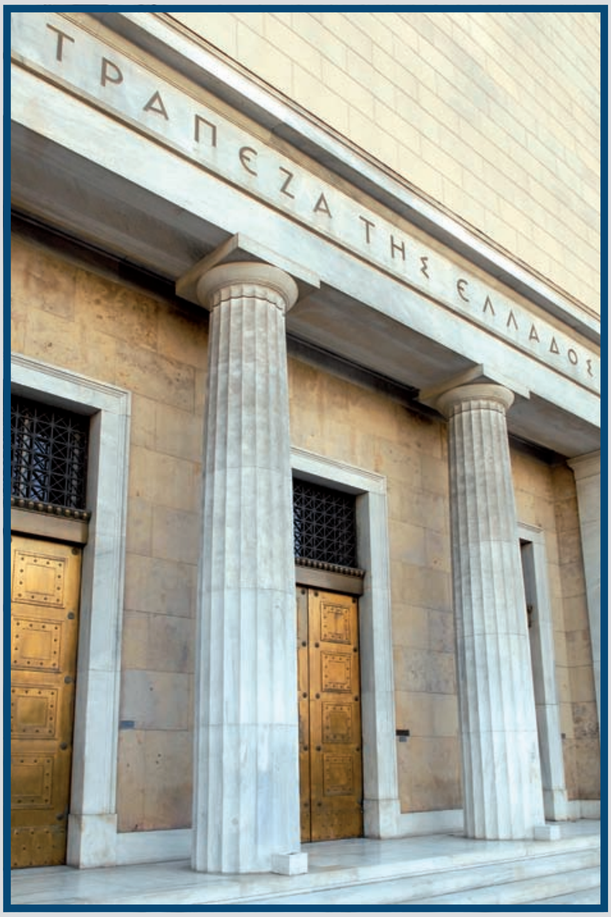
ANNUAL REPORT
2011

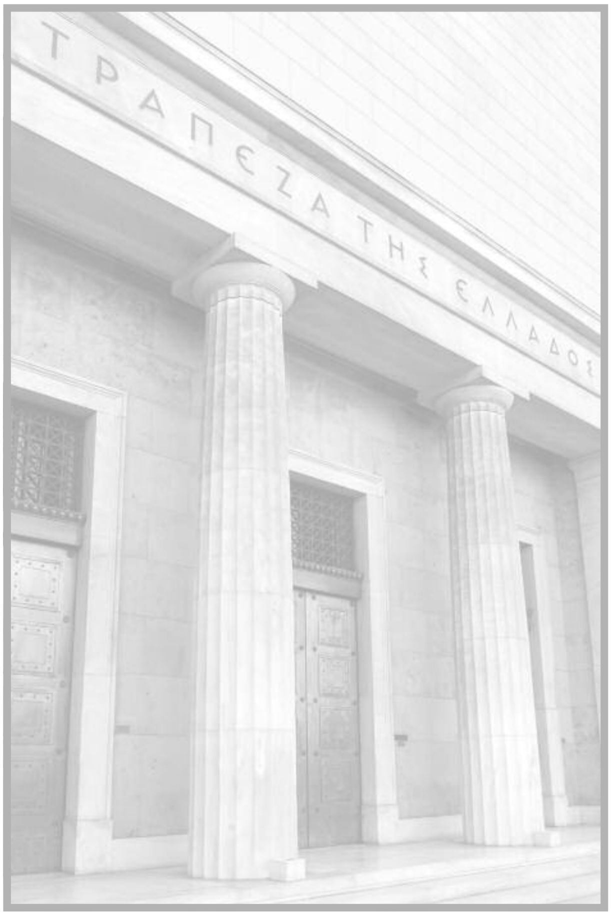


APRIL 2012

BANK OF GREECE
EUROSYSTEM

ANNUAL REPORT
2011

Presented to the 79th General Meeting of Shareholders
on 24 April 2012 by Governor George Provopoulos



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BANK OF GREECE

Address
21, E. Venizelos Avenue
GR-102 50 Athens

Website
http://www.bankofgreece.gr

Telephone
+30 210 320.2393

Fax
+30 210 323.3025

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GENERAL COUNCIL

George Provopoulos	**Chairman – Governor**	
Helen Dendrinou – Louri	**Deputy Governor**	
Ioannis Papadakis	**Deputy Governor**	
George Demopoulos	Member of the MPC and Member	*Expiry of term of office: 24.4.2012*[*]
George Oikonomou	»	
Charalampos Stamatopoulos[**]	»	
Dimitrios Asimakopoulos	Member	
Ioannis Gozadinos	»	
Georgios Kassimatis	»	
Georgios Mylonas	»	
Christos Polyzogopoulos	»	*Expiry of term of office: 2012*[***]
Michael Chandris	»	
Panagiotis Karakousis	Government Commissioner	

* The term of office of Mr. George Demopoulos, who was appointed Member of the Monetary Policy Council for six years, by the Presidential Decree of 25 April 2006 published in the Government Gazette, in accordance with Article 35A of the Bank's Statute, expires on 24 April 2012.

** By the Presidential Decree of 19 May 2011 published in the Government Gazette, Mr. Charalampos Stamatopoulos was appointed Member of the Monetary Policy Council, and consequently Member of the General Council with a term of office that expires on 4 April 2019, in accordance with Article 35A of the Bank's Statute, replacing Mr. Panayotis Thomopoulos, who was appointed Chairman of the Hellenic Financial Stability Fund.

*** The term of office of Mr. Christos Polyzogopoulos, elected by the Annual General Meeting of 15 April 2009, expires at the current Annual General Meeting, in accordance with Article 21 of the Bank's Statute.

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I FINANCIAL RESULTS FOR 2011

The Bank's total net revenue for 2011 increased by 52.7%, while total operating expenses excluding provisions declined significantly for the second consecutive year (2011: 9%, 2010: 13.2%), mainly reflecting lower staff costs and pensions.

Provisions increased substantially to €1,151.4 million, compared with €472.9 million in 2010.

As a result of high provisioning, the Bank's profits for 2011 came to €96.6 million, compared with €190.4 million in 2010.

In accordance with Article 71 of the Bank's Statute, the General Council has decided to propose to the General Meeting of Shareholders to allocate the profits of 2011 as follows: distribute €16.6 million to the shareholders and transfer the balance (€80 million) to the State.

In greater detail, the Bank's revenue and expenses in financial year 2011 were as follows:

Income

The Bank's total net income from monetary policy operations, from interest and commission fees, and other revenue from domestic and foreign activities increased by 52.7% to €1,594.8 million, from €1,044.4 million in 2010.

Specifically:

Net interest income and income from financial operations and the pooling of Eurosystem monetary income came to €1,459 million, up by 66% from €878 million in 2010. This resulted mainly from (i) the fact that the key ECB interest rate averaged 1.25% in 2011, compared with 1% in 2010, (ii) the rise in banknotes in circulation (5.8%) as well as (iii) increased portfolio returns.

Net income from fees and commissions dropped by 30.6% to €98.3 million, from €141.5 million in 2010, mainly due to a reduction in the fees and commissions received as from 1 January 2011 for transactions conducted by the Bank on behalf of the Greek State.

Income from equity shares and participating interests increased by €11.5 million to €23.8 million, compared with €12.3 million in 2010. In its most part, this revenue relates to the Bank's share in the ECB capital and to dividends received from participating interests of the Bank. Out of its profits (€1,894 million) in 2011, the ECB used €1,166 million to increase its portfolio risk provisions. Out of the remaining €728 million that was allocated to the National Central Banks of the Eurosystem, the Bank of Greece received €20.4 million (2010: €4.8 million), corresponding to its share (2.80818%) in the capital of the ECB.

Finally, other income increased by 11.2% to €13.9 million, compared with €12.5 million in 2010. The bulk of this amount involves income from activities carried out by the Banknote Printing Works (IETA) on behalf of the Greek State and various other types of revenue.

Expenses

Total expenses in 2011 increased by €644.2 million to €1,498.2 million, compared with €854 million in 2010, solely on account of high provisioning, while operating expenses excluding provisions declined.

Specifically:

The Bank's operating costs excluding provisions (staff costs, pensions, depreciation and other costs) decreased by €34.4 million (i.e. 9%) to €346.7 million, from €381.1 million in 2010, mainly because staff costs and pensions were significantly reduced by €33.5 million (10.5%).

As part of a general effort to rationalise the Bank's operating expenses, staff costs and pensions were reduced by 14% in the past two years, while overtime employment costs were cut down by 39%. In 2011, travelling expenses were cut by 36% and payments for outsourcing by 14%. Moreover, since late 2009, the members of Administration and the Monetary Policy Council have waived 20% of their pay.

Operating expenses were reduced despite the Bank's increased obligations in ensuring financial stability (additional audits etc.) and supervising private insurance.

High provisioning for operating risks and obligations continued in 2011 (€1,151.4 million were allocated), reaching €3,951 million on aggregate.

High provisioning is in line with the principle of prudence followed by the ECB and the NCBs of the Eurosystem. This practice aims at strengthening the financial position of the Bank of Greece, enabling it to fulfill its duties and address the risks it faces, in the best possible way.

Organisational restructuring

Coordinated action towards a more functional and efficient structure that will allow the Bank of Greece to meet its ever-changing needs continued, with the merger or the restructuring of units and the facilitation of their seamless and more rationalised operation or their more efficient supervision and control.

In particular, improvements involved rationalising the operation of regional units, by gradually abolishing the "notes held to order scheme" network that serves the outlets and removing tellers from tax and customs offices. As of 1 March 2012, the Bank's tellers were removed from the Athens Customs Office and the 2nd Customs Office of Thessaloniki. The outlets of Pyrgos and Corfu have been operating without the support of the "notes held to order scheme" for their cash transactions as of 15 July 2011 and 16 March 2012, respectively. Moreover, the remaining seven outlets are in the process of operating without such support as well.

Furthermore, a procedure was established rationalising cash transports to the "notes held to order scheme" network by reducing their number and cost, abolishing at the same time twenty-seven (27) units of the network as of 9 February 2011. In this context, another procedure was also established, limiting the use of cash in transactions, with an aim to further cut down on cash transfers and ensure safety in transactions.

It should also be noted that the regulatory framework for the operation of the Bank's units is being streamlined and adapted to the new requirements by processing and finalising Operating Regulations and submitting them for final approval to the General Council.

At the same time, seeking to enhance its services to the State and other entities (mainly legal persons in public law and public organisations), the Bank of Greece applied an integrated electronic communications system, by adjusting existing systems and procedures so as to automatically carry out payment orders issued by such entities to beneficiaries' accounts with other credit institutions.

Regarding organisational restructuring, the following are worth noting:

- the adjustments made to the organisational structure and operation of the Supervision of Credit and Related Financial Institutions Department;

- the abolition of the Payment Systems Department and the establishment of a new Payment and Settlement Systems Department, which took up the Book Entry Securities Management Section and the Electronic Secondary Securities Market Section from the Government Financial Operations and Accounts Department;

• the Payment Systems Oversight Section of the abolished Payment Systems Department came under the Financial Stability Department;

• the Market Risk Monitoring and the Credit Risk Monitoring Sections of the Financial Stability Department were merged into a new Financial Risk Monitoring Section;

• the Administration Department, the Strategic Planning and Organisation Department and the Department of Technical Services were abolished and two new ones (Human Resources and Organisation Department, and Technical and Administrative Support Department) were created with the aim to achieve synergies and best address matters relating to technical projects and procurement;

• the structure of the Statistics Department became more efficient and functional, by abolishing Sectors and merging or abolishing some Sections and Services.

