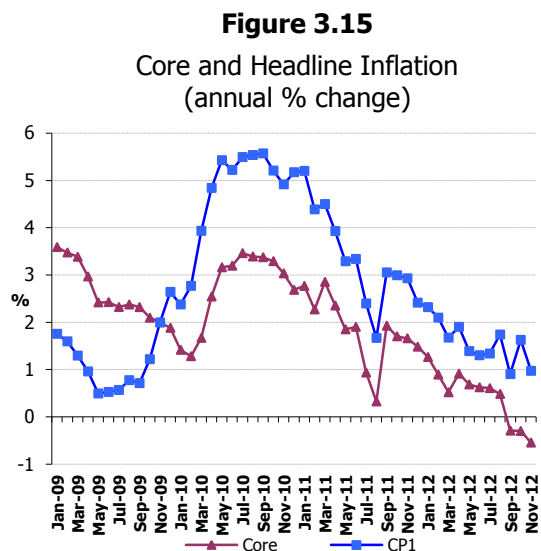


Source: ELSTAT Data Processing: IOBE

On the other hand, strong disinflation was observed in Tobacco – Alcoholic Beverages, where the average inflation rate fell significantly by 7 percentage points year-on-year to drop below 0.9%. In contrast, prices of Clothing – Footwear marginally increased by 0.9%, while in the previous year they were falling by 0.5%.

The inflation rate of the harmonised index (HICP) reached 0.4% in November, below its October level (0.9%), while for the first eleven months of 2012 it stood at 1.1% on average. It is worth noting that for the first eleven months of 2012 Greece re-

corded the lowest inflation rate (1.1%) among the Eurozone member-states (2.5% on average), slightly lower than in Ireland (1.9%).



Source: ELSTAT Data Processing: IOBE

The highest inflation rate was observed in Hungary with 5.7%, followed by Estonia (4.3%), Poland and Slovakia (3.8% in both countries). Lower inflation than the EA-17 average was also observed in Spain (2.4%), Germany (2.2%) and France (2.3%).

In addition, the production cost continued to exert strong inflationary pressure on the formation of the final price of goods and services throughout 2012, as the domestic industry producer price index increased by 5.5% in the first ten months of the year, compared with 7.6% in the corresponding period of the previous year.

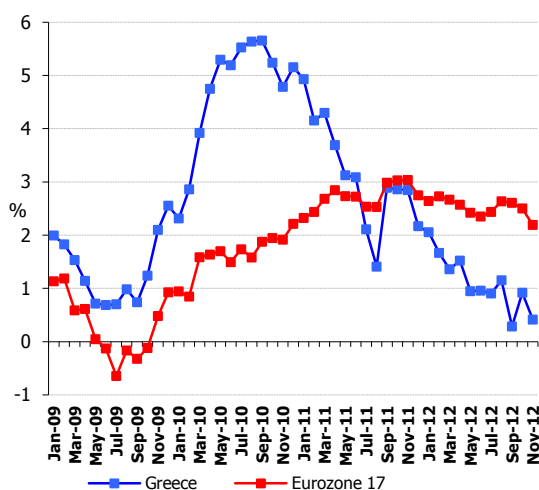
The index grew by more in Greece than the EA-17 average rate (3.3%), with Cyprus topping this ranking with 7.8%.

Regarding the constituent branches, the strongest inflationary pressures were ob-

served in Electricity – Natural Gas with +14%, at about the same rate as in 2011. Next in the ranking were Coke Products with 13% inflation, recording however a significant slowdown compared with the previous year (29%). Growth of the indicator was also observed in Crude Petroleum (9.4%) and Energy Goods (12%), slightly lower than in the same period of the previous year (16% and 35%). Reduction of the indicator was observed in Electrical Equipment (-4% from +12% in the previous year), while smaller deflation was observed in Furniture and Machinery-Equipment (about -1.4%).

Figure 3.16

Harmonized Index of Consumer Prices – Greece & Euro Area-17 (annual % change)



Source: Eurostat, **Data Processing:** IOBE

The course of the prices of imported raw materials also exerted significant inflationary pressures on the prices of goods and services, with the cost of domestic production indicator increasing by 5.4% in the first eleven months of 2012, almost double than the EA-17 average (2.9%). Germany was the country with the largest growth of imported raw material prices (9.4%),

while the lowest and negative change was observed in Slovakia (-2.3%).

Medium-term Outlook

The disinflation is expected to carry through to 2013, due to the significant further weakening of consumption demand from the implementation of the adopted fiscal measures for 2013 and the perseverance of unemployment growth, albeit at a weaker rate than in 2012.

As a result, **it is estimated that Greece has experienced the lowest inflation rate in EA-17 in 2012 (1.5%),** while the average rate for the monetary union most likely stood at around 2.6%. The domestic inflation rate was less than half its 2011 level (3.3%).

The adoption of structural changes and fiscal measures in 2013 will cause a further reduction of disposable income and hence purchasing power, due to the further cuts in public sector wages and pensions, but also due to the abolition of the tax allowance for the income of all individuals. In addition, consumption demand will be hampered by the high and rising unemployment rate. Therefore, inflation will continue to slow down.

In contrast, the higher heating oil prices due to the increased excise duty and the hikes of electricity tariffs will counteract the disinflation trend. These two developments will increase the cost of these products for the households, but also the cost of production for the enterprises. The prices of public transport will also increase in the last quarter of the year. **As a result**

of the above effects on prices, inflation will ease slightly in 2013 to reach about 1.0%.

Important information on the course of prices in the coming period is also provided by IOBE's monthly business surveys, whose results serve as leading indicators of price developments on the supply side.

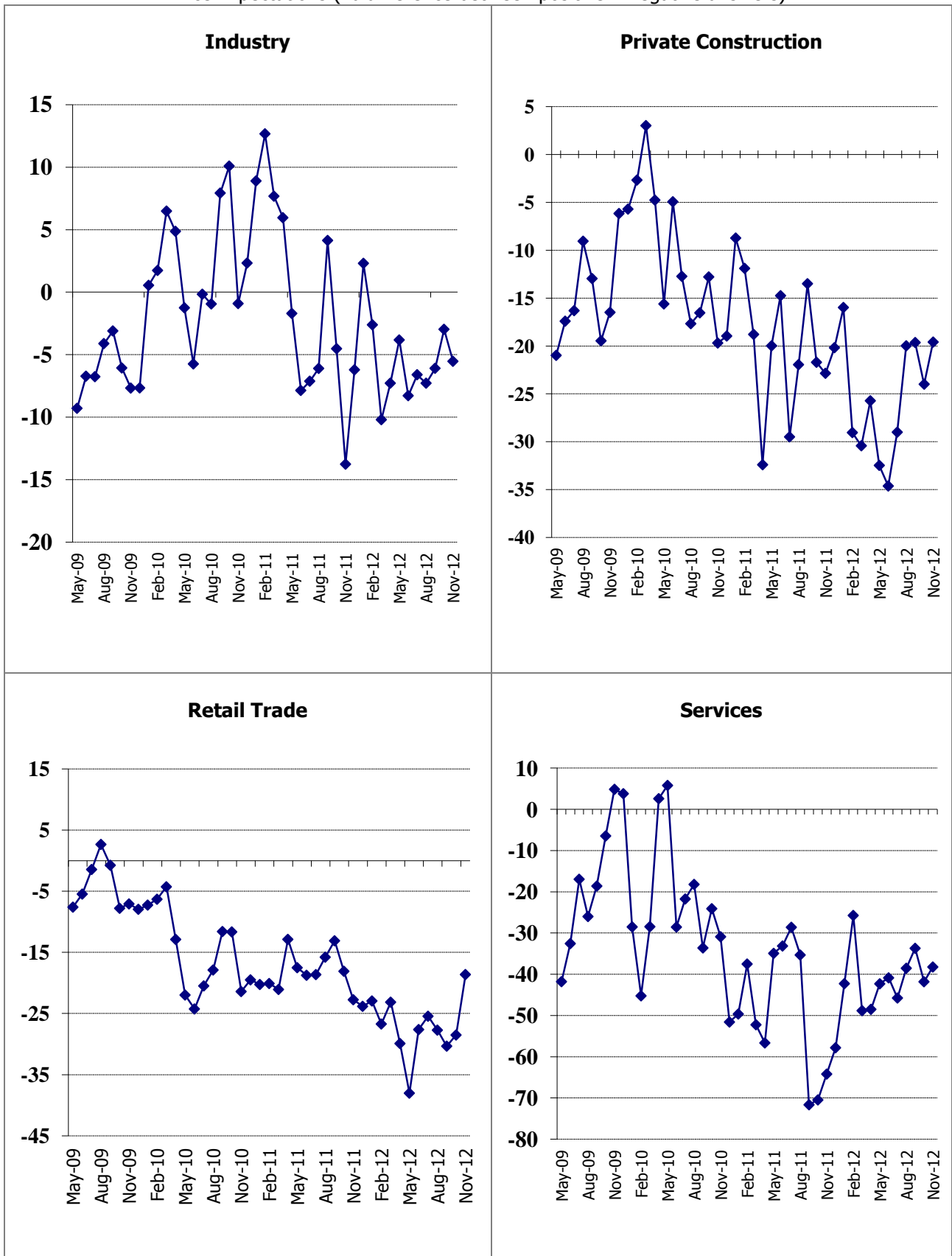
Even though the negative trends seem to be slightly weakening, deflationary expectations dominated in all sectors. In particular, **the price expectations in October – November 2012 eased, compared with the preceding quarter, in Industry and Services, remaining almost unchanged in Private Construction and Retail Trade.** Year-on-year, the deflationary expectations eased slightly in Industry and more substantially in Private Construction, while in Retail Trade they remained almost unchanged and in Services they slightly intensified. In greater detail:

In Industry, the deflationary expectations slightly weakened in October-November of 2012, compared with the preceding quarter, with the indicator reaching -4 from -7. Year-on-year, the indicator slightly increased (from -9 on average). Among the enterprises in the sector, 14% were expecting prices to increase, while 1/10 were expecting prices to decrease, with the remaining 76% of the enterprises expecting prices to remain stable over the near term.

In Retail Trade, the deflationary expectations remained almost unchanged, with the negative balance of expectations standing once more at -22, unchanged year-on-year as well. The share of the enterprises expecting prices to fall in the near term stood at 28%, while only 6% were holding inflationary expectations. Regarding the constituent branches in the sector, the deflationary expectations strengthened quarter-on-quarter in Food-Drinks-Tobacco and Fabrics-Clothing-Footwear, while in contrast they eased in Department Stores, Vehicles-Spare Parts and Household Appliances.

The deflationary expectations weakened in Services in the period under examination, compared with the preceding quarter, with the indicator reaching -24 on average (from -28), slightly up on its level from the corresponding period of the previous year (-20). About 26% of the sector's enterprises held expectations that prices would fall in the near term (from 28%), while a marginal 2% of the enterprises was anticipating prices to increase. Regarding the constituent branches, the negative balance of price expectations increased slightly in Travel Agencies and IT Services and more significantly in Various Business Activities and Financial Intermediaries, remaining unchanged in Hotels – Restaurants and falling further in Land Transport.

Figure 3.17
Price Expectations (% difference between positive – negative answers)



Source: IOBE

Lastly, in Private Construction the balance of price expectations in the period under investigation remained almost unchanged compared with the preceding quarter, to reach -40 on average, significantly up on its level from the previous year (from -67). In the period under examination, 2/5 of the enterprises in the sector were expecting prices to fall further in the near term, while steadily not a single respondent has been expecting prices to increase since June. The remaining 3/5 of the enterprises were expecting prices to remain stable in the near-term.

3.6 Balance of Payments

Current Account

The **current account deficit** contracted by 74.4% in the first ten months of 2012 to reach €4.1 billion, down year-on-year by €12.1 billion and at 15% of its 2008 level. As a result, the current account deficit was at its lowest level since 1999, according to Bank of Greece data. The large reduction came again from a large significant contraction of the trade deficit and the income account deficit, while the services surplus increased and the surplus of current transfers improving significantly as well.

The **trade deficit** contracted by 25.3% (€5.8 billion)⁹ in the first ten months of 2012 to reach €17.3 billion from €38 billion in 2008. The trade deficit of goods excluding oil and ships fell significantly, by 32.1%, as apart from the slight increase of the exports in this category by 2.7% (+€295 million), imports declined by

14.4% (€3.1 billion). The exports in this category reached €11.3 billion, slightly lower than in 2008 (€11.7 billion). The growth of exports, however, has slowed down from +21% in 2011 (€11 billion export value), as the debt crisis in the Euro area has continued to destabilise world trade. In particular, the volume of world trade in the first ten months of 2012 grew by 2.3%, almost three times lower than the 2011 growth rate (6.5%).¹⁰ The fuel exports increased significantly in the first 10 months of 2012, by 17.2%, to reach their highest level in 10 years, at €6.1 billion, while the growth rate of fuel imports was significantly lower at 3.9%, and as a result the fuel deficit declined by €320 million to reach about €9 billion.

The services surplus increased in 2012 to €13.8 billion, against €13.4 billion in 2011, up by 2.6%. Both payments and receipts fell, with the relatively larger contraction of payments leading to an increase in the surplus, as the former fell by 4.2% to reach €24.1 billion, while payments declined by 12% to €10.4 billion. In greater detail, tourist receipts fell by 4% (-€405.5 million) in the first ten months to reach €9.8 billion, however their contraction has eased since the first seven months (-7%). The payments for tourist services fell by 18.9% (-€368 million) to reach €1.6 billion. The receipts from transport services fell by €444.8 million, while in contrast payments fell by €792 million, to reach €11.3 and €5.3 billion respectively. Lastly, regarding the remaining services, receipts decreased by €212.3

⁹ The amounts in brackets express year-on-year change, unless otherwise indicated.

¹⁰ The Netherlands Bureau for Economic Policy Analysis (CPB), CPB World Trade Monitor

million in the first ten months, against a drop in receipts by €245.8 million.

The contraction of the **income account deficit** strengthened in the first ten months, as it fell by about 70% to reach -€2.1 billion, from -€6.9 billion in 2011, while it had fallen by about 55% in the first seven months. This contraction was mostly due to a significant fall in the outgoing payments for wages, salaries, interest and dividends, by 50.3% to reach €4.8 billion, while in contrast the receipts declined marginally by 0.8% to reach €2.7 billion.

The surplus of **current transfers** almost tripled in the first ten months of 2012, increasing from €477.8 million in 2011 to €1.5 billion in 2012, against an increase by 81.7% in 2011. Total receipts¹¹ reached €4.6 billion, up by 19.7%, while payments¹² fell by 7.4% to €3.2 billion.

Capital Account

The surplus of **capital transfers** increased at a lower rate than in 2011, as in the first ten months of 2012 it reached €1.6 billion from €1.1 billion in 2011. The key driver for this was once more the increase of receipts¹³ to €1.8 billion, from €1.4 billion in 2011, while payments declined to €187.9 million from €213.7 million in 2011.

Lastly, the **Current and Capital Account** deficit, which to some extent reflects the economy's external borrowing

requirements, stood at -€2.6 billion from -€15 billion in 2011, lower that is by 82.9% or €12.4 billion, as the rapid drop of imports and payments has caused a significant contraction in the country's borrowing requirements. As a result, the borrowing requirements have declined by €22.6 billion since 2008.

Financial Account

The **financial account** surplus fell significantly in the first ten months of the year, by 78.4%, to reach €3.4 billion, from €15.9 billion in the corresponding period of 2011.

At the level of specific accounts, **direct investment** experienced **net inflow** of €2.1 billion, against €2.1 billion net outflow in the corresponding ten months of 2011. Foreign direct investment to Greece formed a €1.8 billion net inflow, while net inflow of €264 million was also observed in the residents' direct investment abroad, compared with net outflow of €1.3 billion in the previous year. According to data from the Bank of Greece, in August to October the most significant investments that took place in the country were:

August – Net outflow by €192 million to record negative reinvested profits (i.e. loss instead of profit in the financial statements of the direct investment companies in Greece).

September – Inflow of €30 million for the participation of Abbott Investment SPRL (Luxembourg) in the increase of the share capital of its subsidiary Abbott Laboratories Hellas SA and inflow of €25 million for the participation of Abbvie Investment

¹¹ Including receipts from the European Agricultural Guidance and Guarantee Fund (EAGGF) and the European Social Fund (ESF).

¹² Mainly contributions to the Community Budget.

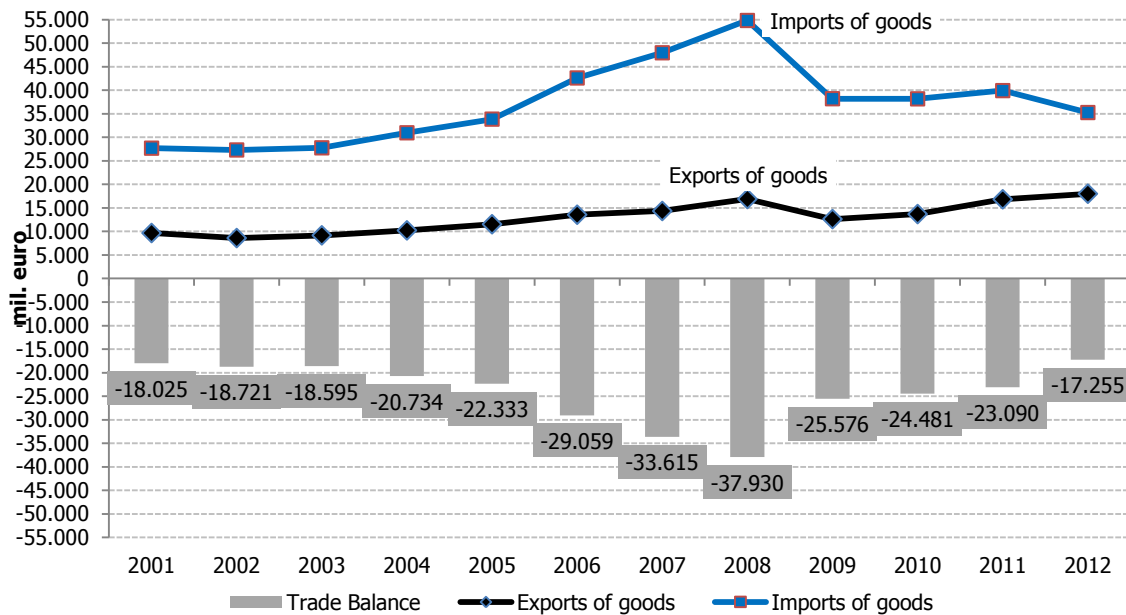
¹³ The capital transfer receipts refer to incoming payments from structural and cohesion funds.

SPRL (Luxembourg) in the increase of the share capital of its subsidiary Abbvie

Pharmaceuticals Société Anonyme.

Figure 3.18

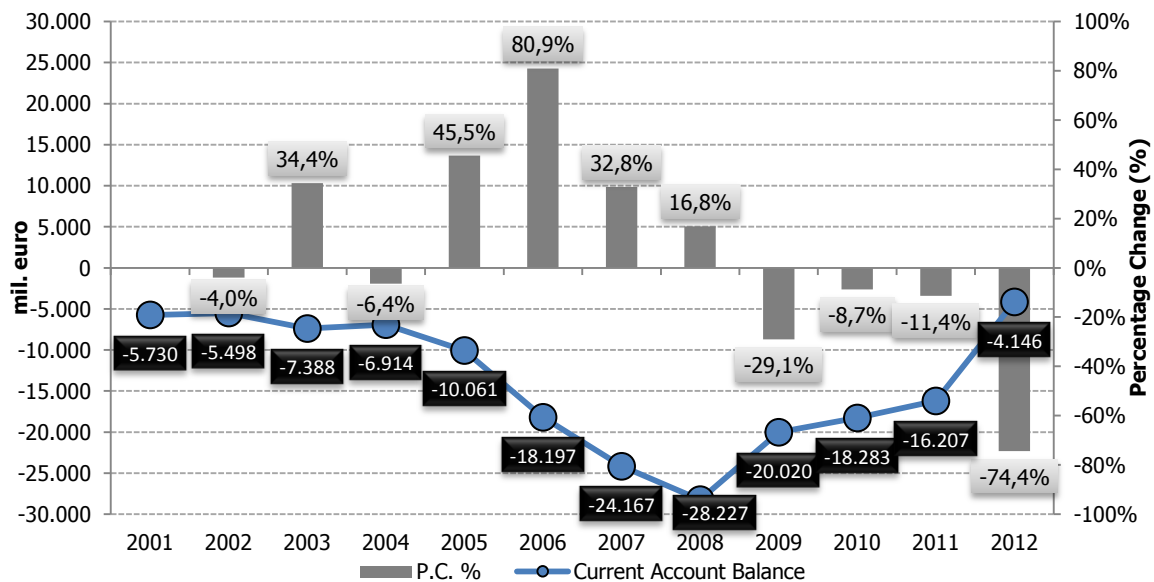
Imports-Exports 2001-2012 (January-October)



Source: Bank of Greece – Data processing: IOBE

Figure 3.19

Current account Balance 2001-2012 (January-October)



Source: Bank of Greece – Data processing: IOBE

October – Inflow of €134 million for the participation of Allianz S.E. (Germany) in the increase of the share capital of its subsidiary Allianz Hellas, which was offset by the booking of an outflow, mostly due to negative reinvested profits. Meanwhile, the direct investment abroad by Greek residents had a net inflow (disinvestment) by €79 million with the largest transactions being the inflow of €100 million from the sale of Piraeus Bank's participation in Marathon Banking Corporation (USA) to Investors Bancorp Inc.

Net outflow of €77.6 billion was recorded in **portfolio investment**, against €18.2 billion outflow in 2011. According to the Bank of Greece, the receivables reached a net outflow of €41 billion, out of which €40.1 billion concerned outflow of capital from an increase of holdings of residents in bonds and treasury bills issued abroad (including EFSF bonds), €738 million came from an increase of holdings in foreign financial derivatives and €128 million in shares. Correspondingly, payables experienced net outflow of €36.6 billion, out of which €36.5 billion came from a reduction in holdings by non-residents of bonds and treasury bills issued by the Greek state, while the remaining €137 million concerned reduction of foreign holdings of domestic shares.

A net inflow of €79 billion was recorded in **other investment**, from €36.2 billion in 2011. The liabilities stood at €65 billion, as the net debt liabilities of the public and the private sector to non-residents increased by €75.1 billion, while the holdings of non-residents in deposits and repos in Greece

fell by €10.9 billion. The receivables reached €14.1 billion in the first ten months, out of which €15.4 billion came from reduction of the holdings of domestic financial institutions in deposits and repos abroad. Meanwhile, the gross borrowing by the general government from the EFSF and the IMF did not change in the last three months, standing at €75.6 billion. Lastly, the country's **reserve assets** stood at €5.9 billion at the end of October, from €5.3 billion in October 2011.

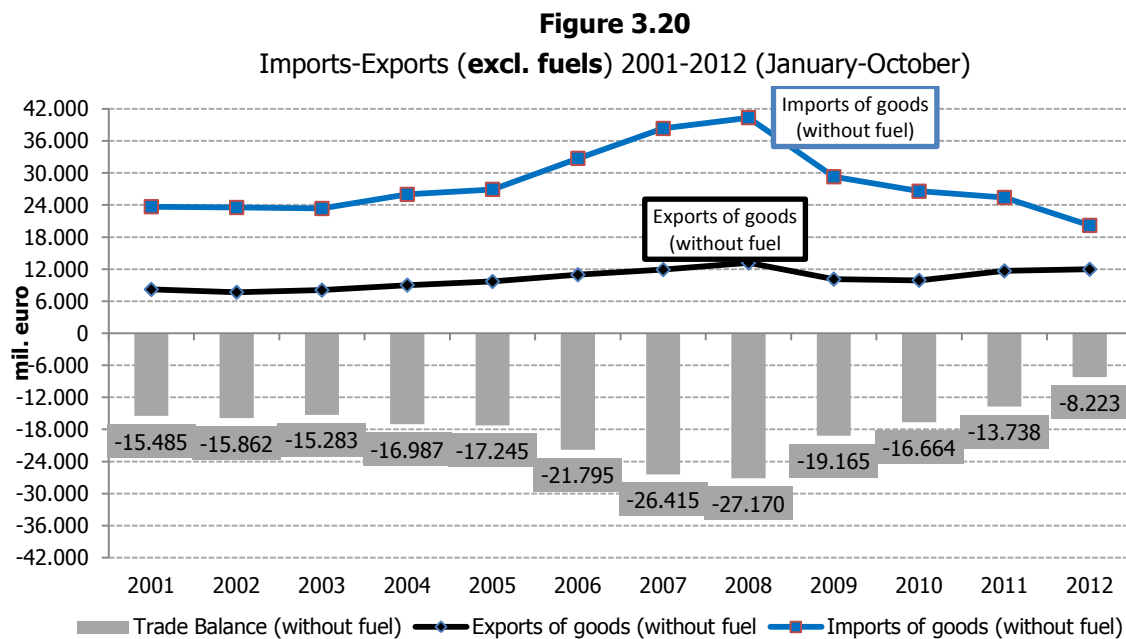
Assessment

The 2008 crisis has certainly shifted the balances in the Greek economy. The economy is on the lookout for a new production model, while many enterprises are looking for an outlet to the continuously falling domestic activity in exports. The rapid contraction of the economy, however, has created numerous problems in the attempt of the enterprises to maintain a stable, secure level of activity and to search for a new export perspective. According to the data on the external sector of the economy, imports in the first three quarters of 2012 have declined sharply compared with 2008, by about 40%, due to the reduction of the disposable income. Meanwhile, the growth of exports fatigued in the third quarter of 2012, due to the turmoil internationally that was caused by the uncertainty to tame the debt crisis in the Eurozone, but also by the eventual fiscal problems in the USA. In this regard, a comparison of Greece's performance with that of EU-27 could reveal a trend regarding the evolution of exports, relative to imports. In particular, as depicted in