Corporate Governance

The Audit Committee, which was established in late 2010, provided support to the Bank's General Council in 2011, in its field of competence, giving emphasis, inter alia, on the following:

• Review of the Bank's annual financial statements in respect to completeness and integrity of data, and information content, according to the applicable regulatory framework and the law, and submission of a relevant Report to the General Council;

• Evaluation of external auditors' work, independence, terms of employment and fees, and supervision of the procedure for the selection of new external auditors for financial years 2012-2016, in accordance with the Bank's applicable policy;

• Supervision of the Internal Control System, which also includes the Compliance Unit and the Risk Management Unit functions;

• Monitoring and evaluating the independent, adequate and operational efficiency of the Bank's Internal Audit Department.

The Risk Management Unit was launched in early 2011. Its objective is to effectively cover all types of risk, including financial and operational risks (but excluding compliance risks), ensure uniform risk control, apply specialised risk management and coordinate at Bank level. The establishment of the Risk Management Unit and the Risk Management Committee —to which the Unit recommends appropriate techniques for reducing risks to tolerable levels— aims at enhancing the Bank's internal control and corporate governance system.

The Compliance Unit, in line with the corporate governance principles that all credit institutions apply, is administratively independent of the other Departments of the Bank and reports directly to the Administration, the Audit Committee and the General Council. The Compliance Unit aims at identifying, evaluating and promptly addressing legal and reputational risks or losses incurred by the Bank due to non-compliance with the regulatory framework that governs its operation. The Unit fulfills the obligations that the Bank has assumed in the context of self-regulation for the prevention and suppression of money laundering and terrorist financing attempted through its operations. The new administrative structure seeks to enhance this function, as the new Unit engages systematically in advisory action and coordination, while continuously monitoring and performing inspections in cooperation with the Internal Audit.

Buildings and technical projects

As regards the Bank's premises, in 2011 the Technical and Administrative Support Department continued the maintenance and rearrangement of the Bank's buildings and spaces, as part of a project to improve working conditions, enhance the physical security of facilities and transactions, and switch over to more environmentally-friendly solutions.

In respect to environmental management, the tender for the construction of the private network for natural gas heating in the Halandri complex was concluded, works were commissioned and construction began. At the same time, designs for meeting part of the energy requirements of these buildings with the development of a photovoltaic park are being prepared.

Meanwhile, the refurbishment of offices in the Head Office was completed in 2011 and works to transform the ground floor on Stadiou Street into a transaction area began. Measures were also taken to enhance the security of cash transports and of the Bank's buildings in Athens and elsewhere. Finally, the implementation of a new contract for the provision of mobile and fixed-line telephony services for the Bank's buildings in Attica contributed to reducing telecommunication costs substantially.

Other activities

In the context of continuing research into matters relating to the Greek and European economy, the Bank participated in the Eurosystem's research activities.

About 20 working papers and one issue of the Economic Bulletin of the Bank of Greece were published in 2011. Joint research projects were also carried out, bringing together experts from the Bank of Greece and the domestic and foreign academic community, as well as postgraduate students from Greek universities, on matters relating to social policy, public debt sustainability, competition in the European banking system, monetary policy and regulatory burden, competition and growth.

Moreover, four conferences and events on the real estate market, social policy and SouthEast European countries were organised, as well as 20 seminars and workshops with the participation of speakers from Greece, Europe and the US, aiming to inform the Bank's economists and the Academic Community about the latest developments in research.

In 2011 the Climate Change Impacts Study Committee completed its report on "The environmental, economic and social impacts of climate change in Greece", which was published in a thick volume and was posted, along with the relevant studies, on the Bank's website. This project required the cooperation of 112 scientists for two years. The report of the Committee was presented in a special event at the Athens Concert Hall on 1 June 2011.

The Museum of the Bank of Greece continues to steadily attract visitors interested in the numismatic and economic history of modern Greece. In 2011, the first year of its operation, the number of visitors exceeded 5,000. In their majority, these visitors were high school and university students, which is fully in line with the Museum's educational role and mission. Diplomatic representatives and representatives of foreign central banks also visited the Museum.

In the context of the Bank's corporate social responsibility, the exhibition "Bank of Greece: The Buildings" was organised in September-November 2011 at the Benaki Museum. The exhibits (models, architectural drawings, photographs, etc.) are important evidence of the history of the Bank and of modern Greek architecture, and were presented to the public for the first time. In parallel with the exhibition, the Bank published an album (in Greek) under the same title, rich in photographic material. 3,500 people visited the exhibition.

Expiry of General Council members' term of office

The term of office of Mr. George Demopoulos, who was appointed Member of the Monetary Policy Council for six years, by the Presidential Decree of 25 April 2006 published in the Government Gazette, expires on 24 April 2012, in accordance with Article 35A of the Bank's Statute.

By a Presidential Decree, Mr. Charalampos Stamatopoulos was appointed Member of the Monetary Policy Council with a term of office that expires on 4 April 2019, replacing Mr. Panayotis Thomopoulos, who was appointed President of the Hellenic Financial Stability Fund.

The term of office of Mr. Christos Polyzogopoulos, elected by the Annual General Meeting of 15 April 2009, expires at the current Annual General Meeting, in accordance with Article 21 of the Bank's Statute. For this reason, the General Meeting will be called upon to elect a new General Council member, for a three-year term, in his place. The outgoing General Council member is eligible for re-election.

II THE STRATEGY FOR THE GREEK ECONOMY'S EXIT FROM THE CRISIS AND WHAT IS AT STAKE

1 THE OBJECTIVE CONDITIONS ARE MORE FAVOURABLE THAN PREVIOUSLY, BUT EXIT FROM THE CRISIS WILL DEPEND EXCLUSIVELY ON THE COUNTRY'S WILLINGNESS AND ABILITY TO RISE TO THE HISTORIC CHALLENGE

The historical stakes are still high

Two years after the first Memorandum, we are now faced with a new challenge, one that is especially crucial for the country's future. Despite the progress made, failure to act in a resolute and timely manner, along with the recession, resulted in a worsening of the dynamics of public debt, making a new agreement for financial support necessary. The size of the loan support package —taken together with the first package of May 2010— is unprecedented in relation to the size of our economy and covers borrowing needs up to 2015, provided that the accompanying reform programme is implemented promptly and rigorously. The new loan agreement and the economic adjustment programme 2012-2014 create more favourable conditions for pursuing the required effort and are tangible proof of our partners' willingness to support us. On the other hand, the international environment remains fluid and uncertainty continues to surround the course of the global economy and the unfolding of the sovereign debt crisis in European economies.

These objective facts, both at home and abroad, leave no room for slackening off or complacency. If we are to take advantage of the new opportunity, we must now promptly implement all that we have agreed to and make up for the delays of previous years. There is no easy way out of the crisis. The adjustment that has begun must be carried through with determination.

Inevitably, the current pre-election period has temporarily sidelined planned reforms. A significant part of the credibility gained thanks to the loan agreement and the cooperation between political forces has already been used up. If, after the election, there is any question about the will of the new government and of society to implement the loan agreement and the reform programme, today's favourable prospects will be reversed. In such an event, the problems would rapidly multiply and spread to total economy, leading the country to an impasse.

What is historically at stake remains crucial: a choice between an orderly, albeit painstaking, effort to reconstruct the economy within the euro area, with the support of our partners; or
a disorderly economic and social regression, taking the country several decades back, and eventually driving it out of the euro area and the European Union.

We are now called upon to resolve this dilemma through actions, and not just words, and to assume the historical responsibility of making the choice, as a society, as a political system, as citizens. The future of our country is today in our hands.

Past failures to act in a resolute and timely manner, as well as delaying tactics, have magnified the actual costs of adjustment

The second adjustment programme, along with the private sector involvement in the restructuring of Greece's public debt, leading to its substantial reduction, mark the end of one phase of the crisis. During that phase, destabilisation was avoided. With the help of our partners, with a hard effort and at considerable cost, changes were made that were important, but still insufficient in relation to the size of the economic problem at hand. This explains the repeated underperformance with respect to the targets of the adjustment programme after the first Memorandum. The related revisions would have been avoided if we had accepted from the outset our full responsibility *about the need to change course, once it had become clear that the growth model followed was no longer sustainable.*

This did not happen, or at least not to the extent required. The Memorandum, which contained reforms that should had been implemented long ago, was handled defensively and treated as an external imposition. Under the delusion that the political and social costs could be contained, the changes made were often limited to the strict minimum. This defensive stance, however, proved to be totally counter-productive – *it multiplied the cost of adjustment and deepened and prolonged the recession.*

A promising new start: a battle has been won, but the war is not over

This brought us to the restructuring of debt and the new loan agreement – choices which, given the circumstances, had become unavoidable. The agreement averts a deterioration in the public debt dynamics and creates a more favourable framework for the economy. Thus, a dangerous phase of the crisis comes to a close —at great social cost, but without any devastating effects— and we now find ourselves at a promising new starting point. A battle has been won, but not the war. This is why there can be no justification for slackening off or for complacency. On the contrary, heightened and continued vigilance is required, together with an intensification of efforts with more effective tools and a faster pace.

The effective implementation of reforms calls for qualitative changes across the entire spectrum of economy and society

In order to succeed where we have systematically failed in the past, we must abandon the attitudes and behaviours that led us to the crisis in the first place and promptly make fundamental qualitative changes. Above all, we need to change the way in which we plan, decide and ultimately implement reforms, which at the present critical juncture may be painful in the short run, but historically necessary. Changes must be made to all governance practices that have proved ineffective. These changes involve the functioning of the state, the operation of public administration and more broadly, institutions, the political system, the judicial system, the social partners, as well as the values and attitudes that shape our behaviour.

The agreement of society and of political forces is needed on the main issue: the country's European prospects and growth

For these long-overdue changes to proceed, what is needed is the broadest possible consensus across society and the spectrum of political views.

Citizens must be convinced of the necessity of the changes stemming from the country's choice of euro area membership; further they must understand that an eventual failure to implement the changes would entail losses many times greater, as well as an irreparable break-up of social cohesion.

Political forces must focus on what unites them, thereby ensuring the continuity of the state, which also means safeguarding both the rule of law and equality before the law. Moreover, looking beyond their legitimate —and necessary within a democracy— difference in views and approaches, the political forces must safeguard the continuity of the much-needed core reforms.

The necessary changes can be realised today

Today we are better positioned to take action towards economic recovery and towards changing our growth and governance models – a medium-term goal, the pursuit of which must nonetheless begin immediately to ensure sustainable growth. We must take advantage of this position to build on what we have achieved and to discard all that has kept us back. The objective conditions that make this possible are in place:

- The restructuring of the debt substantially reduces the country's debt obligations and the cost of servicing them, thereby facilitating fiscal adjustment and supporting economic growth.

- The loan agreement and the accompanying economic adjustment programme were passed by Parliament with a large majority.

• Whilst the fiscal deficit remains high, it has been substantially reduced over the past two years. The objective of achieving primary surpluses from 2013 onwards is clearly attainable.