Figure 3.20, the ratio of exports to imports in Greece has changes since 2010, relative to the corresponding index for EU-27, without a clear trend of a boost in the various export categories, apart from a growth trend that could be attributed to the large drop of imports. When this index takes values above one, this implies that the exports-imports ratio in the Greek economy is better than in EU-27, while in contrast values lower than one imply that Greece is lagging behind the rest of Europe. According to the latest available data on all product categories,¹⁴ apart from fuels, where due to a different measurement mode the exports appear increased, the animal and vegetable fats and raw materials have been the only categories with a notable differentiation of the exports-imports ratio in the past few years, where the index has grown, significantly above one and hence the export-import rate in Greece is better than in the EU. It should not be overlooked that in the remaining categories as well, where the index is lower than one, a relative improvement can be observed.

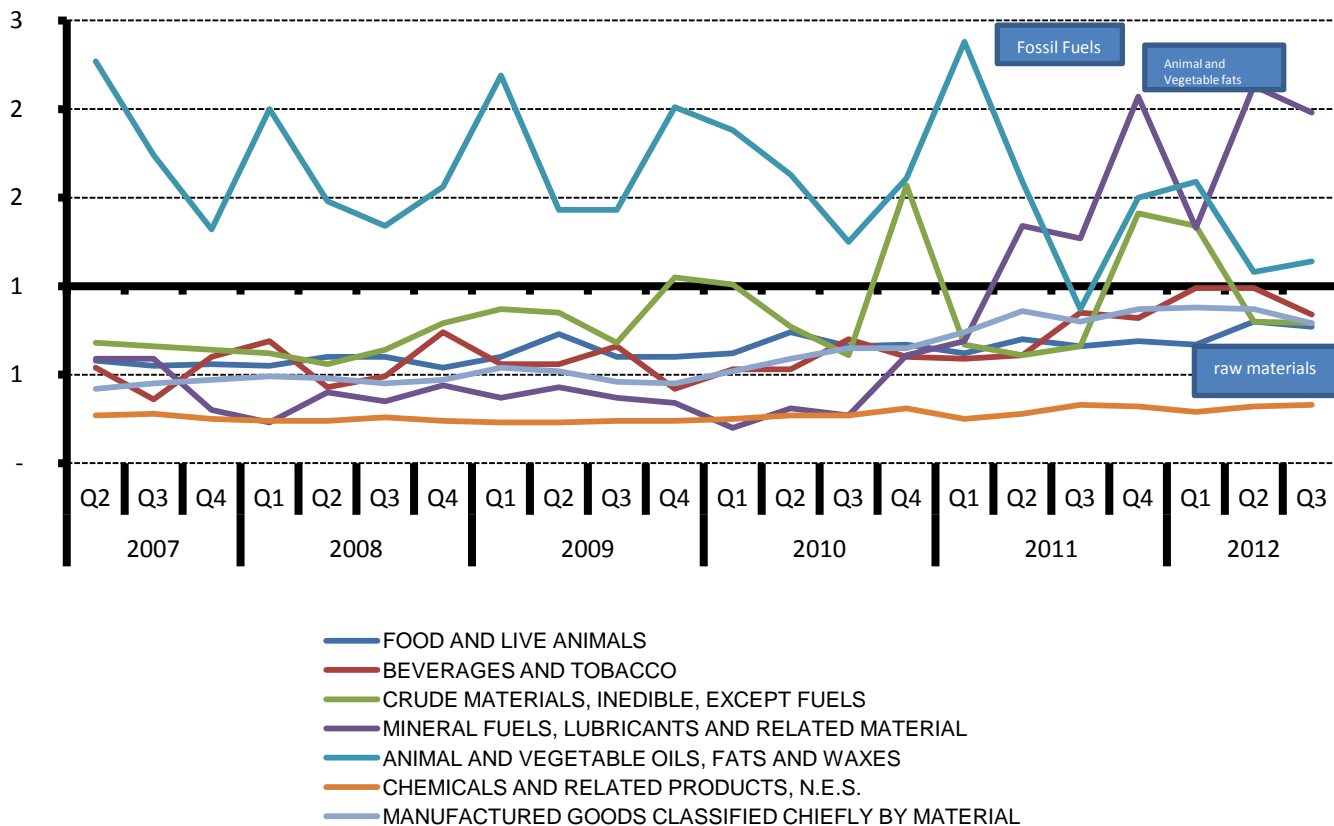
This increase, setting aside the reduction of imports, is considered to constitute an indication of a stronger export orientation, which however has not acquired permanent features that would allow for a quick change to a production model with stronger emphasis on exports. Besides, as already noted in older IOBE reports, the transformation of the production and export profile of the Greek economy could become permanent when certain requirements are met, in the medium term, such as a focus on the knowledge triangle Education – Research – Innovation, through which domestic production and its export momentum could strengthen.

¹⁴ According to the Standard International Trade Classification (SITC) - Revision 4



Source: Bank of Greece – Data processing: IOBE

Figure 3.21
Exports/Imports ratio (Greece/EU27) *



Source: Eurostat – Data Analysis:IOBE

*(Greek exports/Greek imports)/(EU27 exports/EU27 imports).

Table 3.10: Provisional Balance of External Payments in mil. €

		January - October			October		
		2010	2011	2012	2010	2011	2012
I	CURRENT ACCOUNT BALANCE (I.A+I.B+I.C+I.D)	-18.282,6	-16.206,6	-4.146,2	-2.213,0	-1.468,6	-684,2
I.A	GOODS (I.A.1 - I.A.2)	-24.480,8	-23.089,8	-17.254,7	-2.209,7	-2.098,7	-1.602,9
I.A.1	Oil Balance	-7.817,1	-9.352,3	-9.032,2	-760,2	-930,2	-867,2
	Trade Balance excluding oil	-16.663,7	-13.737,5	-8.222,5	-1.449,5	-1.168,4	-735,7
	Ship's Balance	-2.989,5	-3.041,9	-959,6	-278,3	-239,3	-130,2
	Trade Balance excluding oil and ships	-13.674,2	-10.695,6	-7.262,9	-1.171,2	-929,1	-605,5
	Exports	13.699,6	16.842,1	18.017,8	1.511,1	1.788,5	1.926,9
I.A.2	Oil	3.789,5	5.169,9	6.059,5	425,8	586,5	587,9
	Ships	798,7	648,1	639,8	112,8	19,4	36,4
	Other goods	9.111,4	11.024,0	11.318,6	972,5	1.182,6	1.302,7
	Imports	38.180,4	39.931,9	35.272,5	3.720,8	3.887,1	3.529,8
	Oil	11.606,6	14.522,3	15.091,7	1.186,0	1.516,7	1.455,1
	Ships	3.788,2	3.690,0	1.599,3	391,1	258,7	166,6
	Other goods	22.785,6	21.719,6	18.581,4	2.143,7	2.111,7	1.908,2
I.B	SERVICES (I.B.1 - I.B.2)	12.272,8	13.395,8	13.739,4	1.000,2	1.364,3	1.117,8
I.B.1	Receipts	25.015,8	25.140,4	24.077,8	2.308,1	2.390,7	2.070,5
	Travel	9.246,4	10.179,3	9.773,8	743,5	845,6	688,6
	Transportation	13.011,4	11.701,8	11.257,0	1.252,6	1.154,1	1.071,6
	Other services	2.758,0	3.259,3	3.047,0	312,0	391,0	310,2
I.B.2	Payments	12.743,0	11.744,6	10.338,3	1.307,8	1.026,4	952,6
	Travel	1.835,4	1.949,2	1.581,1	184,6	159,0	106,6
	Transportation	6.816,3	6.077,2	5.284,8	636,5	520,3	535,2
	Other services	4.091,3	3.718,2	3.472,4	486,7	347,1	310,8
I.C	INCOME (I.C.1 - I.C.2)	-6.337,4	-6.990,3	-2.128,0	-576,1	-559,3	-110,1
I.C.1	Receipts	3.366,5	2.717,6	2.695,3	315,4	291,5	252,3
	Compensation of employees	168,2	151,8	161,6	16,2	13,7	15,8
	Investment Income	3.198,3	2.565,8	2.533,7	299,2	277,9	236,5
I.C.2	Payments	9.703,9	9.707,9	4.823,3	891,5	850,9	362,4
	Compensation of employees	308,6	381,9	390,1	27,0	41,7	39,7
	Investment Income	9.395,3	9.326,0	4.433,2	864,5	809,2	322,7
I.D	CURRENT TRANSFERS (I.D.1 - I.D.2)	262,9	477,8	1.497,0	-427,5	-174,9	-89,0
I.D.1	Receipts	4.201,1	3.884,7	4.651,3	191,5	179,2	148,3
	General Government (mainly transfers from EU)	2.961,8	2.900,0	3.747,1	68,5	93,6	58,8
	Other sectors	1.239,2	984,7	904,2	123,0	85,6	89,5
I.D.2	Payments	3.938,2	3.406,9	3.154,3	619,0	354,1	237,3
	General Government (mainly transfers to EU)	2.626,7	2.185,9	2.265,8	493,5	250,6	169,1
	Other sectors	1.311,4	1.221,0	888,5	125,5	103,6	68,2
II	CAPITAL TRANSFERS (II.1-II.2)	750,7	1.143,4	1.577,1	-18,3	-8,7	-5,7
II.1	Receipts	988,2	1.357,2	1.764,9	9,6	15,1	7,7
	General Government (mainly transfers from EU)	888,1	1.241,6	1.699,3	2,1	3,2	0,5
	Other sectors	100,2	115,6	65,6	7,5	11,9	7,2
II.2	Payments	237,5	213,7	187,9	27,9	23,7	13,4
	General Government (mainly transfers to EU)	14,2	11,3	12,4	0,7	1,0	0,3
	Other sectors	223,3	202,5	175,4	27,2	22,7	13,1
III	CURRENT ACCOUNT AND CAPITAL TRANSFERS (I + II)	-17.531,9	-15.063,1	-2.569,2	-2.231,3	-1.477,2	-689,9
IV	FINANCIAL ACCOUNT (IVA+IVB+IVC+IVD)	18.510,6	15.905,9	3.432,1	2.483,6	1.128,5	80,4
IV.A	DIRECT INVESTMENT*	-907,4	-2.144,6	2.067,0	-110,7	-182,5	48,1
	Abroad	-950,0	-1.260,5	264,0	-52,1	-25,7	78,8
	Home	42,6	-884,1	1.803,0	-58,7	-156,8	-30,7
IV.B	PORTFOLIO INVESTMENT*	-20.572,8	-18.152,9	-77.566,5	-2.307,9	-1.208,5	-1.582,4
	Assets	12.830,1	3.453,2	-40.971,7	567,1	-20,3	-1.345,9
	Liabilities	-33.402,9	-21.606,1	-36.594,8	-2.875,0	-1.188,1	-236,5
IV.C	OTHER INVESTMENT*	39.849,8	36.232,5	78.957,5	4.891,2	2.454,5	1.625,7
	Assets	-1.489,0	2.291,0	14.050,6	5.052,4	2.144,2	867,4
	Liabilities	41.338,8	33.941,5	64.907,0	-161,3	310,3	758,3
	(Loans of General Government)	27.552,1	31.926,5	75.122,1	-19,2	-119,2	-2,8
IV.D	CHANGE IN RESERVE ASSETS**	141,0	-29,0	-26,0	11,0	65,0	-11,0
V	BALANCE ITEM	-978,8	-842,8	-862,9	-252,3	348,7	609,5
RESERVE ASSETS (STOCK) (end period)***					4.398	5.341	5.949

Source: Bank of Greece

* (+) net inflow (-) net outflow, ** (+) increase (-) decrease

*** Reserve assets , as defined by the ECB, only include monetary gold, the reserve position at the IMF, Special Drawing Rights and the Bank of Greece's claims in foreign currency on residents of countries outside the euro area. Conversely, reserve assets do not include claims in euro on residents of countries outside the euro area, claims in foreign currency and in euro on residents of euro area countries, and the Bank of Greece's participation in the capital and the reserve assets of the ECB.

4. IMPACT ON THE ECONOMY OF GREECE FROM LEVERAGING ITS CULTURAL HERITAGE¹⁵

4.1 Introduction

Greece today is undergoing a deep and prolonged economic and social crisis. In the attempt to find a way out of the crisis, the country should turn to its comparative advantages. Without a doubt the values of its ancient civilisation and the awe that it generates globally form part of the major comparative advantages of Greece.

Democracy, philosophy, literature (poetry, rhetoric), arts (architecture, sculpture) and sciences (arithmetic, geometry, medicine) are concepts which have a direct link with the ancient Greek world. Even though the cultural wealth of Greece is invaluable, its leverage for economic development has been relatively limited until today. The cultural heritage can be leveraged through culture tourism, which can contribute substantially to the recovery of economic activity, given the significant contribution of tourism to the Greek economy.

The scope of the study, whose findings are summarised here, is to reveal the growth possibilities from the utilisation and promotion of Greece's cultural heritage, through further development of this type of tourism, as an alternative form of attracting foreign visitors to the country.

4.2 The initiative to leverage Greece's cultural heritage

The term "cultural tourism" describes the "movements of persons for essentially cultural motivations such as study tours, performing arts and other cultural tours, travel to festivals and other cultural events, visit to sites and monuments, travel to study nature, folklore or art or pilgrimages".¹⁶ Cultural tourism can contribute to further development of the tourist product and the economy in general in a number of ways.

Its services are usually addressed to individuals with higher educational and income level, which implies higher tourist expenditure. Furthermore, its development is linked with a weaker seasonality, as it is not exclusively related to visits to seaside and island areas during the summer, but allows for arrival of visitors for its purposes throughout the year. In addition, there are empirical indications, albeit hard to prove beyond doubt, that the utilisation and promotion of existing cultural monuments and the creation of new culture spaces contribute to the attraction of new visitors to an area.

The establishment of the Guggenheim Museum in Bilbao, Spain is a characteristic example. After its opening (October 1997), the visits to the area increased by 33%, while the average

¹⁵ This text is an excerpt from a special study of IOBE.

¹⁶ World Tourism Organization, 1985, p. 131

occupancy rate of the accommodation establishments in the area increased from 38% to 47%. As a result of the establishment of the museum, almost four in five tourists in the Basque country reported the museum as the main reason to visit the area, while the city of Bilbao gradually transformed from a downgraded area to a significant urban centre.¹⁷ Likewise, the establishment of the national history museum Te Papa Tongarewa in Wellington, New Zealand in February 1998 has had a statistically significant impact on arrivals, duration of stay and occupancy rate of the accommodation establishments in the city.¹⁸

Hence, we can ask ourselves how Greece can create opportunities that can generate benefits at social and economic level, both in the immediate future and in the long term, by leveraging its spiritual and cultural heritage. To find, that is, those paths which can lead to the creation of favourable conditions for economic growth and job creation, through promotion of its culture.

In this regard, Bondholders Communication Group, in association with Ralph Applebaum Associates, a company that specialises in the design of culture spaces and museums all over the world, has prepared an investment plan to upgrade and promote some of the most important cultural monument of the country, a project for which IOBE analysed the importance of this investment plan for the Greek economy in terms of value added and employment.

In particular, the projects of the initiative are:

- **Digital Heritage Nation:** The digital technologies can contribute to the promotion of Greece's cultural heritage, offering important information both to the visitors in an area (access through a laptop, table or smart phone) and for research and education purposes all over the world (e.g. for classes in classical studies in universities and colleges).
- **The Acropolis: By Day and Night.** In the vicinity of the current ticket office and refreshment kiosk, a new Visitor Centre would be created, designed in congruence with the physical surroundings. Digital interpretations (accessed through one's smart phone or tablet) would provide additional interpretation, and could include options for specific interests (such as the Greek gods, or the conservation process, or original architectural features). Finally, night openings and the installation of an audiovisual light show will enrich the visitors experience and will create a strong incentive for the visitors to extend their stay by one more night, with significant beneficial impact on tourist flows in the wider area.
- **Acropolis Museum Underground Exhibit:** At this institution, the underground outdoor exhibit that is currently unfinished and off-limits to the public would be completed. This in-

¹⁷ Plaza B. (2000). 'Evaluating the influence of a large cultural artifact in the attraction of tourism: the Guggenheim Museum Bilbao case'. *Urban Affairs Review* 36(2): 264–274.

¹⁸ Carey S., Davidson L., Sahli M. 2012. 'Capital City Museums and Tourism Flows: an Empirical Study of the Museum of New Zealand Te Papa Tongarewa'. *International Journal of Tourism Research* doi: 10.1002/jtr.

cludes the foundations of streets, houses, private and public baths, workshops, wells, cisterns, and latrines. To this excavated network, a walkway and interpretive rail would be added, conveying the everyday life in this ancient slice of a neighbourhood.

- **Laurium Mines:** the scope of this museum is to reveal the installations related to the mining of silver during the 5th and 4th century BC in ancient Athens. The visitors will be able to learn the history of the mineral wealth in the area, which contributed substantially to the strengthening of the Athens Democracy.
- **New Museum of Democracy:** Marking a major entry point to the Ancient Agora, a new museum will bring to life the stories that, while being inherent in the site, are currently not well shared with the visitor — from the genius of the jury selection machine, to the drama of Socrates' trial, to the excitement of daily life centred around the Stoas. The new museum could also seek to become the home of an annual award for the promotion of democratic values, such as the European Parliament's annual Andrei Sakharov Prize for Freedom of Thought.
- **Plato's Academy:** the Initiative would create a new complex that combines multi-functional buildings centred around a faithful recreation of the original gymnasium. Nearby, a Plato Academy Educational Complex would be built for lectures and performances on issues related to philosophy, physical education, medicine, government, the dramatic arts. This would be a state-of-the-art international venue that hosts cutting-edge lectures and symposia, featuring the most recent digital communication hook-ups. Plato's Academy would help to restore Athens as one of the world's "centres of thought."
- **Democracy's Battlefields: Marathon and Salamis.** A pavilion-style Visitor Centre would be created for the interpretation of the Battles of Marathon and Salamis. From this base, visitors would explore the Marathon battle site using smart phones or tablets that are triggered by triangulated GPS interpretation. Either through live re-enactment or in self-guided exploration, they could see the authentic places where this momentous conflict took place. In addition, the naval triumph at Salamis will be presented using recreated triremes on the Olympic Lake, supplemented with augmented reality. For those who wish to stay, a new hotel could be constructed in the vicinity, including an athletic "Marathon Race" theme, to supplement the historic presentations.
- **Panathenaic Way:** The 1.2 km route of the Panathenaic Way from the Dipylon Gate, through Keramikos, into the town square (Agora), and up to the Acropolis, is the original grand public thoroughfare and processional route. Presenting this authentic historical route as a literal "walk into Classical Athens" would entice visitors into a site seldom visited in full capacity today.

- **Agora Site:** Coming from the Museum of Democracy, the interpreted footprints of the ancient buildings of the Agora will have great significance to the visitor. The major visualization of the site could be digital — for instance, an augmented reality overlay on one's smart phone or tablet that shows civic life within Classical Greek structures as they would have appeared.
- **The Museum of Mythology at Olympia:** the Initiative proposes the establishment of a Museum of Mythology at Olympia. In addition, a carefully selected itinerary of stops along this route from Athens to Olympia (Eleusis, Mycenae, etc.) would offer a unique rediscovery of the best of the heroic and classical Greek world.
- **Nationwide Cultural Interpretive Infrastructure:** Best practices in the cultural sector (e.g. signage, amenities, digital integration, etc.) can be implemented in the remaining significant outdoor cultural heritage sites in Greece.

4.3 Impact on the Greek economy from leveraging the cultural heritage

The total investment budget of these projects is estimated to range between €1.1 billion and €4.3 billion, depending on the ultimate extent of the interventions. The completion of the projects in Attica and Olympia is distributed over a seven-year horizon, while the implementation of best practices across Greek territory expands beyond 2020.

Table 4.1:

Assumptions under three intervention scenarios

Parameter	Small-scale	Inter-mediate	Large-scale
Capital expenditure	€ 1.1 billion	€ 2.4 billion	€ 4.3 billion
Increase of tourist arrivals	+ 10%	+ 20%	+ 30%
Increase of overnight stay	½ day	1 day	2 days

As such, the estimated impact on GDP and employment of the above culture projects depends on the investment that would be made to construct them, the revenues that their operation would generate and the increase in tourist consumption, as a result of increased inflow of foreign visitors and extension of their stay. We used three scenarios for this estimation, which combine assumptions on the size of the initiative's budget, the percentage growth of foreign visitors (arrivals by air) in the areas where the projects will take place, and the expansion of the duration of their stay in the area (Table 4.1).

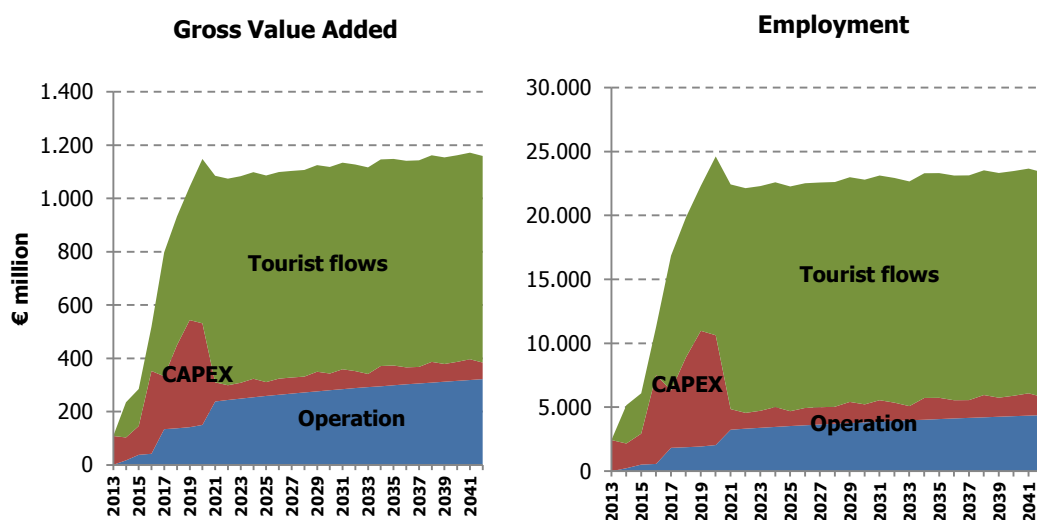
The estimation of the impact was based on input-output tables of the Greek economy, using Leontief's celebrated input-output model. The economic impact from the investment programme concerns the period 2013-2042.

The total impact on GDP from the programme to upgrade and promote Greece's cultural heritage is estimated at €530 million to €1.8 billion each year, depending on the ultimate size of the investment's budget. Correspondingly, the initiative could generate significant employment opportunities, with the impact on job creation ranging between 12 thousand and 38 thousand.

The largest part of the impact is expected to come from the increase in tourist expenditure (Figure 4.1). Increase of arrivals by 10% in the airports of Athens, Thessaloniki and Araxos, combined with an extension of the duration of stay in these areas by half a day implies an increase in tourist expenditure by €218 million, with a total impact on the country's GDP standing at €340 million per year and the creation of about 9100 new jobs.

Figure 4.1

Impact on gross value added and employment in the intermediate scenario



Source: IOBE

Correspondingly, the total impact on the gross domestic product would almost double in case that the airport arrivals of foreign visitors increase by 20%, compared with 2010, and at the same time the duration of stay expands by one day. This development would result in the generation of about 15 thousand new jobs. Lastly, extension of the stay by two days and growth of the tourist arrivals by 30% would have as a result the generation of about 30 thousand jobs, while the gross value added would increase by almost €1.3 billion annually on average for the next 30 or so years.