• The supportiveness of our partners is in the form of concrete and substantial assistance.

• The need to speed up the recovery features prominently on the agenda of consultations with the European Union and has generated a positive response.

• There is now broader public awareness of the gravity of the situation and of the need for radical change if Greece is to remain within the European Union.

• The banking system proved resilient during a difficult period and today looks forward to its restructuring, which would enable it to operate more effectively to the benefit of the economy.

Uncertainty and risks

The abovementioned factors will help the economy to recover from the crisis and then to settle onto a steady growth path. However, the economic developments have yet to show an improvement, while the risks remain high and uncertainty is still considerable.

The recession and unemployment turned out worse than initially expected

• The recession that began in 2008 continues unabated. In 2011, real GDP contracted by 6.9%. The situation worsened in the fourth quarter, reflecting, among other things, the fact that uncertainty remained high. The decline in GDP was driven by the fall in both consumption and investment, the latter dropping by more than 20%, i.e. much more than expected.

• A further reason for the deterioration in GDP in the fourth quarter of 2011 was the halt in the upward trend in real exports of goods, after four successive quarters of growth (on a national accounts basis). Exports of goods increased on average in 2011, but more slowly than in 2010 (3.6% against 5.4%). The decrease in exports in the fourth quarter can be attributed not only to the slowdown in economic activity in our trading partners, but also to financial constraints faced by exporting firms (in particular, limited access to bank and trade credit).

• On the supply side, output of the secondary sector fell sharply (almost twice as much as in 2010: -12%, compared with -6.1%), mainly attributable to construction (-17.9%, against -8.1% in 2011) and industry including energy (-9.1%, from -5%). The decline in output of the tertiary sector intensified as well (-5.9%, against -3.1%). By contrast, agricultural output increased by 2.5% but, given the sector's small size, this positive development had little effect on GDP as a whole.

• The decline in production was the main cause of the net loss of some 298,000 jobs and the surge in unemployment by approximately 248,000 people in 2011.

• Conditions in the financial sector deteriorated. The rate of credit expansion to the private sector, which has been steadily decelerating since 2008, turned negative in 2011. While this development can be partly attributed to reduced demand for credit on account of the recession, an important factor was also the liquidity squeeze experienced by banks, resulting from the loss of confidence brought about by the fiscal crisis and the debt situation. Today many sound businesses are suffering the consequences of that squeeze and, as a result, are having difficulty staying afloat.

The general government deficit was reduced in 2011 as a percentage of GDP, but meeting the targets for 2012 will require a hard and persistent effort

According to estimates due to be released by Eurostat on 23 April, the general government deficit was reduced by more than one percentage point, while the primary deficit was reduced by about 2.5% of GDP. Furthermore, in the first quarter of 2012, the central government deficit, on a cash basis, decreased markedly year-on-year, while a primary *surplus* in the order of 0.5% of GDP was recorded, compared with a primary *deficit* of 0.5% of GDP over the corresponding period in 2011. Primary expenditure fell, albeit less than targeted, due to increased subsidies to social security funds. Attaining the full-year targets will obviously require a hard and persistent effort.

Meanwhile, there is considerable uncertainty in the international environment as well

Global economic activity, after a strong recovery in 2010, slowed in 2011 on account of the sovereign debt crisis in advanced economies, the general decline in confidence, and the impact on demand from rising and currently very high commodity prices.

The global economy's recovery suffered a severe blow in the second half of 2011 and particularly in the last months of the year, from heightened uncertainty caused by the intensifying sovereign debt crisis in the euro area. As a consequence, the risks surrounding projections for 2012 remain elevated. GDP growth is expected to slow both in emerging and developing economies, though still remaining high; among advanced economies, the US and Japan are expecting an improvement, whereas the euro area will enter a mild recession in 2012. This projection is subject to considerable downside risks, relating in particular to an intensification of the debt crisis as well as further increases in commodity prices.

The recession is negatively affecting expectations and is fuelling the vicious circle

Delays with fiscal adjustment and the implementation of structural reforms, negative developments in the real economy and adverse conditions still surrounding the provision of bank finance to the economy, apart from their direct impact on incomes and especially unemployment, are also contributing to uncertainty about the economic outlook. As long as the vicious circle of fiscal contraction-recession-uncertainty continues, the prospects for meeting deficit and debt targets will tend to weaken, thus refuelling negative expectations.

Some consider the vicious circle to be due to the tight fiscal policy pursued. Though not without foundation, this interpretation is incomplete. It fails to take into account that, while fiscal consolidation does bring about a decrease in aggregate demand, it also affects *expectations*. Positive expectations can be generated when:

(i) a fiscal consolidation plan is able to convince that it forms part of a credible medium-term programme, aimed at reducing the share of the public sector in the total economy, frees up resources for the private sector and ensures a smooth servicing of public debt; and

(ii) there is strong evidence that the economic adjustment programme is likely to succeed and that its continuity is ensured, regardless of political developments.

When these two conditions are in place, expectations of a *positive* final outcome can take hold, indirectly boosting consumption and investment. These indirect effects can, to a greater or lesser extent, offset the decline in demand brought about by the fiscal deficit reduction and, after a year or two, lead to economic recovery.

2 A STRATEGY THAT GOES BEYOND THE MEMORANDUM – GEARED TOWARDS AN EXIT FROM THE CRISIS AND TOWARDS SUSTAINABLE GROWTH – MUST BE IMPLEMENTED CONSISTENTLY AND WITHOUT DELAY

A national strategy for the orderly reconstruction of the economy

It has now become clear that the changes undertaken thus far are insufficient. Both the fiscal and the external deficit remain high, implying that the country continues to live beyond its means, by relying on the financial support of its partners. Serious structural weaknesses in the public sector can still be found even in cases where measures to eliminate them have been legislated. Market distortions undercut competition and hamper growth. Competitiveness, despite improving in cost terms, still lags behind in structural terms. If, on top of these chronic structural weaknesses, one adds the important cyclical problems caused by the recession, then it becomes clear that the difficult task before us calls for a persistent and coordinated effort over several years.

What is now needed is a comprehensive strategy that goes beyond the Memorandum.

Recovery and growth through the mobilisation of the private business sector

A strategy for recovery and growth is of utmost priority. Failure to tackle the recession could compromise our ability to meet the targets of fiscal consolidation. But recovery and growth cannot be brought forward with piecemeal measures or, more importantly, with financing from public expenditure. In the current context, growth requires the mobilisation of the private business sector; this cannot be achieved as long as the state continues to dominate the economy. Nor can it happen as long as the fiscal deficit and public debt are persistently high. Moreover, there cannot be growth as long as there is a climate of uncertainty and distrust about the prospects of the economy.

The **prerequisites** for growth are therefore:

(i) the restoration of confidence and the elimination of uncertainty;

(ii) the creation of an environment favouring entrepreneurship;

(iii) the transfer of resources from an inefficient public sector to the production of goods and services by the private sector and, especially, from the sector of non-tradable goods and services to that of the tradable.

Actions for growth

As early as in 2010, the Bank of Greece pointed out the need for a comprehensive Action Plan for Growth, which would run in parallel with fiscal consolidation, specify needed structural policies and provide a framework for coordinating the growth-enhancing activities of the public sector that do not put the fiscal targets at risk.

Such a plan is all the more urgent today, with both short- and medium-term goals.

Goals with immediate results

- A speeding-up of the privatisation programme. Apart from generating proceeds that reduce the debt, privatisation typically entails further investment to fully exploit the assets acquired. Privatisations open up opportunities for foreign direct investment, which leads to technology transfer and productivity gains, thereby helping to increase investment expenditure and, ultimately, aggregate demand.

- A faster absorption of funds under the National Strategic Reference Framework (NSRF) and the securing of funds from international institutions, such as the European Investment Bank, so that important infrastructure projects that have been put on hold can be resumed.

- Reforms to improve the business environment, including measures to deal with red tape and reduce the administrative burden on businesses, to simplify the regulatory framework and to restore market competition.

Structural changes for a transition to a new growth model

Apart from measures with immediate results, a long-term growth policy is needed. Such a policy must as of today strive for reforms to foster the transition to a new, export-oriented, growth model. These reforms must focus on changing the structure of production and removing distortions. The largest distortion of all is perhaps the high concentration of available resources in activities intended for the domestic market (and mostly controlled by the public sector) or in the resale of imported goods. Euro area entry and increased competition did not bring about major changes in this model, which is why Greece's structure of production has changed so little, compared to other economies; as a result, the level of structural competitiveness remains low.

Structural changes to improve productivity

The last two years have seen an improvement in Greece's cost competitiveness against its 28 major trading partners, mainly as a result of lower relative unit labour costs. While this is definitely a positive development, it is not sufficient. A sustainable improvement in competitiveness can only be fostered through continued productivity gains. For this to be achieved, structural reforms are required in order to remove the distortions and allow the transfer of resources to more productive activities, especially to the production of internationally-traded goods and services. The ultimate objective is export growth and import substitution, i.e. a strengthening of the position of domestic products in both the external and the home markets. Structural reforms aimed at creating a business-friendly environment and at attracting foreign direct investment can make a decisive contribution in this direction. Such reforms involve:

- bolstering competition in the markets for goods and services;

- modernising public administration;

- speeding up judicial procedures;

- rationalising and simplifying the regulatory environment;

- supporting labour market mobility;

- encouraging innovation, research and export-oriented activities;

- increasing the effectiveness of education at all levels; and

- ensuring a stable tax system;

None of this is new. All of these points have been raised before on numerous occasions and the need for such reforms is widely recognised. In several of these areas, measures have even been adopted. But the pace of implementation remains slow, meaning that the benefits are not yet visible. At the present critical juncture, all of these reforms must be carried forward simultaneously, with resolve and without being watered down.

Projections of key macroeconomic aggregates for 2012

The available short-term indicators for the first months of 2012 suggest that the recession will continue this year.

- The Bank of Greece —taking into account also the latest available data and indications— forecasts an average annual rate of decline in GDP of close to 5%, implying that the recession will be less pronounced than in 2011; this forecast assumes that the necessary structural reforms will be implemented without delay and according to plan. There have been some signs of stabilisation in the first quarter, but the economic environment remains volatile and uncertainty is still high.

- The **average rate of unemployment** is projected to increase this year and exceed 19%, up from 17.7% last year. In January 2012, the rate of unemployment reached 21.8%.

- Forecast reductions in **unit labour costs** for 2012-13, together with projected price developments, should lead to a marked improvement in cost competitiveness, thereby contributing to export growth and import substitution. In particular, it is estimated that by the end of 2012, two thirds to three quarters of the total cost competitiveness lost over the period 2001-2009 will have been recovered and that, by end-2013, all of the loss will likely have been recovered. Moreover, the current account deficit is projected to decrease from 9.8% of GDP in 2011 to roughly 7.5% of GDP in 2012 and this downward trend should continue in the years to come.

- Finally, the downward trend in inflation (measured by the Harmonised Index of Consumer Prices – HICP) will also continue in 2012, with average annual inflation expected to be around 1.2%, while core inflation will probably be zero on average. On the basis of certain assumptions, inflation is projected to fall further in 2013, possibly to below 0.5%, and average core inflation should be negative (around -0.3%).

3 RESTORING THE NORMAL FINANCING OF THE ECONOMY: THE RESTRUCTURING OF THE BANKING SYSTEM WILL CONTRIBUTE TO ECONOMIC RECOVERY AND GROWTH

The recession and the evolution of credit flows interact

The fiscal crisis and the associated climate of uncertainty have significantly worsened financial conditions during the past two years. Doubts as to the Greek economy's ability to break out of the vicious circle affected Greek banks, with the result that they were shut out of international markets and experienced a continuous decline in deposits: from end-October 2009 to end-February 2012, domestic bank deposits by the private sector decreased by over €70 billion, an equivalent to approximately one third of Greek GDP. The deposit outflows markedly constrained banks' ability to provide credit to the economy. Apart from its impact on deposits, the prevailing uncertainty also affected the inflow of foreign direct investment and the absorption of EU funds which, together with reduced bank financing, deepened the recession. Meanwhile, there is no doubt that the recession has contributed to a decline in loan demand, while the generalised increase in credit risk dampened loan supply.

Economic recovery therefore hinges upon the setting in motion of a virtuous circle, whereby an improved economic outlook fosters the strengthening of the banking system, so that the latter can, in turn, supply credit to the real economy, with positive feedback effects on expectations, and so on.

It is possible to improve the funding potential

The second package of financial support and the alleviation of the fiscal burden can substantially improve the funding potential for the economy, provided of course that what has been agreed upon is effectively implemented. This can be achieved in the following ways:

First, by restoring confidence, which could initially lead to a return of bank deposits of some €10-15 billion of cash now being hoarded and then encourage capital repatriation. This would substantially improve banks' liquidity positions.

Second, by attracting funds from sources other than the banking system. Two sources can be mentioned in this regard. The privatisation programme, with expected proceeds of €19 billion by 2015 and €50 billion overall in the medium term, mainly in the form of capital inflows from abroad, will lead to much greater total inflows, if the additional investments needed to fully exploit the assets to be acquired are taken into consideration. Credit flows to businesses could be supported by an additional €15 billion, provided that our absorption rate of NSRF funds is improved. To this, one should add the funds available from the European Investment Bank, which will be allocated to Greek businesses through the intermediation of domestic commercial banks.

The restructuring of the banking system

Apart from those other sources, the key factor to improving financial conditions is the strengthening and restructuring of the banking system, currently in progress.

2012 will be a critical year in shaping the future structure of the banking system in Greece. Banks now face losses originating from the fiscal crisis. First, they are dealing with the implications of having invested in Greek government bonds, an instrument considered safe until recently. Second, banks also face the consequences of the increased difficulty that households and businesses have in servicing their debt obligations in a timely manner, on account of the protracted recession. These developments imply that it is imperative for banks to strengthen their capital bases.

Anticipating these challenges as early as in the summer of 2011, the Bank of Greece, in cooperation with the International Monetary Fund, the European Commission and the European Central Bank, began planning a number of measures to safeguard financial stability and protect depositors. These measures mainly include:

- meeting short-term liquidity needs through the Eurosystem;

- formulating, in cooperation with the government, a resolution regime for credit institutions, and applying it where necessary, in order to safeguard financial stability;

- securing €50 billion from the financial support programme for the banking system's recapitalisation and restructuring;

- conducting a diagnostic exercise to determine the capital requirements of Greek commercial banks for 2012-2014.

As regards the recapitalisation exercise, the Bank of Greece took into consideration:

- the impairment of Greek government bonds held in bank portfolios;

- expected losses on bank lending portfolios;

- provisions already set aside for these losses;

- the business plans submitted by banks.

The recapitalisation of banks

After banks' capital needs and recapitalisation plans have been assessed, banks will be given time to raise funds in the market and then, if necessary, from the Financial Stability Fund (subject to conditionality) in a manner that ensures the smooth functioning of banks and preserves private sector incentives. The Bank of Greece estimates that the €50 billion earmarked under the Loan Agreement will be more than sufficient to cover capital needs and is also confident that the recapitalisation and restructuring of the banking system will soon be successfully completed. This will strengthen the role of banks as a supplier of financing to the economy and boost confidence in the banking system. The restructuring of the banking system is one of the most crucial structural reforms needed by the economy today and will be instrumental in restoring confidence.

The objective: a sound, strong and competitive banking system

The banking sector will, following its restructuring, be relieved of past burdens. It will be more sound, efficient and robust and its size will correspond to the real needs of the economy. The publication of banks' capital needs will substantially increase transparency, which will in turn help banks to gradually regain the confidence of markets and depositors. This will enable them to better perform their fundamental role of financial intermediation and contribute to the return of the Greek economy to a path of sustainable growth. What is more, with the catalytic role of the Financial Stability Fund, opportunities will open up for synergies and perhaps even partnerships, not possible until now.

4 CONCLUDING REMARKS

Projections for domestic economic developments in 2012 are fraught with uncertainties. The economic outlook for the euro area is also subject to uncertainties, linked to the possibility of an intensification of the sovereign debt crisis. It is against this challenging backdrop that the Greek economy needs to embark on a path of stabilisation as soon as possible. To this end, and for the sacrifices made by the Greek people not to have been in vain, society must at this critical juncture take a responsible stance – this applies in particular to political forces and the social partners. In other words, what is needed is a government and a society in full readiness from the very first day of the post-election period, so as to win the war on all fronts, starting with the construction of an efficient and flexible state that will serve both the competitive functioning of markets and social cohesion, promote social dialogue and facilitate the proper utilisation of the country's resources. This will avert conditions that would lead not only to our sacrifices going to waste, but also to a drastic deterioration in the standard of living. Instead, the economy will be able to get back on track to recovery by the end of 2013 and gradually into a virtuous circle of confidence-fiscal balance-growth. This is the way for unemployment to start to decrease from today's high unprecedented levels and for employment to resume an upward trend.

III THE INTERNATIONAL AND EUROPEAN ENVIRONMENT

1 DEVELOPMENTS AND PROSPECTS IN THE WORLD ECONOMY AND THE EURO AREA – POLICY RESPONSES

Global economic activity, following a strong recovery in 2010, slowed down in 2011. This was a result of the debt crisis in advanced economies and the required tightening of monetary policies, as well as of a generalised decline in confidence and the impact of increasing and already very high commodity prices and of the deleveraging of financial institutions.

Global economic recovery was seriously hit in the second half of 2011, particularly in the last months of the year, amid dramatically mounting uncertainty from the intensification of the euro area sovereign crisis, but it is gradually being restored after the ECB's decisive liquidity-providing interventions, positive developments in Italy, as well as the successful completion of the PSI and the signing of the new loan agreement for Greece. However, risks surrounding 2012 projections remain high. The growth rate of world GDP is estimated to decline in emerging and developing economies, but will remain at high levels. Among the advanced economies, the United States and Japan expect an improvement while, conversely, the euro area is expected to witness a mild recession in 2012 (see Table III.1).

The **world GDP** growth rate declined to 3.9% in 2011, from 5.3% in 2010, and is expected to reach 3.5% in 2012. The decline was more felt in **advanced economies** (1.6%, from 3.2% in 2010), which were affected more strongly by the intensifying debt crisis, the worsened economic climate, as well as exceptional circumstances such as the temporary, albeit serious, disruptions in the supply chain on account of the natural disasters in Japan in March 2011.[1] In the **emerging market and developing economies**, which now account for 48.8% of world GDP, a slowdown in output growth was observed (from 7.5% in 2010 to 6.2% in 2011) and is expected to persist in 2012 (5.7%), mainly due to a weakening in external demand. The emerging economies of Central and Eastern Europe and the Commonwealth of Independent States were an exception, as their GDP growth accelerated in 2011. However, these economies will be more strongly affected by the economic downturn projected for the euro area in 2012, on account of the close commercial and financial relations between them. For instance, in the Central and East European economies as a whole a sharp decline in GDP growth is expected, from 5.3% in 2011 to 1.9%.

In the **United States,** GDP growth weakened in 2011 (1.7% against 3.0% in 2010), but unemployment fell to 9.0%, from 9.6%, and the growth rate of private consumption and fixed capital formation quickened. Specifically, the volume of fixed capital formation excluding residential investment increased by 8.7%, compared with 4.4% in 2010. In 2012, GDP growth is expected to accelerate to 2.1%, unemployment will decline further, while a slight increase in the current account deficit is projected (see Table III.1). In **Japan**, after the most devastating earthquake in its history and the subsequent tsunami and nuclear disaster, economic recovery was rapid and GDP is estimated to increase by 2.0% in 2012, against a 0.7% decrease in 2011. However, the continued appreciation of the Japanese yen over 2008-2011 and the subdued external demand were among the factors that hampered economic activity.

Turning to the **euro area**, a slightly negative growth rate is projected for 2012, due to the continued sovereign debt crisis and the ongoing deleveraging of financial institutions, as well as credit constraints, tight fiscal policies and high uncertainty. According to IMF forecasts, the rate of change in GDP will come to -0.3%, against 1.4% in 2011, as both private consumption and investment will decline, external demand is also expected to be nega-

1 According to the IMF, the 34 advanced economies, although contributing 51.2% of world GDP, account for 62.6% of global exports of goods and services.

Table III.1 Key macroeconomic aggregates of the world economy

	Number of coun-tries	Share in GDP[1] (%)	Output (annual percentage changes in real GDP)			Inflation[2] (annual percentage changes)			Fiscal balance (% of GDP)			Gross public debt (% of GDP)			Current account balance (% of GDP)		
			2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012
World total	**184**	**100.0**	**5.3**	**3.9**	**3.5**	-	-	-	-	-	-	-	-	-	-	-	-
1. Advanced economies	*34*	*51.1*	*3.2*	*1.6*	*1.4*	*1.5*	*2.7*	*1.9*	*-7.6*	*-6.5*	*-5.6*	*99.7*	*103.5*	*107.6*	*-0.2*	*-0.2*	*-0.4*
United States		19.1	3.0	1.7	2.1	1.6	3.1	2.1	-10.5	-9.6	-8.1	98.5	102.9	106.6	-3.2	-3.1	-3.3
Japan		5.6	4.4	-0.7	2.0	-0.7	-0.3	0.0	-9.4	-10.1	-10.0	215.3	229.8	235.8	3.6	2.0	2.2
United Kingdom		2.9	2.1	0.7	0.8	3.3	4.5	2.4	-9.9	-8.7	-8.0	75.1	82.5	88.4	-3.3	-1.9	-1.7
Euro area	17	14.3	1.9	1.4	-0.3	1.6	2.7	2.0	-6.2	-4.1	-3.2	85.7	88.1	90.0	0.3	0.3	0.7
2. Emerging and developing economies	*150*	*48.9*	*7.5*	*6.2*	*5.7*	*6.1*	*7.1*	*6.2*	*-2.8*	*-1.1*	*-1.0*	*40.8*	*37.9*	*36.5*	*1.9*	*1.9*	*1.7*
China		14.3	10.4	9.2	8.2	3.3	5.4	3.3	-2.3	-1.2	-1.3	33.6	27.1	23.7	5.1	2.8	2.3
Russia		3.0	4.3	4.3	4.0	6.9	8.4	4.8	-3.5	1.6	0.6	11.7	10.5	11.2	4.7	5.5	4.8

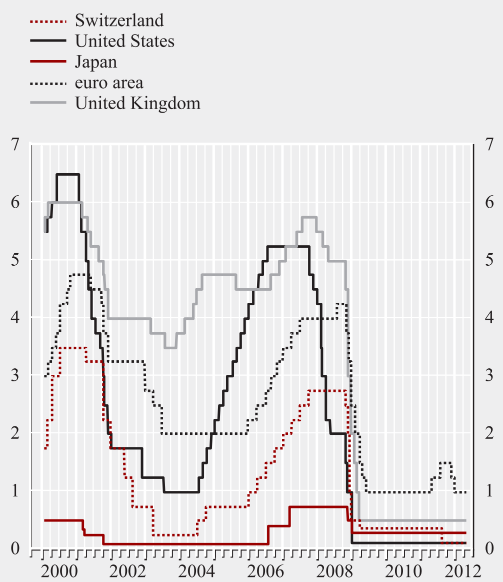
Sources: IMF, *World Economic Outlook*, April 2012, and *Fiscal Monitor*, 24 January 2012.
Notes: Estimates for 2011 and projections for 2012. According to IMF classification: *Advanced economies*: Euro area-17, the four newly *industrialised Asian economies* (Korea, Singapore, Taiwan Province of China and Hong Kong SAR), United States, Japan, Australia, Denmark, Switzerland, United Kingdom, Iceland, Israel, Canada, Norway, New Zealand, Sweden and the Czech Republic. *Emerging and developing economies*: Africa (44), Central and Eastern Europe (14), Commonwealth of Independent States (13 incl. Mongolia), Developing Asia (27), Middle East (20) and Western Hemisphere (32).
1 Percentage share in world GDP in 2011, on the basis of purchasing power parities (PPPs).
2 HICP for the euro area and the United Kingdom, CPI for the other countries. Year averages.

tively affected by a slowdown in the growth rates of world GDP and world trade. The latest interim forecast of the European Commission also points to a mild recession (-0.3%) with a gradual return to modest growth in the second half of 2012. Besides, financial markets as well as consumer and business confidence have shown signs of stabilisation, although the situation remains fragile. Inflation is expected to decline to 2.0%, from 2.7% in 2011, while unemployment will increase further to 10.9%. The euro area fiscal deficit was considerably reduced in 2011, to 4.1% of GDP from 6.2% in 2010, and is projected to decrease further in 2012, to 3.2% of GDP, while public debt is predicted to rise to 90.0% of GDP, from 88.1% in 2011.

A hike in **inflation** was observed both in advanced (2.7% from 1.5% in 2010) and in emerging market and developing economies (7.1% from 6.1% in 2010) throughout 2011, mainly on account of a surge in international commodity prices, despite the economic downturn and the persistently large output gap in major advanced economies (-3.8% of potential output, against 4.0% in 2010). In 2012, inflation is projected to decline to 1.9% in advanced economies and to 6.2% in emerging market and developing economies. On average, the **international price of crude oil** rose sharply in 2011 by 31.6% in US dollar terms (or 25.3% in euro terms) and came to about $104.01 per barrel. The new round of increases in the international price of crude oil (at average annual levels higher even than those in 2008) is due to concerns initially about uprising and unrest in North Africa and the Middle East and more recently about the possible repercussions of the international community's dispute with Iran over its nuclear programme and the ensuing embargo on Iranian fuels. Similarly, strong demand led to a renewed increase in **international commodity prices excluding fuels**, which rose by 17.8% in 2011 or 12.2% in euro terms (see also Chart III.2). For 2012, the IMF predicts a 10.3% increase in the crude oil price and a 10.3% drop in commodity prices excluding fuels.

Chart III.1 Central bank policy rates (January 2000 - 15 April 2012)

(percentages per annum; daily data)



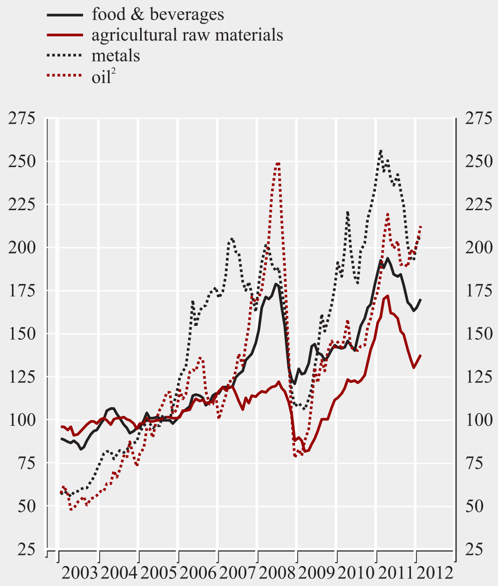
Sources: Euro area: European Central Bank (ECB), interest rate on main refinancing operations; USA: Federal Reserve, federal funds target rate; Japan: Bank of Japan, official discount rate; United Kingdom: Bank of England, repo rate; Switzerland: Swiss National Bank, operational target range for the three-month Libor.

Weakened external demand globally and mounting uncertainty led to a slowdown in the growth rate of **world trade volume** in 2011, compared with the exceptionally high growth rate recorded in 2010 (5.8% against 12.9%), while a further deceleration to 4.0% is projected in 2012.

Fiscal policy tightened in all advanced economies except for Japan in 2011 and the general government fiscal deficit of advanced economies as a whole decreased to 6.5% of GDP in 2011, compared with 7.6% in 2010, while a further reduction to 5.6% of GDP is expected in 2012. The structural deficit in advanced economies as a whole, although declining to -5.2% of potential GDP (from -5.8% in 2009 and 2010), is estimated to remain high in 2012, at 4.3% of GDP. Gross public debt continues to grow in advanced economies (103.5% of GDP, from 99.7% in 2010), but it decreased in emerging market economies (37.9% of GDP, from 40.8% in 2010). Despite the different problems facing

Chart III.2 Commodity price index (January 2003-February 2012)

(market prices,[1] 2005=100)



Source: IMF.
1 Last observation: February 2012.
2 Average international price of UK Brent, WTI and Dubai.

individual economies, fiscal aggregates in the euro area as a whole are better, relative to the US and Japan. Fiscal deficit declined to 4.1% of GDP, from 6.2% in 2010, and is expected to decrease further to 3.2% in 2012.

Monetary policy remained exceptionally eased and monetary authorities in advanced economies made significant interventions in 2011. The ECB, taking into account the sharp deterioration in euro area conditions and low inflationary pressures, lowered its key policy rate twice, by 25 basis points each time, on 9 November and 14 December, to 1%, while the European banking system was greatly relieved by the new three-year LTRO programme launched in December 2011 (see Chapter IV). The US Federal Reserve and the Bank of Japan continued their policies on practically zero interest rates, as well as the quantitative easing programmes (see Chart III.1). The Bank of England also decided to continue its quantitative easing interventions (9 February 2012).

Euro area: interventions and policy suggestions

• Eurogroup decision to boost firewall, 30 March 2012

In order to further improve market confidence and in accordance with the agreement reached at the Euro Summit on 9 December 2011 and reiterated on 2 March 2012, the Eurogroup reassessed the adequacy of the maximum lending capacity for support mechanisms and decided to raise the current overall ceiling of €500 billion for lending through the EFSF, which is already active but of a temporary nature, and through the ESM, which will start operating as from July 2012 as a permanent arrangement, to €700 billion. Taking into account the €49 billion out of the European Financial Stabilisation Mechanism (EFSM) and the €53 billion of the bilateral Greek loan facility that have already been paid out to support current programmes, the euro area has mobilised an overall firewall of approximately €800 billion, or more than $1 trillion.

• IMF and OECD policy prescriptions for the EU and the euro area

The recent IMF and OECD reports analyse key economic governance and economic policy issues, which were also included in European Council and Eurogroup decisions, and present their own policy prescriptions. A number of such prescriptions refer to the strengthening of the European support mechanisms, the pursuit of fiscal adjustment coupled with growth, as well as the importance of a reinforced single market. The main points of these analyses and recommendations are the following:

Strengthening the European support funds. According to the IMF, it is urgent to set up a firewall that is large, robust and flexible enough to halt contagion and facilitate the adjustment process in highly indebted countries. Alternative solutions include, among other things, the combination of the temporary facility (EFSF) with the permanent mechanism (ESM), as well as a rise in the effective lending capacity of the latter. According to the OECD, the firewall should be strong enough —around €1 trillion— to ensure that it does not need to be used.

Fiscal adjustment. Sufficient fiscal consolidation is taking place in the euro area, according to the IMF, but the pace of fiscal adjustment plans should be calibrated to avoid undue pressure on demand in the near term. More generally, given weak growth prospects in major economies, countries with room for fiscal policy manoeuvring (including the historically low cost of borrowing) can reconsider the pace of consolidation. Others should let automatic stabilisers operate freely for as long as they can readily finance higher deficits.

Structural reforms. The OECD stresses that decisive and immediate action is required to fully stabilise vulnerable euro area sovereigns. According to the OECD, the concern is that bank deleveraging, fiscal consolidation and economic adjustment could unduly restrict demand in the short term before the benefits of long-term adjustment materialise. However, recent OECD analyses of past experience show that —contrary to the widely held view— certain structural reforms can have positive effects even in the short run. For instance, considerable flows of investment could be unleashed if regulations keeping new entrants out of markets were dismantled, and better conditions for doing business were put in place.

Single Market. Strengthening the Single Market should be at the centre of EU policy action to boost growth, as noted by the OECD, placing special emphasis on the implementation of the Services Directive. The main obstacles are market regulations at the national level and poor implementation of existing Single Market rules. Similarly, recent IMF reports have reiterated the importance of the Single Market, which is also a top priority in the conclusions of the Spring European Council, stressing that "*efforts will continue in order to bring the Single Market to a new stage of development and to complete the Digital Single Market by 2015, in particular by adopting measures to boost confidence in on-line trade and by providing better broadband coverage, including by reducing the cost of high-speed broadband infrastructure*".

2 THE ECONOMIES OF SOUTH-EAST EUROPE[2]

The signs of a strong recovery in the economies of South-East Europe, mainly on the basis of data on the first quarter of 2011, were not confirmed, as growth rates declined considerably during the second half of 2011, reflecting to a large extent a slowdown in euro area economic growth. Turkey was the only country to post a particularly high growth rate, i.e. 8.5%, and all other countries recorded much lower rates. Namely, growth rates in Bulgaria, Romania, Serbia, FYROM, Bosnia and Herzegovina, and Montenegro came to 1.9%, 2.5%, 1.6%, 3.2%, 2.4% and 2.7% respectively (see Table III.2A).

This loss in growth momentum is almost entirely associated with the euro area debt crisis, which worsened in the course of 2011. Declining euro area growth led to a weakening demand in South-East Europe, with negative effects on exports and industrial output. Furthermore, financing constraints, mainly on account of the need for deleveraging by European parent banking groups, contributed to a further slowdown of the already low credit growth rate and a stubbornly weak domestic demand. Moreover, domestic demand remained subdued under weak labour market conditions and fiscal adjustment. Turkey was once again the only exception, with domestic demand posting a significant increase.

2 Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Former Yugoslav Republic of Macedonia (FYROM), Montenegro, Romania, Serbia and Turkey.

Table III.2 Key macroeconomic indicators in South-East European countries[1]

A. GDP and inflation
(annual percentage changes)

	GDP					Inflation (average)				
Country	2008	2009	2010	2011 (estimate)	2012 (forecast)	2008	2009	2010	2011 (estimate)	2012 (forecast)
Albania	7.5	3.3	4.1	3.0	0.5	3.4	2.3	3.6	3.5	1.7
Bosnia-Herzegovina	5.6	-2.9	0.7	2.4	0.0	7.4	-0.4	2.1	3.7	2.2
Bulgaria	6.2	-5.5	0.2	1.9	1.3	12.0	2.5	3.0	3.5	2.7
Croatia	2.2	-6.0	-1.2	0.2	-1.0	6.1	2.4	1.0	2.3	2.2
FYROM	5.1	-1.0	1.7	3.2	2.5	8.3	-0.8	1.6	3.9	2.5
Montenegro	6.9	-5.7	2.5	2.7	2.2	7.4	3.4	0.5	3.1	2.6
Romania	7.3	-6.6	-1.6	2.5	1.5	7.8	5.6	6.1	5.8	2.7
Serbia	3.8	-3.5	1.0	1.6	0.7	8.6	6.6	10.3	7.0	4.1
Turkey	0.7	-4.8	9.2	8.5	3.0	10.4	6.3	8.6	6.5	7.2

B. Current account balance and fiscal balance
(% of GDP)

	Current account balance					Fiscal balance				
Country	2008	2009	2010	2011 (estimate)	2012 (forecast)	2008	2009	2010	2011 (estimate)	2012 (forecast)
Albania	-15.5	-15.2	-11.3	-12.2	-12.1	-5.5	-7.0	-3.1	-3.5	-4.5
Bosnia-Herzegovina	-14.0	-6.3	-5.7	-8.7	-8.0	-2.2	-4.4	-2.5	-1.3	-
Bulgaria	-23.2	-8.9	-1.3	1.6	1.1	2.9	-0.8	-4.0	-2.1	-1.6
Croatia	-8.8	-5.2	-1.2	-0.5	0.7	-1.4	-4.1	-4.9	-5.5	-
FYROM	-12.8	-6.7	-2.2	-2.8	-5.5	-1.0	-2.7	-2.5	-2.5	-2.2
Montenegro	-50.6	-29.6	-24.7	-19.9	-20.4	-0.4	-5.7	-4.9	-4.0	-2.6
Romania	-11.6	-4.2	-4.0	-4.0	-4.2	-4.8	-7.3	-6.5	-4.4	-1.9
Serbia	-20.6	-7.4	-7.5	-9.5	-8.0	-2.6	-4.5	-4.6	-4.7	-3.9
Turkey	-5.5	-2.2	-6.4	-10.0	-8.8	-2.2	-5.7	-3.6	-1.4	-2.4

Sources: *World Economic Outlook*, IMF, April 2012, *IMF Country Reports*, *CCEQ*, European Commission, April 2012.
1 Estimates for 2011 and forecasts for 2012 are expected to be revised.

The above clearly show that the region's growth prospects will remain limited in 2012 too, as they are closely linked with developments in euro area countries. The fact that the euro area economy is expected to enter into a mild recession (GDP contraction of 0.3%) will undoubtedly be the main growth inhibitor. In fact, according to the latest forecasts, the average (weighted) real GDP growth in South-East European countries (except for Turkey) is expected to decline to 1% in 2012, from 2.2% in 2011.[3] The growth rate of the Turkish economy is also estimated to "land" to 3.0%, from 8.5% in 2011. Of course, the fact that as from early 2012 the euro area debt crisis appears to be entering a phase of abatement, mainly on the back of a more effective crisis manage-

3 See EBRD, Regional Economic Prospects in EBRD Countries of Operations: January 2012.

ment and gradually improving euro area fiscal aggregates, is very likely to create a more favourable environment for growth in the second half of 2012.

Inflation declined markedly in most countries, mainly in the second half of 2011, while a further decrease is also projected in 2012. Turkey is the only exception, with its economy showing signs of overheating, as inflation (end-of-period) exceeded 10.0% in 2011. Inflation was quite high in Serbia and Romania in 2011 (7.0% and 5.8%, respectively), but has already embarked on a downward path. Declining inflation largely reflects lower food commodity and energy prices, as well as a negative output gap in most countries. Lastly, it should be noted that a possible reversal of the course of energy and commodity prices could lead to higher than currently expected inflation in 2012 (see Table III.2.A).

Most countries achieved considerable fiscal adjustment in 2011 and efforts are expected to continue unabated through 2012. Almost all countries managed to stay within their 2011 budgetary targets, while structural deficits were reduced in several countries (see Table III.2.B).

In 2011, the current account deficit in most countries under review showed signs of stabilisation, albeit with slight changes relative to 2010. A negative exception was Turkey's external deficit, which rose to 10% of GDP, whereas Bulgaria's external balance moved to the opposite direction, posting a surplus of 1.6% of GDP. Developments in the external sector were influenced by the euro area debt crisis, which had a negative effect both on the exports from South-East European countries and on the inflow of emigrants' remittances. Similarly, capital inflows, mainly for foreign direct investment, remained low in 2011. In 2012, the external sector aggregates of the countries under review are not expected to change significantly, although developments in the euro area countries will definitely play a crucial role (see Table III.2.B).

Monetary policy in most countries of the region focused on boosting economic activity and, to this end, expansionary policies have been adopted since the second half of 2011, with gradual reductions in interest rates. Such reductions, coupled with the decreasing trend of inflation, have continued into early 2012, with a view to stimulating aggregate demand. Credit expansion followed an upward course in the first months of 2011, but then moderated gradually. Underlying this development was the escalation of the euro area debt crisis, compounded by the partial deleveraging of large European banking groups that are active in the region. The only exception was Turkey, where strong demand for new credit was observed, in line with economic activity growth; as a result, total credit expansion exceeded 20% for the year as a whole. Lastly, it should be noted that the quality of the loan portfolio has not improved, as the NPL ratio remains high in most countries. On the other hand, the loan-to-deposit ratio shows a downward trend in several countries, which is likely to signal a shift towards a more sustainable model of credit growth.

Large European banking groups that are active in the region offer an important economic link between South-East European and euro area countries. It is clear that an interruption or decrease in the financing supplied by parent banks to their affiliated banks in South-East Europe could contribute to a further slowdown in the already low rate of credit growth. However, it should be pointed out that the banking system of the region is well-capitalised and significant defence mechanisms have been developed to cope with a possible generalised deleveraging on behalf of parent banks. Specifically, the adoption of macroprudential supervision arrangements, such as higher capital adequacy ratios, high levels of domestic international reserves, combined with actions under the "Vienna 2.0 Initiative", create a quite strong safety net for the banking system of the region.

IV THE SINGLE MONETARY POLICY AND EUROSYSTEM INTERVENTIONS

Since September 2011, the Governing Council of the ECB started noting that financing conditions for enterprises and households in the euro area were adversely affected by shocks in the financial markets, because of the renewed fiscal crisis in the summer of 2011. This development contributed to a weakening of economic activity in the euro area, leading to subsiding inflationary pressures. Thus, the ECB reduced key rates in November and December 2011, by 25 basis points each time (see Table IV.1).

In March and April 2012, the ECB Governing Council pointed out that economic activity, which had declined in the fourth quarter of 2011, is stabilising in early 2012 and, if all goes well, a gradual recovery is expected in the course of the year, although this forecast is evidently subject to considerable downside risks. On the other hand, inflation is expected to stand above 2% in 2012, because of recent increases in energy prices and indirect taxation, while there is also risk of further acceleration. However, inflation should drop below 2% in early

Table IV.1 Changes in key ECB interest rates

(percentages per annum)

With effect from:[1]		Deposit facility	Main refinancing operations: Fixed rate tenders (fixed rate)	Main refinancing operations: Variable rate tenders (minimum bid rate)	Marginal lending facility
2000	6 October	3.75	-	4.75	5.75
2001	11 May	3.50	-	4.50	5.50
	31 August	3.25	-	4.25	5.25
	18 September	2.75	-	3.75	4.75
	9 November	2.25	-	3.25	4.25
2002	6 December	1.75	-	2.75	3.75
2003	7 March	1.50	-	2.50	3.50
	6 June	1.00	-	2.00	3.00
2005	6 December	1.25	-	2.25	3.25
2006	8 March	1.50	-	2.50	3.50
	15 June	1.75	-	2.75	3.75
	9 August	2.00	-	3.00	4.00
	11 October	2.25	-	3.25	4.25
	13 December	2.50	-	3.50	4.50
2007	14 March	2.75	-	3.75	4.75
	13 June	3.00	-	4.00	5.00
2008	9 July	3.25	-	4.25	5.25
	8 October	2.75	-	-	4.75
	9 October	3.25	-	-	4.25
	15 October	3.25	3.75	-	4.25
	12 November	2.75	3.25	-	3.75
	10 December	2.00	2.50	-	3.00
2009	21 January	1.00	2.00	-	3.00
	11 March	0.50	1.50	-	2.50
	8 April	0.25	1.25	-	2.25
	13 May	0.25	1.00	-	1.75
2011	13 April	0.50	1.25	-	2.00
	13 July	0.75	1.50	-	2.25
	9 November	0.50	1.25	-	2.00
	14 December	0.25	1.00	-	1.75

Source: ECB.
1 From 10 March 2004 onwards, with the exception of the interest rate changes of 8 and 9 October 2008, changes in all three key ECB interest rates are effective from the first main refinancing operation following the Governing Council decision, not the date of the Governing Council meeting on which this decision is made.

2013 and stand at levels consistent with price stability in the medium term.[1] Notwithstanding that, any signs of energy price increases being passed-through to wages or profit margins, or generally affecting the general level of prices, need to be monitored closely. Moreover, the Eurosystem has at its disposal all means necessary to address in a firm and timely manner any upside risks to price stability over the medium-term.

The ECB Governing Council also observed that the reductions in key rates and the non-standard monetary policy measures taken in the last two months of 2011, particularly the two 36-month liquidity-providing open market operations, helped improve financing conditions from early 2012 onwards. Besides, improvement was also observed in the operation of the monetary policy transmission mechanism in April. Another driver of these favourable developments was the progress made in limiting fiscal imbalances, implementing structural reforms in several Member States, and establishing an enhanced framework for economic governance in the euro area.[2]

In April 2012, the ECB Governing Council noted in particular that all the monetary policy measures implemented by the Eurosystem had helped avoid abrupt and disorderly changes in the balance sheets of euro area credit institutions. The banks' ability to raise funds from the financial markets was enhanced, their deposit base was strengthened, the issuance of debt securities by credit institutions rose, and more generally, stagnating financial market segments resumed operations.

On the other hand, the ECB Governing Council stressed that the full positive effect of the non-standard monetary policy measures on bank lending will become apparent with a time lag, and only if accompanied by a recovery in business and household demand for loans, which currently remains weak due to the subdued economic activity and the balance sheet adjustment (i.e. mainly deleveraging) process in the non-financial sector.

With respect to developments in the single money market, the representative 3-month Euribor increased overall in the course of 2011 (see Chart IV.1), although from August 2011 onwards it followed a downward path.

This decline in interbank interest rates (in the second half of 2011 and early 2012) was initially fuelled by expectations on key rate decreases, given the subsiding inflationary pressures that were driven by rekindled financial market strains. On the other hand, the premium for counterparty risk in the interbank market, which was incorporated into the Euribor interbank rates, was rising almost continuously from May to end-December 2011, when it reached its highest since the first quarter of 2009 (i.e. a few months after the collapse of Lehman Brothers). This development underlines concerns from the intensified sovereign debt crisis on the potential impact of the exposure of many euro area banks (though loans extended and securities portfolios held) to Member States that face serious fiscal problems.

The reduction of Eurosystem key rates in the last two months of the year, the considerable increase in excess liquidity in the euro area interbank market and the gradual decline of the counterparty risk premium following the first 36-month open market operation (conducted in late December 2011) contributed to further downward pressures on interbank rates in late 2011 and early 2012.

In 2011, in the context of employing non-standard monetary policy measures (see Table IV.2), liquidity-providing open market operations with a maturity of 6 and 12 months in euro were conducted anew, while —as mentioned above— a 36-month open market operation was conducted for the first time (a similar operation was also conducted in March 2012).[3]

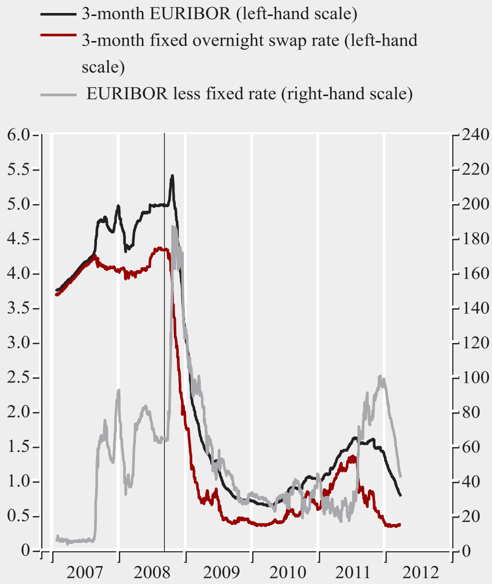
1 According to the definition that forms part of the Eurosystem monetary policy strategy, price stability is a year-on-year increase in HICP for the euro area of below but close to 2%.

2 A milestone in progress was the Treaty on Stability, Coordination and Governance in the EMU, signed on the fringe of the European Council meeting of 1-2 March 2012.

3 Taking into account the settlement date, i.e. the date on which the operation directly affects liquidity in the banking system.

Chart IV.1 Interest rates and spread in the euro area money market (January 2007-March 2012)

(percentages per annum and basis points; daily data)



Sources: ECB and European Banking Federation.
The vertical line marks the date of the Lehman Brothers bankruptcy on 15 September 2008.
EURIBOR and fixed swap rate curves refer to a different vertical scale (left-hand scale) than the curve representing the course of these rates' spread (referred to the right-hand scale). The representation of these three curves in one chart allows the reader to form a qualitative view of whether these changes in EURIBOR reflect changes in the "differential" (which may be interpreted as a counterparty risk premium) or changes in the fixed swap rate (reflecting expectations on the overnight rate and ultimately on key interest rates).

Moreover, all main and longer-term refinancing operations in 2011 and in the period from January to early April 2012 were conducted as fixed-rate tenders with full allotment. The Securities Markets Programme was rigorously implemented as from August 2011, while a new Covered Bond Purchase Programme was launched in November 2011. However, the weekly purchases of government bonds were considerably limited in early 2012.

In addition, it was decided to temporarily reduce the reserve requirement ratio[4] from 2% to 1% as of mid-January 2012, in order to help increase money market transaction volumes and reduce the need of credit institutions to raise funds from the Eurosystem, and by extension to hold eligible collateral.

Another measure aimed at increasing money market transactions was the temporary discontinuation, in mid-December 2011, of the accumulation of credit institutions' deposits with the Eurosystem through liquidity-absorbing fine-tuning operations conducted as variable-rate tenders on the last day of each maintenance period.

Also, it was decided to temporarily expand the set of securities eligible for liquidity supply by the Eurosystem. More specifically: first, the rating threshold[5] for residential mortgage-backed securities or securities backed by loans to small- and medium-sized enterprises

4 In the context of reserve requirements, credit institutions must hold an interest-bearing deposit with the Eurosystem (other than their deposits under the standing deposit facility). More specifically, the interest rate on reserve requirements is equal to the (fixed) rate of main refinancing operations. The relevant maintenance periods are set in advance and do not coincide with calendar months but last approximately 30 days. The level of each credit institution's reserve requirement held with the respective NCB must not fall short of the minimum reserve ratio (0.01 since 18 January 2012) multiplied by the sum of a subset of that credit institution's liabilities (e.g. excluding liabilities against other credit institutions and the Eurosystem) as this stood on the last day of the month before last. In case a credit institution's average reserve requirement during a maintenance period falls short of the required level, the ECB may impose sanctions. The credit institutions' ability to maintain their reserve requirements on average during a maintenance period (allowing for daily fluctuations of the reserve requirement level) normally contributes to the stabilisation of money market interest rates. Moreover, under normal conditions, the reserve requirements system facilitates the central bank in influencing money market interest rates, as it helps create a liquidity shortage, which means that commercial banks necessarily rely on the central bank for raising funds, and thus bear the cost entailed by the liquidity supply rates the central bank has set – see "The monetary policy of the ECB", ECB, 2011, pp. 101-104. Having said that, the conditions currently prevailing in the single money market are rather atypical, a fact that urges the Eurosystem to supply unlimited liquidity to the credit institutions, and therefore curbs the usefulness of the reserve requirements system; hence, room was allowed for reducing the relevant ratio.

5 In the past, the lowest acceptable credit rating for asset-backed securities had been set to 'AAA' upon issuance, reducible to 'A' – or an equivalent rating based on the Eurosystem's harmonised credit rating scale – for the period until maturity. As of 1 March 2011 the Eurosystem demanded at least two credit ratings by different external rating agencies for all securities of this broad category. For securities issued after 1 March 2010 it had been established that the two best credit ratings available should not fall short of the lowest permissible credit ratings, i.e. 'AAA' upon issuance and 'A' thereafter. With the new decision of the ECB Governing Council in December 2011, the requirement regarding the lowest acceptable credit rating for securities issued exclusively against residential mortgages or loans to small- and medium-sized enterprises becomes more lax. More specifically, securities of this special category are eligible as collateral as long the second best credit rating assigned to them by the various different rating agencies is equivalent at least to the 'A' rating of the harmonised scale. It should be noted that equivalent to the 'A' rating of the Eurosystem's harmonised credit rating scale are the 'A+' / 'A' / 'A-' ratings used by Fitch and Standard & Poor's, and the 'A1' / 'A2' / 'A3' ratings used by Moody's. Eligibility of these securities is subject to further requirements, e.g. the underlying loans must be performing, etc.

Table IV.2 The Eurosystem's open market operations in 2011 and the first quarter of 2012*

1. Main and longer-term refinancing operations:	
1.1 Main refinancing operations (MROs): provision of liquidity with a maturity of one week	**Frequency:** Once a week. **Procedure:** At least until 10 July 2012, fixed rate tender with full allotment.
1.2 Longer-term refinancing operations (LTROs):	
1.2.1 Provision of liquidity with a maturity of one maintenance period	**Frequency:** Once at the beginning of each maintenance period. These operations will be carried out at least until around mid-2012. **Procedure:** Fixed-rate tender (at a rate equal to the MRO rate) with full allotment.
1.2.2 Provision of liquidity with a maturity of three months	**Frequency:** Once a month. **Procedure:** Fixed rate tender with full allotment, the interest rate being fixed ex-post at the average value of the fixed rate of the MROs over the life of the respective LTRO.
1.2.3 Provision of liquidity with a maturity of six months	One operation was conducted with a maturity of around six months and settlement date on 11 August 2011. **Procedure:** Fixed rate tender with full allotment, the interest rate being fixed *ex-post* at the average value of the fixed rate of the MROs over the life of the respective LTRO.
1.2.4 Provision of liquidity with a maturity of twelve months	One operation was conducted with a maturity of 371 days (i.e. around 12 months) and settlement date on 27 October 2011. **Procedure:** Fixed rate tender with full allotment, the interest rate being fixed ex-post at the average value of the rate of the MROs conducted over the life of the respective LTRO.
1.2.5 Provision of liquidity with a maturity of thirty-six months	Two LTROs were conducted with a maturity of 36 months on 22 December 2011 and 1 March 2012 (settlement dates) respectively. The LTRO with a maturity of 406 days to be conducted on 22 December 2011 (settlement date) was replaced by an operation with a maturity of 36 months, which was conducted on the same day. **Procedure:** Fixed rate tender with full allotment, the interest rate being fixed ex-post at the average value of the rate in the MROs conducted over the life of the respective LTRO. Credit institutions are given the option of an early partial or total repayment of the funds they will raise a year later.
2. Outright purchases of securities:	
2.1 Securities Markets Programme	The Governing Council decided on 9 May 2010 to launch the Programme. By end-March 2012, the Eurosystem had purchased securities of a total value of €214 billion.**
2.2 Second Covered Bond Purchase Programme	The Programme lasts from November 2011 to end-October 2012 and is expected to involve the purchase of bonds of €40 billion. By end-March 2012 the Eurosystem had acquired covered bonds of a total value of €9.2 billion in the context of this Programme.
3. Fine-tuning operations:	
3.1 Liquidity absorption on the last day of each maintenance period	These operations were discontinued after 13 December 2011. **Procedure :** Collection of overnight deposits from credit institutions through variable-rate tenders with a maximum bid rate equal to the MRO fixed rate.
3.2 Liquidity absorption on a weekly basis to sterilise the effect, on the overall liquidity of the banking system, of purchases made under the Securities Markets Programme	**Frequency:** Every week, starting on 18 May 2010. **Procedure:** Collection of weekly deposits from credit institutions through variable-rate tenders with a maximum bid rate equal to the MRO fixed rate.
3.3 Provision of liquidity with overnight maturity on 21 December 2011 and on 29 February 2012 (settlement days) respectively	The purpose of these operations was to avoid liquidity fluctuations, as on 21 December 2011 and on 29 February 2012 credit institutions had to repay the amounts raised through the MRO of the previous week, while raising new liquidity through 36-month LTROs was only possible a day later.
4. US dollar liquidity-providing operations:	
4.1 Operations with a maturity of one week	**Procedure:** Fixed rate tender with full allotment against collateral eligible for the Eurosystem's credit operations in euro.
4.2 Operations with a maturity of three months	

* The table covers data and information available until end-March 2012.
** The figure takes into account redemption of securities.

(asset-backed securities – ABS) was reduced; second, the ECB Governing Council allowed NCBs to accept, as a temporary solution and on their responsibility, additional performing credit claims (i.e. bank loans) as collateral in the main and longer-term refinancing operations as well as in the marginal lending facility.

With respect to marketable debt instruments, on 28 February 2012 the ECB Governing Council decided to temporarily suspend the eligibility of those issued or fully guaranteed by the Hellenic Republic for use as collateral in Eurosystem monetary policy operations. Liquidity needs of affected Eurosystem counterparties can be satisfied by the relevant NCBs, in line with relevant Eurosystem arrangements (emergency liquidity assistance). Thereafter, on 8 March 2012 it was decided that marketable debt instruments issued of fully guaranteed by the Hellenic Republic will once again be accepted by the Eurosystem, given the activation of the buy-back scheme, provided to underpin the quality of these instruments. The scheme is backed up by bonds issued by the European Financial Stability Fund with a nominal value of €35 billion. It was also decided that the minimum credit rating for collateral eligibility will not be applied in the case of marketable debt instruments issued or fully guaranteed by the Hellenic Republic until further notice.

Starting from October 2011, the ECB and other central banks outside the euro area resumed US dollar liquidity-providing operations with a maturity of 3 months. At end-November 2011 they announced a reduction of the cost that credit institutions (outside the US) are burdened with for raising funds in US dollars from the respective central bank through open market operations. These central banks have agreed to lower the pricing on the existing temporary US dollar liquidity swap arrangements by 50 basis points so that the new rate will be the US dollar Overnight Index Swap (OIS) rate plus 50 basis points. The funds in US dollars acquired by the ECB are supplied to the Eurosystem counterparties through regular fixed-rate tenders with full allotment —i.e. as is also the case in open market operations in euro— but against provision of eligible collateral by the counterparties to the Eurosystem for the supply of funding in euro.

The non-standard monetary policy measures provide stronger credit support to the real economy in the euro area. They facilitate bank lending to non-financial enterprises and households by supplementing and smoothing out the operation of the single money market and other international financial markets, in order to improve the redistribution of liquid assets among banks. Some of these measures amplify the availability of collateral against which credit institutions may raise funds through the Eurosystem, in view of the fact that financial market strains lead to a reduction in the value of many of the securities offered as collateral.

With the implementation of non-standard measures, liquidity supply to credit institutions by the Eurosystem rose considerably from April 2011 until the end of the year. In January and February 2012, liquidity supply followed a downward trend, but picked up again in March 2012 and remained high until early April.

Specifically, total liquidity supply in euro rose from an average of €480 billion in April 2011 (i.e. 5.1% of euro area GDP) to €787 billion in December 2011 (i.e. 8.4% of euro area GDP). On average, liquidity supply appears further increased in March 2012, standing at €1,207 billion (12.6% of euro area GDP for 2012, on the basis of a European Commission forecast).

Moreover, it should be noted that the reduced minimum reserve ratio resulted in a release of around €100 billion in liquid assets for euro area Monetary Financial Institutions (MFIs).

Meanwhile, a fast rise started being observed in mid-June 2011 in credit institutions' deposit balances under the Eurosystem deposit facility. In more detail, from €30 billion on average in the first half of 2011, they rose to an average of €323 billion in December 2011 and €783 billion in March 2012.

The increased liquidity supply to credit institutions by the Eurosystem was necessary, as the recent rekindling of the sovereign debt crisis intensified the limitations observed more or less since summer 2007 in the interbank market's ability to carry out the redistribution of liquid assets among credit institutions. Difficulties in the operation of the interbank market are also implied by the abovementioned rise in credit institutions' deposits under the relevant standing facility.

In the course of 2011, the ECB Governing Council repeatedly stressed that banks with limited ability to raise funds through the interbank market must urgently increase their operational efficiency and enhance their capital base.

Euro area credit institutions also faced difficulties in raising funds in US dollars[6] from their usual counterparties (many of which are based in the US) through the international market. This was because the counterparties of euro area credit institutions were concerned about the impact of the sovereign debt crisis on the robustness of euro area banks. The manifestation of these difficulties created the need to take —as was mentioned above— measures for increasing the availability and decreasing the cost of credit institutions' funding in US dollars through the Eurosystem.

Thus, liquidity supply in US dollars to credit institutions in the euro area, which was zero in July 2011, averaged \$53 billion in December 2011 and \$89 billion in February, but fell to \$50 billion in March 2012. In comparison, in the fourth quarter of 2008 (i.e. right after the collapse of Lehman Brothers) US dollar supply by the Eurosystem was much higher, standing on average at \$242 billion.

6 Several euro area credit institutions carry out securities transactions in US dollars, or even engage more broadly in the US credit market, granting loans etc. These US dollar-denominated assets have to be financed through a regularly renewed raising of short-term funds in US dollars, otherwise the credit institution assumes considerable exchange rate risk – see Patrick McGuire and Goetz von Peter, "The US dollar shortage in global banking," *BIS Quarterly Review*, March 2009, pp. 47-63. See also Ingo Fender and Patrick McGuire, "European Banks' US dollar funding pressures," *BIS Quarterly Review*, June 2010, pp. 57-64.

V ECONOMIC ACTIVITY IN GREECE

1 ECONOMIC ACTIVITY, DEVELOPMENTS AND PROSPECTS

1.1 DEVELOPMENTS IN ACTIVITY IN 2011

Macroeconomic developments in 2011 were more adverse than what was forecast in the first months of the year. ELSTAT estimated (on 9 March 2012) that GDP fell by 6.9% in 2011 (Q1: -8.0%, Q2: -7.3%, Q3: -5.0%, Q4: -7.5%), following a 3.5% decline in 2010 (see Chart V.1), and that the change in gross value added (at constant factor prices, i.e. after indirect taxes are deducted and subsidies are added) was -6.7% (Q1: -8.1%, Q2: -6.5%, Q3: -5.1%, Q4: -7.1%).

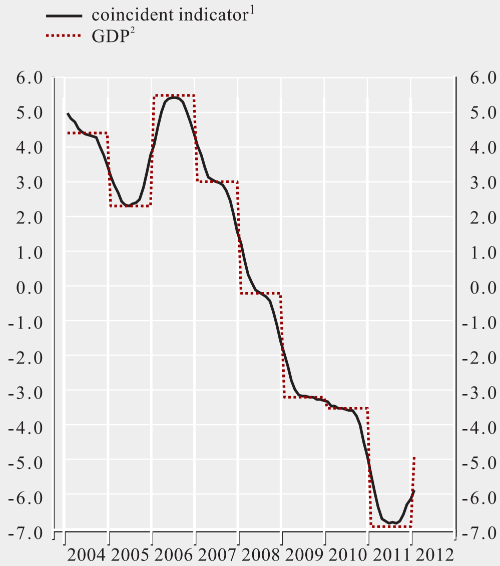
The difference between the outturn and the projections made by most organisations (initially for a decline of about 3% and later for one close to 4%) mainly came from the underestimated decline in final domestic demand (both investment and consumption —private and public— decreased more than expected), as well as from the smaller than expected (positive) contribution of net exports in goods and services. These gaps are the result of, among other things, the newly adopted strict fiscal policy measures, pervasive uncertainty, the stronger (than expected) negative rate of credit expansion (see Chapter X), as well as the slowdown of economic activity globally (see Chapter III).

In the absence of seasonally adjusted quarterly national accounts data, it is hard to make accurate estimations on the course of GDP from one quarter to another. However, short-term indicators point to just a marginal decline in economic activity between the second and the third quarter and to a significant deterioration between the third and the last one.

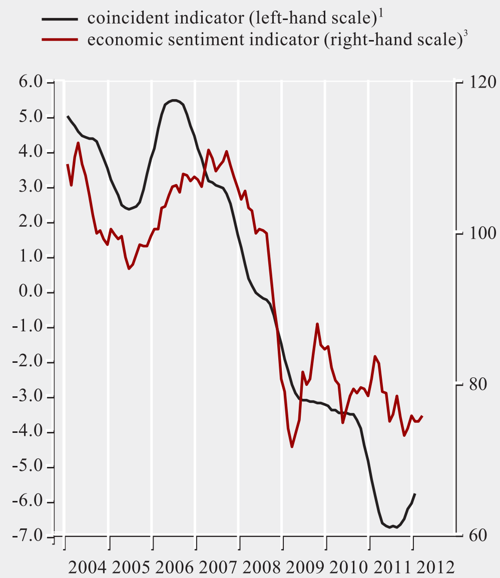
On the **expenditure** side (see Table V.1), the largest contribution to the decline in GDP came from **private consumption** (which was reduced by 7.1% at constant prices, contributing 5.3 percentage points to the decline in GDP) and **investment** (which was reduced by

Chart V.1 Economic activity indicators

A. The coincident indicator of economic activity compiled by the Bank of Greece
(January 2004 - January 2012)



B. The coincident indicator of economic activity compiled by the Bank of Greece and the European Commission's economic sentiment indicator for Greece
(January 2004 - March 2012)



Sources: Bank of Greece (coincident indicator, as well as GDP for 2012), ELSTAT (GDP 2004-2011) and European Commission (economic sentiment indicator).
1 Annualised monthly percentage changes.
2 Annual rate of change.
3 Monthly data.

Table V.1 Gross expenditure of the economy and gross domestic product

(at constant market prices of 2005)

	Value in million euro	Annual percentage changes					
	2005	2006	2007	2008	2009	2010	2011
1. Private consumption	134,725	4.3	3.7	4.0	-1.3	-3.6	-7.1
2. Public consumption	34,937	2.3	7.6	-2.1	4.8	-7.2	-9.1
3. Gross fixed capital formation	40,020	20.4	5.4	-6.7	-15.2	-15.0	-20.7
3.1 Construction	25,156	22.7	-8.9	-12.7	-10.0	-12.2	-21.4
3.2 Equipment	13,043	15.6	37.0	1.3	-24.0	-20.0	-22.1
3.3 Other investment	1,821	24.4	-10.2	-4.2	15.8	-7.1	-7.0
4. Domestic final demand[1]	209,682	7.0	4.7	0.7	-3.1	-6.3	-9.6
5. Change in inventories and statistical discrepancy (% of GDP)	1,302	0.5	1.6	1.2	-1.7	-1.3	-0.1
6. Exports of goods and services	44,807	3.1	6.9	3.0	-19.5	4.2	-0.3
6.1 Exports of goods	20,490	5.1	4.1	-0.4	-15.7	5.4	3.6
6.2 Exports of services	24,317	1.4	9.5	5.9	-22.5	3.2	-3.8
7. Final demand	255,790	6.2	5.9	0.8	-8.0	-4.4	-7.2
8. Imports of goods and services	62,741	8.2	14.6	3.3	-20.2	-7.2	-8.1
8.1 Imports of goods	51,875	7.9	15.3	1.5	-21.0	-10.7	-7.1
8.2 Imports of services	10,866	9.8	11.6	12.3	-16.5	7.0	-11.6
GDP at market prices	**193,050**	**5.5**	**3.0**	**-0.2**	**-3.2**	**-3.5**	**-6.9**
		Contribution to GDP change (percentage points)					
1. Private consumption		2.99	2.58	2.78	-0.91	-2.68	-5.25
2. Public consumption		0.41	1.34	-0.39	0.87	-1.39	-1.71
3. Gross fixed capital formation		4.24	1.28	-1.62	-3.43	-2.98	-3.63
3.1 Construction		2.95	-1.35	-1.70	-1.18	-1.33	-2.12
3.2 Equipment		1.05	2.74	0.12	-2.40	-1.56	-1.43
3.3 Other investment		0.23	-0.11	-0.04	0.15	-0.08	-0.08
4. Domestic final demand[1]		7.64	5.17	0.80	-3.47	-7.08	-10.57
5. Inventories and statistical discrepancy		-0.13	1.13	-0.44	-2.81	0.42	1.27
6. Exports of goods and services		0.72	1.57	0.71	-4.73	0.85	-0.07
6.1 Exports of goods		0.54	0.43	-0.05	-1.67	0.50	0.37
6.2 Exports of services		0.18