The impact on GDP from the investment expenditure ranges between €50 – €200 million on average over the 30-year period under examination. In employment terms, the investment is expected to create between 1200 and 4500 jobs approximately, depending on the ultimate size of the initiative's budget. These jobs would have to do with employment for tasks that have a direct link with the construction of the projects, but also in profession that either

support these tasks or serve the additional consumption that would come from spending the newly generate wage income across the economy.

In addition, we built a financial model in order to examine the viability of each of the proposed culture projects. This model estimates the incremental revenue and expenses for each project, based on certain assumptions. The revenues are expected to come from the receipt of entry fees to the monuments and the archaeological sites, sale of souvenirs in the gift shops that would operate there, food services, receipts from hosting events and conferences, while in the case of Plato's Academy revenues are also expected from tuition fees, collected from foreign students during their stay. Accordingly, the main operating expenditure concerns payments for wages of the employees and maintenance expenses for the installations. Based on certain assumptions, the outcome of the financial analysis indicates that under proper operation and appropriate kind of funding, the initiative would be financially viable overall.

Out of the revenues that are generated by the operation of the culture sites and monuments, estimated with the financial model to range between €100 and €260 million on average per annum, the gross domestic product can increase by €130 and €350 million on average per annum over the next 30 years. Meanwhile, the revenues from the culture activity generate favourable conditions for the creation of jobs, ranging from 1800 under the low budget scenario to reach 4750 under the high budget scenario on average for the period 2013-2042.

4.4 Summary - Conclusions

The utilisation of the national culture heritage could provide significant opportunities for growth through a number of social and economic activity aspects. Culture tourism, as an alternative means to attract visitors to the country, can be linked with the need to adopt a new policy for Greece's tourism development, which largely should aim at finding new markets for the provision of tourist services, mainly in Asia. The fact that the arrival of visitors to Greece from China, who (just as the Japanese) show a special interest in culture tourism, reached only 16 thousand in 2011, when in Italy, another country with rich culture heritage, this number exceeded 260 thousand, is indicative for the underutilised potential that exists in Greek culture tourism.

Culture tourism can also contribute to the differentiation of the Greek tourist product, given that the sun-and-beach model, albeit remaining its key pillar of development, has unidimensionally dominated in the past decades. Meanwhile, culture tourism can also have a positive impact on the growth of tourist receipts, as it is considered a more substantive form of tourism, as opposed to the mass tourism that is largely managed by the major European tour operators.

However, one of the crucial issues regarding this initiative concerns the financing of the project, given firstly the need for substantial capital to implement the investment and secondly the limited availability of funds in the country due to the fiscal consolidation programme. This highlights the need to find funding from alternative source, such as tax-increment financing and the structural funds (NSRF).

In the extraordinarily difficult economic and social conditions that the country is experiencing today, the uniqueness of the ancient Greek civilisation can offer a way out. The utilisation of the noble values of the most important cultural achievement of Greece – democracy, philosophy, theatre, sciences and classical arts – could contribute both to the recovery of the country's economy and to our spiritual cultivation. The effective promotion of the undoubted contribution of Greece to the western civilisation constitutes the strongest antidote to the severed image of the country abroad and the best way to restore its people's national pride.

5. APPENDIX: KEY ECONOMIC INDICATORS

Table 1: Real GDP growth rate

	Annual data (%)								
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Austria	3.7	3.7	1.4	-3.8	2.1	2.7	0.8	0.9 ^(f)	2.1 ^(f)
Belgium	2.7	2.9	1	-2.8	2.4	1.8	-0.2	0.7 ^(f)	1.6 ^(f)
Bulgaria	6.5	6.4	6.2	-5.5	0.4	1.7	0.8	1.4 ^(f)	2.0 ^(f)
Cyprus	4.1	5.1	3.6	-1.9	1.3	0.5	-2.3	-1.7 ^(f)	-0.7 ^(f)
Czech Republic	7	5.7	3.1	-4.5	2.5	1.9	-1.3	0.8 ^(f)	2.0 ^(f)
Denmark	3.4	1.6	-0.8	-5.7	1.6	1.1	0.6	1.6 ^(f)	1.3 ^(f)
Estonia	10.1	7.5	-4.2	-14.1	3.3	8.3	2.5	3.1 ^(f)	4.0 ^(f)
EU-27	3.3	3.2	0.3	-4.3	2.1	1.5	-0.3	0.4 ^(f)	1.6 ^(f)
Euro area (17)	3.2	3	0.4	-4.4	2	1.4	-0.4	0.1 ^(f)	1.4 ^(f)
Finland	4.4	5.3	0.3	-8.5	3.3	2.7	0.1	0.8 ^(f)	1.3 ^(f)
France	2.5	2.3	-0.1	-3.1	1.7	1.7	0.2	0.4 ^(f)	1.2 ^(f)
Germany	3.7	3.3	1.1	-5.1	4.2	3	0.8	0.8 ^(f)	2.0 ^(f)
Greece	5.5	3.5	-0.2	-3.1	-4.9	-7.1	-6	-4.2 ^(f)	0.6 ^(f)
Hungary	3.9	0.1	0.9	-6.8	1.3	1.6	-1.2	0.3 ^(f)	1.3 ^(f)
Ireland	5.4	5.4	-2.1	-5.5	-0.8	1.4	0.4	1.1 ^(f)	2.2 ^(f)
Italy	2.2	1.7	-1.2	-5.5	1.8	0.4	-2.3	-0.5 ^(f)	0.8 ^(f)
Latvia	11.2	9.6	-3.3	-17.7	-0.9	5.5	4.3	3.6 ^(f)	3.9 ^(f)
Lithuania	7.8	9.8	2.9	-14.8	1.5	5.9	2.9	3.1 ^(f)	3.6 ^(f)
Luxembourg	4.9	6.6	-0.7	-4.1	2.9	1.7	0.4	0.7 ^(f)	1.5 ^(f)
Malta	2.6	4.1	3.7	-2.4	2.7	1.6	1	1.6 ^(f)	2.1 ^(f)
Netherlands	3.4	3.9	1.8	-3.7	1.6	1	-0.3	0.3 ^(f)	1.4 ^(f)
Poland	6.2	6.8	5.1	1.6	3.9	4.3	2.4	1.8 ^(f)	2.6 ^(f)
Portugal	1.4	2.4	0	-2.9	1.9	-1.6	-3	-1.0 ^(f)	0.8 ^(f)
Romania	7.9	6.3	7.3	-6.6	-1.1	2.2	0.8	2.2 ^(f)	2.7 ^(f)
Slovakia	8.3	10.5	5.8	-4.9	4.4	3.2	2.6	2.0 ^(f)	3.0 ^(f)
Slovenia	5.8	7	3.4	-7.8	1.2	0.6	-2.3	-1.6 ^(f)	0.9 ^(f)
Spain	4.1	3.5	0.9	-3.7	-0.3	0.4	-1.4	-1.4 ^(f)	0.8 ^(f)
Sweden	4.3	3.3	-0.6	-5	6.6	3.7	1.1	1.9 ^(f)	2.5 ^(f)
United Kingdom	2.6	3.6	-1	-4	1.8	0.9	-0.3	0.9 ^(f)	2.0 ^(f)
Croatia	4.9	5.1	2.1	-6.9	-1.4	0	-1.9	0.0 ^(f)	1.4 ^(f)

Table 2: General government debt (% of GDP)

	Annual data (%)								
	2004	2005	2006	2007	2008	2009	2010	2011	2012
Austria	64.7	64.2	62.3	60.2	63.8	69.2	72	72.4	74.4
Belgium	94	92	88	84	89.2	95.7	95.5	97.8	100.3
Bulgaria	37	27.5	21.6	17.2	13.7	14.6	16.2	16.3	20
Cyprus	70.9	69.4	64.7	58.8	48.9	58.5	61.3	71.1	86.4
Czech Republic	28.9	28.4	28.3	27.9	28.7	34.2	37.8	40.8	45.3
Denmark	45.1	37.8	32.1	27.1	33.4	40.7	42.7	46.4	45.4
Estonia	5	4.6	4.4	3.7	4.5	7.2	6.7	6.1	10.8
EU-27	61.9	62.3	62.8	61.6	59	62.2	74.6	80	82.5
Euro area (17)	69.2	69.6	70.3	68.6	66.4	70.2	80	85.4	87.3
Finland	44.4	41.7	39.6	35.2	33.9	43.5	48.6	49	53.5
France	65	66.7	64	64.2	68.2	79.2	82.3	86	90
Germany	66.2	68.5	68	65.2	66.8	74.5	82.5	80.5	82.4
Greece	98.9	101.2	107.5	107.2	112.9	129.7	148.3	170.6	174.7
Hungary	59.5	61.7	65.9	67	73	79.8	81.8	81.4	79
Ireland	29.5	27.3	24.6	25.1	44.5	64.9	92.2	106.4	118.1
Italy	103.4	105.7	106.3	103.3	106.1	116.4	119.2	120.7	126.2
Latvia	15	12.5	10.7	9	19.8	36.7	44.5	42.2	42
Lithuania	19.3	18.3	17.9	16.8	15.5	29.3	37.9	38.5	41.3
Luxembourg	6.3	6.1	6.7	6.7	14.4	15.3	19.2	18.3	21.5
Malta	69.8	68	62.5	60.7	60.9	66.3	67.4	70.4	70.7
Netherlands	52.4	51.8	47.4	45.3	58.5	60.8	63.1	65.5	71.3
Poland	45.7	47.1	47.7	45	47.1	50.9	54.8	56.4	56.1
Portugal	61.9	67.7	69.4	68.4	71.7	83.2	93.5	108	119
Romania	18.7	15.8	12.4	12.8	13.4	23.6	30.5	34.7	35.9
Slovakia	41.5	34.2	30.5	29.6	27.9	35.6	41	43.3	52.2
Slovenia	27.3	26.7	26.4	23.1	22	35	38.6	46.9	53.7
Spain	46.3	43.2	39.7	36.3	40.2	53.9	61.5	69.3	85.4
Sweden	50.3	50.4	45.3	40.2	38.8	42.6	39.5	38.4	37.9
United Kingdom	41	42.2	43.3	44.2	52.3	67.8	79.4	85.2	88.9
Croatia	:	:	:	:	:	:	:	:	:

Table 3: General government balance (% of GDP)

	Annual data (%)								
	2003	2004	2005	2006	2007	2008	2009	2010	2011
Austria	-1.5	-4.4	-1.7	-1.5	-0.9	-0.9	-4.1	-4.5	-2.5
Belgium	-0.1	-0.1	-2.5	0.4	-0.1	-1	-5.5	-3.8	-3.7
Bulgaria	-0.4	1.9	1	1.9	1.2	1.7	-4.3	-3.1	-2
France	-4.1	-3.6	-2.9	-2.3	-2.7	-3.3	-7.5	-7.1	-5.2
Germany	-4.2	-3.8	-3.3	-1.6	0.2	-0.1	-3.1	-4.1	-0.8
Denmark	0.1	2.1	5.2	5.2	4.8	3.2	-2.7	-2.5	-1.8
EU-27	-3.2	-2.9	-2.5	-1.5	-0.9	-2.4	-6.9	-6.5	-4.4
Euro area (17)	-3.1	-2.9	-2.5	-1.3	-0.7	-2.1	-6.3	-6.2	-4.1
Greece	-5.6	-7.5	-5.2	-5.7	-6.5	-9.8	-15.6	-10.7	-9.4
Estonia	1.7	1.6	1.6	2.5	2.4	-2.9	-2	0.2	1.1
United Kingdom	-3.4	-3.5	-3.4	-2.7	-2.8	-5.1	-11.5	-10.2	-7.8
Ireland	0.4	1.4	1.7	2.9	0.1	-7.4	-13.9	-30.9	-13.4
Spain	-0.3	-0.1	1.3	2.4	1.9	-4.5	-11.2	-9.7	-9.4
Italy	-3.6	-3.5	-4.4	-3.4	-1.6	-2.7	-5.4	-4.5	-3.9
Cyprus	-6.6	-4.1	-2.4	-1.2	3.5	0.9	-6.1	-5.3	-6.3
Latvia	-1.6	-1	-0.4	-0.5	-0.4	-4.2	-9.8	-8.1	-3.4
Lithuania	-1.3	-1.5	-0.5	-0.4	-1	-3.3	-9.4	-7.2	-5.5
Luxembourg	0.5	-1.1	0	1.4	3.7	3.2	-0.8	-0.8	-0.3
Malta	-9.2	-4.7	-2.9	-2.8	-2.3	-4.6	-3.9	-3.6	-2.7
Netherlands	-3.1	-1.7	-0.3	0.5	0.2	0.5	-5.6	-5.1	-4.5
Hungary	-7.3	-6.5	-7.9	-9.4	-5.1	-3.7	-4.6	-4.4	4.3
Poland	-6.2	-5.4	-4.1	-3.6	-1.9	-3.7	-7.4	-7.9	-5
Portugal	-3.7	-4	-6.5	-4.6	-3.1	-3.6	-10.2	-9.8	-4.4
Romania	-1.5	-1.2	-1.2	-2.2	-2.9	-5.7	-9	-6.8	-5.5
Slovakia	-2.8	-2.4	-2.8	-3.2	-1.8	-2.1	-8	-7.7	-4.9
Slovenia	-2.7	-2.3	-1.5	-1.4	0	-1.9	-6	-5.7	-6.4
Sweden	-1	0.6	2.2	2.3	3.6	2.2	-0.7	0.3	0.4
Czech Republic	-6.7	-2.8	-3.2	-2.4	-0.7	-2.2	-5.8	-4.8	-3.3
Finland	2.6	2.5	2.9	4.2	5.3	4.4	-2.5	-2.5	-0.6
Croatia	-4.5	-4.3	-4	-3	-2.5	-1.4	-4.1	:	:

Table 4: Population percentage at risk of poverty thresholds (*)

	Annual data (%)								
	2004	2005	2006	2007	2008	2009	2010	2011	2012
Austria	17.5	16.8	17.8	16.7	18.6	17	16.6	16.9	:
Belgium	21.6	22.6	21.5	21.6	20.8	20.2	20.8	21	:
Bulgaria	:	:	61.3	60.7	38.2	46.2	41.6	47.1	:
Cyprus	:	25.3	25.4	25.2	22.4	22.9	22.9	23.5	:
Czech Republic	:	19.6	18	15.8	15.3	14	14.4	15.3	:
Denmark	16.5	17.2	16.7	16.8	16.3	17.6	18.3	18.9	:
Estonia	26.3	25.9	22	22	21.8	23.4	21.7	23.1	:
EU-27	:	25.6	25.2	24.4	23.5	23.1	23.4	24.1	:
Euro area (17)	:	:	:	:	:	:	:	:	:
Finland	17.2	17.2	17.1	17.4	17.4	16.9	16.9	17.9	:
France	19.8	18.9	18.8	19	18.6	18.5	19.2	19.3	:
Germany	:	18.4	20.2	20.6	20.1	20	19.7	19.9	:
Greece	30.9	29.4	29.3	28.3	28.1	27.6	27.7	31	:
Hungary	:	32.1	31.4	29.4	28.2	29.6	29.9	31	:
Ireland	24.8	25	23.3	23.1	23.7	25.7	29.9	:	:
Italy	26.4	25	25.9	26	25.3	24.7	24.5	28.2	:
Latvia	:	45.8	41.4	36	33.8	37.4	38.1	40.1	:
Lithuania	:	41	35.9	28.7	27.6	29.5	33.4	33.4	:
Luxembourg	16.1	17.3	16.5	15.9	15.5	17.8	17.1	16.8	:
Malta	:	20.2	19.1	19.4	19.6	20.2	20.3	21.4	:
Netherlands	:	16.7	16	15.7	14.9	15.1	15.1	15.7	:
Poland	:	45.3	39.5	34.4	30.5	27.8	27.8	27.2	:
Portugal	27.5	26.1	25	25	26	24.9	25.3	24.4	:
Romania	:	:	:	45.9	44.2	43.1	41.4	40.3	:
Slovakia	:	32	26.7	21.3	20.6	19.6	20.6	20.6	:
Slovenia	:	18.5	17.1	17.1	18.5	17.1	18.3	19.3	:
Spain	24.4	23.4	23.3	23.1	22.9	23.4	25.5	27	:
Sweden	16.9	14.4	16.3	13.9	14.9	15.9	15	16.1	:
United Kingdom	:	24.8	23.7	22.6	23.2	22	23.1	22.7	:
Croatia	:	:	:	:	:	:	31.3	32.7	:

(*) population percentage with disposable income below 60% of median equivalised income

Table 5: Inflation

	Annual data (%)				January-November (%)			Change (%)	
	2008	2009	2010	2011	2010	2011	2012	2011/10	2012/11
Austria	3.2	0.4	1.7	3.6	1.6	3.6	2.5	1.9	-1
Belgium	4.5	0	2.3	3.5	2.2	3.5	2.7	1.3	-0.8
Bulgaria	12	2.5	3	3.4	2.9	3.5	2.3	0.6	-1.2
Cyprus	5.8	2.2	1.1	2.2	1	2.2	3.3	1.2	1
Czech Republic	3.3	1.9	1.9	1.4	1.9	1.5	0.9	-0.4	-0.5
Denmark	3.6	1.1	2.2	2.7	2.1	2.7	2.4	0.5	-0.3
Estonia	10.6	0.2	2.7	5.1	2.5	5.2	4.3	2.7	-0.9
EU-27	3.7	1	2.1	3.1	2	3.1	2.7	1.1	-0.5
Euro area (17)	3.3	0.3	1.6	2.7	1.6	2.7	2.5	1.1	-0.2
Finland	6.3	0.6	1.2	2.1	1.1	2.1	3.6	0.9	1.6
France	3.2	0.1	1.7	2.3	1.7	2.3	2.3	0.5	0
Germany	2.8	0.2	1.2	2.5	1.1	2.5	2.1	1.4	-0.4
Greece	4.2	1.4	4.7	3.1	4.7	3.2	1.1	-1.4	-2.1
Hungary	2.2	1	0.9	2.5	0.8	2.5	2.8	1.6	0.3
Ireland	3.1	-1.7	-1.6	1.2	-1.7	1.2	1.9	2.9	0.8
Italy	3.5	0.8	1.6	2.9	1.6	2.8	3.4	1.2	0.5
Latvia	4.4	0.2	2.6	3.5	2.6	3.4	3.3	0.8	-0.2
Lithuania	15.3	3.4	-1.2	4.2	-1.5	4.3	2.4	5.8	-1.9
Luxembourg	11.1	4.2	1.2	4.1	1	4.2	3.2	3.2	-1
Malta	4.1	0	2.8	3.7	2.8	3.8	2.9	1	-0.8
Netherlands	4.7	1.9	2	2.4	1.9	2.5	3.3	0.7	0.8
Poland	6	4	4.7	3.9	4.7	3.9	5.7	-0.8	1.8
Portugal	4.2	4	2.7	3.9	2.6	3.8	3.8	1.2	0
Romania	2.7	-0.9	1.4	3.6	1.3	3.6	2.8	2.3	-0.7
Slovakia	7.9	5.6	6.1	5.9	5.9	6.1	3.3	0.2	-2.8
Slovenia	3.9	0.9	0.7	4.1	0.6	4	3.8	3.4	-0.3
Spain	4.1	-0.3	1.8	3.3	1.7	3.4	2.4	1.7	-1
Sweden	5.6	0.9	2.1	2.1	2.1	2.1	2.8	0	0.7
United Kingdom	3.6	2.2	3.3	4.5	3.2	4.5	2.9	1.3	-1.7
Croatia	3.9	1.6	1.7	3.3	1.6	3.4	3.1	1.8	-0.3

Table 6: GDP per capita AEP (in PPS - Purchasing Power Standard, EU-27=100)

	Annual data (%)								
	2003	2004	2005	2006	2007	2008	2009	2010	2011
Austria	128	128	125	126	124	124	125	127	129
Belgium	124	121	120	118	116	116	118	119	119
Bulgaria	34	35	37	38	40	43	44	44	46
Cyprus	88	91	93	93	94	99	100	97	94
Czech Republic	77	78	79	80	83	81	83	80	80
Denmark	124	126	123	124	122	125	123	128	125
Estonia	55	57	61	66	70	69	63	63	67
EU-27	100	100	100	100	100	100	100	100	100
Euro area (17)	110	109	109	109	109	109	109	108	108
Finland	113	116	114	114	117	119	114	113	114
France	111	110	110	108	108	107	109	108	108
Germany	116	115	116	115	115	116	115	119	121
Greece	93	94	91	92	90	93	94	87	79
Hungary	63	63	63	63	61	64	65	65	66
Ireland	142	143	144	146	147	132	130	129	129
Italy	111	107	105	104	104	104	104	101	100
Latvia	44	47	50	53	57	58	54	54	58
Lithuania	49	51	53	55	59	61	55	57	66
Luxembourg	247	252	254	270	274	263	255	267	271
Malta	80	78	78	77	76	79	83	85	85
Netherlands	129	129	131	131	132	134	132	131	131
Poland	49	51	51	52	54	56	61	63	64
Portugal	79	77	79	79	79	78	80	80	77
Romania	31	34	35	38	41	47	47	47	49
Slovakia	55	57	60	63	68	73	73	73	73
Slovenia	84	87	87	87	88	91	87	84	84
Spain	101	101	102	105	105	104	103	99	98
Sweden	124	126	122	123	125	124	120	124	127
United Kingdom	121	123	123	121	117	113	111	111	109
Croatia	55	56	57	58	61	63	62	59	61

Table 7: Real labour productivity per person employed (EU-27=100)

	Annual data (%)								
	2003	2004	2005	2006	2007	2008	2009	2010	2011
Austria	120.7	121	118.5	119.2	117.1	116.6	116.2	116.5	116.7
Belgium	135.6	132.6	130.5	129.3	127.7	127.1	127.9	128.6	127.6
Bulgaria	34.8	34.8	35.8	36.4	37.5	39.6	40	41.2	44.3
Cyprus	82.1	82.4	83	84.2	85.5	91.1	92.5	91	90.9
Czech Republic	71.2	73	73.1	74	76.3	74.1	75.9	73.8	74.1
Denmark	106.9	109.3	107.3	107.1	104.8	105.9	105.8	111.8	110.4
Estonia	55	57.7	60.8	62.4	66.7	65.8	65.1	68.4	68
EU-27	100	100	100	100	100	100	100	100	100
Euro area (17)	109.8	108.8	108.8	108.7	108.9	109.1	109	108.6	108.5
Finland	110.1	113.7	111.3	110.7	113.7	113.4	110.2	108.9	109.3
France	116.3	115.5	116.5	115.4	115.6	115.4	117.3	116.5	116.6
Germany	107.9	107.7	108.6	108.8	108.4	108	104.3	106.1	106.6
Greece	101.9	101.2	95.9	97.2	95.5	97.7	98.2	93.3	90.1
Hungary	66	67.1	67.7	67.8	66.6	70.7	72.4	70.9	71.1
Ireland	137.8	137	135.7	136.1	137.1	127.9	134.4	138.9	142.7
Italy	116.8	113.3	112.1	111.2	111.6	113	112.6	110.1	109
Latvia	44.2	45.9	47.8	48.9	51.4	51.6	52.8	53.7	62.4
Lithuania	52.6	53.9	55	56.8	59.6	62.1	58	62.5	64.8
Luxembourg	168.2	170.6	170.3	179.6	180	168.6	161.2	167.1	169
Malta	96.9	94.5	94.6	93.2	92.3	94.5	97.4	97.2	94.8
Netherlands	111.5	112.9	114.6	114.4	114.5	115.5	112.7	112.1	111.6
Poland	60.3	61.9	61.8	61.2	62.3	62.4	65.5	67.4	68.8
Portugal	71.2	69.9	72.9	73.2	74	73.6	76.1	77	75.5
Romania	31.3	34.6	36.1	39.7	43.4	49.2	49.4	48.5	49.2
Slovakia	63.7	65.8	68.8	71.7	76.5	79.8	80	81.2	80.1
Slovenia	78.9	81.6	83.3	83.4	83.2	83.8	80.5	79.3	80.6
Spain	104.2	102.4	101.5	102.8	103.2	104.4	109.6	107.9	108.5
Sweden	112	115.6	112.1	113.1	114.9	114.4	112.2	114.2	115.5
United Kingdom	112.9	114.3	113.8	113.1	110.6	107.5	105.9	105.9	104.1
Croatia	69.6	70.4	71.4	70.5	72.5	74.9	72.9	72.6	74.9

Table 8: Employment Rate in persons aged 20-64

	Annual Data (%)				3 rd quarter (%)			Change (%)	
	2008	2009	2010	2011	2010	2011	2012	11/10	12/11
Austria	75.1	74.7	74.9	75.2	75.5	75.7	76.4	0.2	0.7
Belgium	68.0	67.1	67.6	67.3	67.4	66.9	67.4	-0.5	0.5
Bulgaria	70.7	68.8	65.4	63.9	66.4	65.4	64.8	-1	-0.6
Cyprus	76.5	75.7	75.4	73.4	75.7	72.7	70	-3	-2.7
Czech Republic	72.4	70.9	70.4	70.9	70.8	71.2	72	0.4	0.8
Denmark	79.7	77.5	75.8	75.7	76.4	76.3	75.6	-0.1	-0.7
Estonia	77.0	69.9	66.7	70.4	67.9	72.4	73	4.5	0.6
EU-27	70.3	69	68.6	68.6	68.9	68.9	:	0	:
Euro area (17)	70.2	68.8	68.4	68.5	68.6	68.7	:	0.1	:
Finland	75.8	73.5	73	73.8	73.9	74.7	74.9	0.8	0.2
France	70.4	69.4	69.2	69.2	69.6	69.5	69.6	-0.1	0.1
Germany	74.0	74.2	74.9	76.3	75.3	76.6	:	1.3	:
Greece	66.5	65.8	64	59.9	64.1	59.7	54.9	-4.4	-4.8
Hungary	61.9	60.5	60.4	60.7	61	61.3	:	0.3	:
Ireland	72.3	67.1	65	63.8	65	63.6	63.8	-1.4	0.2
Italy	63.0	61.7	61.1	61.2	60.9	61.1	61	0.2	-0.1
Latvia	75.8	67.1	65	66.3	66.3	67.1	69.7	0.8	2.6
Lithuania	72.0	67.2	64.4	67.2	65.2	67.9	69.9	2.7	2
Luxembourg	68.8	70.4	70.7	70.1	71.6	70.4	72.1	-1.2	1.7
Malta	59.1	58.8	60.1	61.5	60.3	61.4	63.3	1.1	1.9
Netherlands	78.9	78.8	76.8	77	76.9	77	77.3	0.1	0.3
Poland	65.0	64.9	64.6	64.8	65.3	65.3	65.2	0	-0.1
Portugal	73.1	71.2	70.5	69.1	70.4	69.3	66.6	-1.1	-2.7
Romania	64.4	63.5	63.3	62.8	64.6	63.3	:	-1.3	:
Slovakia	68.8	66.4	64.6	65.1	65	65.6	65.4	0.6	-0.2
Slovenia	73.0	71.9	70.3	68.4	70	68.6	68.3	-1.4	-0.3
Spain	68.3	63.7	62.5	61.6	62.8	61.7	59.4	-1.1	-2.3
Sweden	80.4	78.3	78.7	80	79.7	80.9	80.9	1.2	0
United Kingdom	75.2	73.9	73.6	73.6	74	73.6	74.4	-0.4	0.8
Croatia	62.9	61.7	58.7	57	58.4	57.7	:	-0.7	:

Table 9: Employment Rate in persons aged 55-64

	Annual Data (%)				3 rd quarter (%)			Change (%)	
	2008	2009	2010	2011	2010	2011	2012	11/10	12/11
Austria	41	41.1	42.4	41.5	43.1	41.5	43.7	-1.6	2.2
Belgium	34.5	35.3	37.3	38.7	37.5	38.7	40.2	1.2	1.5
Bulgaria	46	46.1	43.5	43.9	43	44.2	47	1.2	2.8
Cyprus	54.8	56	56.8	54.8	57.4	54.9	51	-2.5	-3.9
Czech Republic	47.6	46.8	46.5	47.6	46.5	47.8	50.4	1.3	2.6
Denmark	58.4	58.2	58.4	59.5	59.7	60	60.5	0.3	0.5
Estonia	62.4	60.4	53.8	57.2	52.9	57.5	61.3	4.6	3.8
EU-27	45.6	46	46.3	47.4	46.6	47.7	:	1.1	:
Euro area (17)	44.3	45.1	45.8	47.1	45.9	47.3	:	1.4	:
Finland	56.5	55.5	56.2	57	56.6	57.2	58.7	0.6	1.5
France	38.2	39	39.8	41.5	40.3	41.8	45	1.5	3.2
Germany	53.7	56.1	57.7	59.9	57.7	60.2	:	2.5	:
Greece	42.8	42.2	42.3	39.4	42.6	38.7	36.2	-3.9	-2.5
Hungary	31.4	32.8	34.4	35.8	34.9	36.2	:	1.3	:
Ireland	53.7	51.3	50.2	50	50.6	49.7	48.8	-0.9	-0.9
Italy	34.4	35.7	36.6	37.9	36.6	38	40.9	1.4	2.9
Latvia	59.4	53.2	48.2	50.5	47.4	50.7	54.6	3.3	3.9
Lithuania	53.1	51.6	48.6	50.5	48.3	51.1	53.1	2.8	2
Luxembourg	34.1	38.2	39.6	39.3	38.4	43	42.3	4.6	-0.7
Malta	29.2	27.8	30.2	31.7	30.5	30.9	34	0.4	3.1
Netherlands	53	55.1	53.7	56.1	53.9	56.5	59	2.6	2.5
Poland	31.6	32.3	34	36.9	34.9	37.7	39.6	2.8	1.9
Portugal	50.8	49.7	49.2	47.9	49	48.1	46.9	-0.9	-1.2
Romania	43.1	42.6	41.1	40	43.1	40.5	:	-2.6	:
Slovakia	39.2	39.5	40.5	41.4	40.9	42.2	43	1.3	0.8
Slovenia	32.8	35.6	35	31.2	35.7	32.5	33.2	-3.2	0.7
Spain	45.6	44.1	43.6	44.5	43.8	44.7	44.3	0.9	-0.4
Sweden	70.1	70	70.5	72.3	70.8	72.5	73.5	1.7	1
United Kingdom	58	57.5	57.1	56.7	57.2	56.6	58.3	-0.6	1.7
Croatia	36.7	38.5	37.6	37.1	36.7	36.9	:	0.2	:

Table 10: Total employment growth (age 15 years or over)

	Annual Data (%)						3 rd quarter (%)		
	2006	2007	2008	2009	2010	2011	2010/09	2011/10	2012/11
Austria	1.7	1.8	2	-0.7	0.8	1.7	0.7	1.3	1
Belgium	1.1	1.7	1.8	-0.2	0.7	1.4	1.7	0	1
Bulgaria	3.3	3.2	2.6	-2.6	-4.7	-4.2	-5.4	-2.8	0
Cyprus	1.8	3.2	2.1	-0.5	0.1	0.5	1	2.6	-1.7
Czech Republic	1.3	2.1	2.3	-1.2	-1.7	0.2	-0.2	0.3	-0.1
Denmark	2.1	2.8	1.7	-2.4	-2.3	-0.4	-2.5	0.2	-1.1
Estonia	5.4	0.7	0.2	-9.9	-4.8	7	-3.3	8.6	1.1
EU-27	1.6	1.8	1	-1.8	-0.5	0.3	0	0.2	:
Euro area (17)	1.6	1.8	0.8	-1.8	-0.5	0.2	-0.2	0.4	:
Finland	1.8	2.2	2.6	-2.6	-0.1	1.1	0.6	0.9	0.6
France	1.1	1.4	0.5	-1.3	-0.1	0.5	0.5	0.2	0
Germany	0.6	1.7	1.2	0.1	0.6	1.4	1.5	2.8	:
Greece	1.8	1.6	0.8	-0.2	-1.9	-6.7	-3	-7.3	-8.3
Hungary	0.4	0	-1.4	-2.8	0.3	0.3	1	0.9	:
Ireland	4.4	3.6	-1.1	-8.1	-4.2	-2.1	-3.7	-0.3	-0.2
Italy	2	1.3	0.3	-1.6	-0.7	0.3	-1	0.7	0
Latvia	4.9	3.6	0.9	-13.2	-4.8	-8.1	0.7	-8.9	3.4
Lithuania	1.8	2.8	-0.7	-6.8	-5.1	2	-5.1	2.1	-5.6
Luxembourg	:	:	:	:	:	:	1.6	1.4	5.9
Malta	1.3	3.2	2.6	-0.3	2.4	2.5	3	2.6	2.1
Netherlands	1.7	2.5	1.5	-0.7	-0.4	0.7	-2.2	-0.1	0.8
Poland	3.2	4.5	3.9	0.4	0.5	1	1.1	0.5	-3.4
Portugal	0.5	0	0.5	-2.6	-1.5	-1.5	-1.1	-2.2	-4.1
Romania	:	:	:	-2	-1.4	0.4	-0.5	-2.7	:
Slovakia	2.1	2.1	3.2	-2	-1.5	1.8	-1.3	1.3	-1
Slovenia	1.5	3.3	2.6	-1.8	-2.2	-1.6	-3	-2.4	-2
Spain	4	3	-0.1	-6.5	-2.5	-1.5	-1.7	-2.1	-4.6
Sweden	1.7	2.3	0.9	-2.4	1.2	2.2	1.9	1.9	0.6
United Kingdom	1.1	0.7	0.3	-1.7	-0.7	0.5	0.8	-0.3	1.8
Croatia	:	:	:	:	:	:	-4.2	-0.4	:

Table 11: Unemployment rate (Total)

	Annual Data (%)				3 rd quarter (%)			Change (%)	
	2008	2009	2010	2011	2010	2011	2012	'2011/10	2012/11
Austria	3.8	4.8	4.4	4.2	4.4	3.7	4.3	-0.7	0.6
Belgium	7.0	7.9	8.3	7.2	8.7	7.8	7.7	-0.9	-0.1
Bulgaria	5.6	6.8	10.2	11.2	9.5	10.2	11.5	0.7	1.3
Cyprus	3.7	5.3	6.2	7.9	5.8	7.8	12.1	2	4.3
Czech Republic	4.4	6.7	7.3	6.7	7.1	6.6	7.0	-0.5	0.4
Denmark	3.4	6.0	7.5	7.6	7.3	7.5	7.4	0.2	-0.1
Estonia	5.5	13.8	16.9	12.5	15.5	10.9	9.7	-4.6	-1.2
EU-27	7.0	8.9	9.6	9.6	9.3	9.4	:	0.1	:
Euro area (17)	7.5	9.5	10.0	10.1	9.7	9.8	:	0.1	:
Finland	6.4	8.2	8.4	7.8	7.3	6.8	7.1	-0.5	0.3
France	7.4	9.1	9.3	9.2	9.1	9.0	9.7	-0.1	0.7
Germany	7.5	7.8	7.1	5.9	6.7	5.8	:	-0.9	:
Greece	7.7	9.5	12.6	17.7	12.4	17.8	24.8	5.4	7
Hungary	7.8	10.0	11.2	10.9	10.9	10.7	:	-0.2	:
Ireland	6.0	11.9	13.7	14.7	13.9	15.1	15.0	1.2	-0.1
Italy	6.8	7.8	8.4	8.4	7.6	7.7	9.8	0.1	2.1
Latvia	7.5	17.1	18.7	16.2	17.9	15.1	13.5	-2.8	-1.6
Lithuania	5.8	13.7	17.8	15.4	17.8	14.8	12.3	-3	-2.5
Luxembourg	5.1	5.1	4.4	4.9	3.9	4.4	5.7	0.5	1.3
Malta	6.0	6.9	6.9	6.5	6.8	6.2	6.6	-0.6	0.4
Netherlands	2.8	3.4	4.5	4.4	4.3	4.2	5.1	-0.1	0.9
Poland	7.1	8.2	9.6	9.7	9.2	9.4	9.9	0.2	0.5
Portugal	7.7	9.6	11.0	12.9	11.1	12.6	16.0	1.5	3.4
Romania	5.8	6.9	7.3	7.4	6.9	7.2	:	0.3	:
Slovakia	9.5	12.0	14.4	13.5	14.1	13.1	13.7	-1	0.6
Slovenia	4.4	5.9	7.3	8.2	7.1	7.9	9.2	0.8	1.3
Spain	11.3	18.0	20.1	21.7	19.8	21.5	25.0	1.7	3.5
Sweden	6.2	8.4	8.4	7.5	7.8	6.8	7.2	-1	0.4
United Kingdom	5.6	7.6	7.8	8.0	7.9	8.4	8.0	0.5	-0.4
Croatia	8.4	9.1	11.8	13.5	11.6	12.3	:	0.7	:

Table 12: Men's Unemployment Rate

	Annual Data (%)				3 rd quarter (%)			Change (%)	
	2008	2009	2010	2011	2010	2011	2012	'2011/10	2012/11
Austria	3,6	5,0	4,6	4,0	4,6	3,5	4,3	-1,1	0,8
Belgium	6,5	7,8	8,1	7,1	8,4	7,6	7,7	-0,8	0,1
Bulgaria	5,5	7,0	10,9	12,3	10,1	11,1	12,8	1,0	1,7
Cyprus	3,2	5,2	6,0	8,1	5,7	7,7	12,4	2,0	4,7
Czech Republic	3,5	5,9	6,4	5,8	6,0	5,6	5,9	-0,4	0,3
Denmark	3,2	6,6	8,4	7,7	7,6	7,2	7,3	-0,4	0,1
Estonia	5,8	16,9	19,5	13,1	16,1	10,6	9,6	-5,5	-1,0
EU-27	6,6	9,0	9,6	9,5	9,2	9,2	:	0,0	:
Euro area (17)	6,8	9,3	9,9	9,9	9,4	9,5	:	0,1	:
Finland	6,1	8,9	9,1	8,4	7,6	7,2	7,2	-0,4	0,0
France	6,9	8,9	9,0	8,8	8,7	8,4	9,4	-0,3	1,0
Germany	7,4	8,1	7,5	6,2	7,1	5,9	:	-1,2	:
Greece	5,1	6,9	9,9	15,0	9,7	15,0	21,7	5,3	6,7
Hungary	7,6	10,3	11,6	11,0	11,0	10,6	:	-0,4	:
Ireland	7,1	14,8	16,9	17,8	16,9	18,0	17,9	1,1	-0,1
Italy	5,5	6,8	7,6	7,6	6,8	6,7	8,9	-0,1	2,2
Latvia	8,0	20,3	21,7	18,6	20,0	17,1	13,9	-2,9	-3,2
Lithuania	6,1	17,1	21,2	17,8	20,3	16,7	14,3	-3,6	-2,4
Luxembourg	4,3	4,4	3,8	3,8	2,8	3,5	4,6	0,7	1,1
Malta	5,6	6,6	6,8	6,1	6,9	5,9	5,4	-1,0	-0,5
Netherlands	2,5	3,4	4,4	4,5	4,2	4,3	5,2	0,1	0,9
Poland	6,4	7,8	9,3	9,0	8,7	8,3	9,0	-0,4	0,7
Portugal	6,6	9,0	10,0	12,7	9,8	12,2	16,4	2,4	4,2
Romania	6,7	7,7	7,9	7,9	7,4	7,8	:	0,4	:
Slovakia	8,4	11,4	14,2	13,5	13,9	13,0	13,0	-0,9	0,0
Slovenia	4,0	5,9	7,5	8,2	7,0	8,0	8,4	1,0	0,4
Spain	10,1	17,7	19,7	21,2	19,3	21,1	24,7	1,8	3,6
Sweden	5,9	8,7	8,5	7,6	7,8	6,9	7,4	-0,9	0,5
United Kingdom	6,1	8,6	8,6	8,7	8,4	9,1	8,3	0,7	-0,8
Croatia	7,0	8,0	11,4	13,8	11,0	12,5	:	1,5	:

Table 13: Women's Unemployment Rate

	Annual Data (%)				3 rd quarter (%)			Change (%)	
	2008	2009	2010	2011	2010	2011	2012	'2011/10	2012/11
Austria	4.1	4.6	4.2	4.3	4.2	3.9	4.4	-0.3	0.5
Belgium	7.6	8.1	8.5	7.2	9.0	8.0	7.8	-1.0	-0.2
Bulgaria	5.8	6.6	9.5	10.0	8.8	9.2	10.2	0.4	1.0
Cyprus	4.3	5.5	6.4	7.7	5.9	7.9	11.8	2.0	3.9
Czech Republic	5.6	7.7	8.5	7.9	8.5	7.8	8.4	-0.7	0.6
Denmark	3.7	5.3	6.5	7.5	6.9	7.7	7.4	0.8	-0.3
Estonia	5.3	10.6	14.3	11.8	14.9	11.3	9.7	-3.6	-1.6
EU-27	7.5	8.9	9.6	9.7	9.4	9.6	:	0.2	:
Euro area (17)	8.3	9.7	10.2	10.4	10.0	10.2	:	0.2	:
Finland	6.7	7.6	7.6	7.1	6.9	6.4	6.9	-0.5	0.5
France	7.9	9.4	9.7	9.7	9.6	9.6	10.0	0.0	0.4
Germany	7.7	7.3	6.6	5.6	6.3	5.6	:	-0.7	:
Greece	11.4	13.2	16.2	21.4	16.1	21.5	28.9	5.4	7.4
Hungary	8.1	9.7	10.7	10.9	10.7	10.8	:	0.1	:
Ireland	4.6	8.0	9.7	10.8	10.2	11.6	11.5	1.4	-0.1
Italy	8.5	9.3	9.7	9.6	8.7	9.0	11.1	0.3	2.1
Latvia	6.9	13.9	15.7	13.8	15.9	13.1	13.2	-2.8	0.1
Lithuania	5.6	10.4	14.5	13.0	15.3	12.9	10.4	-2.4	-2.5
Luxembourg	6.0	6.1	5.1	6.3	5.3	5.4	7.0	0.1	1.6
Malta	6.9	7.6	7.1	7.1	6.7	6.7	8.6	0.0	1.9
Netherlands	3.0	3.5	4.5	4.4	4.3	4.2	5.0	-0.1	0.8
Poland	8.0	8.7	10.0	10.5	9.7	10.6	10.9	0.9	0.3
Portugal	9.0	10.3	12.1	13.2	12.6	13.1	15.6	0.5	2.5
Romania	4.7	5.8	6.5	6.8	6.3	6.6	:	0.3	:
Slovakia	10.9	12.8	14.6	13.6	14.3	13.3	14.6	-1.0	1.3
Slovenia	4.8	5.8	7.1	8.2	7.1	7.8	10.0	0.7	2.2
Spain	13.0	18.4	20.5	22.2	20.4	22.1	25.4	1.7	3.3
Sweden	6.6	8.0	8.3	7.5	7.8	6.7	7.0	-1.1	0.3
United Kingdom	5.1	6.4	6.8	7.3	7.2	7.7	7.6	0.5	-0.1
Croatia	10.1	10.3	12.3	13.2	12.3	12.0	:	-0.3	:

Table 14: Long term unemployment rate (*)

	Annual Data (%)				3 rd quarter (%)			Change (%)	
	2008	2009	2010	2011	2010	2011	2012	'2011/10	2012/11
Austria	36.9	33.1	39.9	42.9	41	43	:	2	:
Belgium	39.3	35.6	42.5	45.2	43.6	45.5	:	1.9	:
Bulgaria	47.5	44.2	48.8	48.4	49	48.7	43.3	-0.3	-5.4
Cyprus	25.7	26.7	45.1	54.5	46.3	55.1	47.3	8.8	-7.8
Czech Republic	12.7	13.2	17.8	18.6	19	19.1	18.3	0.1	-0.8
Denmark	13.5	9.5	20.2	24.4	21.7	23.1	27.7	1.4	4.6
Estonia	47.5	40.8	45	49.6	46.1	51	60.7	4.9	9.7
EU-27	52.5	45.5	47.4	48	47.6	48.4	:	0.8	:
Euro area (17)	30.1	27.4	45.3	56.8	52.6	57.3	52.8	4.7	-4.5
Finland	24.1	24.5	32.6	33.4	32.6	32.4	34.6	-0.2	2.2
France	51.6	43.1	46.4	56.1	47.7	60.3	56.4	12.6	-3.9
Germany	49.3	30.1	41	40.6	43.1	40.4	43.3	-2.7	2.9
Greece	27.1	29.2	49.3	59.3	49.7	59	60	9.3	1
Hungary	24.2	21.3	25.2	25.9	24	24.6	26.7	0.6	2.1
Ireland	37.4	35.2	40.2	41.5	42	42.4	41.1	0.4	-1.3
Italy	13.6	10.3	20.3	20.8	22.1	23.6	32.1	1.5	8.5
Latvia	21.1	23.2	41.4	51.9	42.2	54	50.8	11.8	-3.2
Lithuania	32.2	23.2	29.3	28.6	22.8	29	21.6	6.2	-7.4
Luxembourg	46.5	41.6	49.3	47.9	52.5	48	:	-4.5	:
Malta	42.2	43.5	46.3	46.2	50.9	44	49.1	-6.9	5.1
Netherlands	34.4	24.2	27.5	33.5	28	32.9	33.6	4.9	0.7
Poland	33.5	30.3	31.1	37.2	32.3	38.3	40.4	6	2.1
Portugal	47.4	44.2	52.3	48.1	54	46.6	50	-7.4	3.4
Romania	41.3	31.6	34.9	41.9	37.8	41.4	:	3.6	:
Slovakia	42.2	30.1	43.3	44.2	46.5	42.5	49.9	-4	7.4
Slovenia	69.5	54	64	67.8	66.7	65.9	67.5	-0.8	1.6
Spain	45.6	44.4	48.4	51.9	50.6	53.2	54.2	2.6	1.0
Sweden	18.4	16.7	24	22.2	27.8	24.6	21.6	-3.2	-3.0
United Kingdom	17.8	23.7	36.6	41.6	37.4	41.5	44.6	4.1	3.1
Croatia	63.1	56.1	56.9	63.9	62.2	64.3	:	2.1	:

(*) % of unemployed for 12 months or higher to the total number of unemployed persons

Table 15: Youth Unemployment rate (15 to 24 years)

	Annual Data (%)				3 rd quarter (%)			Change (%)	
	2008	2009	2010	2011	2010	2011	2012	'2011/10	2012/11
Austria	8.0	10.0	8.8	8.3	9.6	7.7	9.5	-1.9	1.8
Belgium	18.0	21.9	22.4	18.7	22.5	23	21.7	0.5	-1.3
Bulgaria	12.7	16.2	23.2	26.6	21.4	23.3	24.6	1.9	1.3
Cyprus	9.0	13.8	16.7	22.4	13	22.2	26.4	9.2	4.2
Czech Republic	9.9	16.6	18.3	18.0	18.4	18.4	19.5	0.0	1.1
Denmark	8.0	11.8	14.0	14.2	14.7	15.3	13.9	0.6	-1.4
Estonia	12.0	27.5	32.9	22.3	28.0	22.2	19.5	-5.8	-2.7
EU-27	15.6	19.9	20.9	21.3	20.5	21.2	:	0.7	:
Euro area (17)	15.6	19.8	20.6	20.7	20	20.2	:	0.2	:
Finland	16.5	21.5	21.4	20.1	14.2	14.3	13.7	0.1	-0.6
France	18.6	23.2	22.8	22	22.6	20.6	23.3	-2	2.7
Germany	10.6	11.2	9.9	8.6	10.3	9.1	:	-1.2	:
Greece	22.1	25.8	32.9	44.4	32.5	45.0	56.6	12.5	11.6
Hungary	19.9	26.5	26.6	26.1	26.7	26.8	:	0.1	:
Ireland	12.7	24.3	27.8	29.1	28	29.8	31.1	1.8	1.3
Italy	21.3	25.4	27.8	29.1	24.7	26.5	32.1	1.8	5.6
Latvia	13.1	33.6	34.5	31	32.5	30.1	31.1	-2.4	1
Lithuania	13.4	29.2	35.1	32.9	35.5	31.7	27.5	-3.8	-4.2
Luxembourg	17.9	17.2	14.2	16.8	12.5	15.8	18.4	3.3	2.6
Malta	12.2	14.4	13	13.7	10	12.3	14.7	2.3	2.4
Netherlands	5.3	6.6	8.7	7.6	8.3	7.4	9.2	-0.9	1.8
Poland	17.3	20.6	23.7	25.8	23.4	25.4	25.8	2	0.4
Portugal	16.4	20	22.4	30.1	23.4	30	39.0	6.6	9.0
Romania	18.6	20.8	22.1	23.7	22.9	24.1	:	1.2	:
Slovakia	19	27.3	33.6	33.2	34.3	33.6	34.4	-0.7	0.8
Slovenia	10.4	13.6	14.7	15.7	13	13.8	21.3	0.8	7.5
Spain	24.6	37.8	41.6	46.4	40.7	45.8	52.3	5.1	6.5
Sweden	20.2	25	25.2	22.9	20.9	18.3	20	-2.6	1.7
United Kingdom	15	19.1	19.6	21.1	19.9	22.9	21.4	3.0	-1.5
Croatia	21.9	25.1	32.6	36.1	30.9	31.1	:	0.2	: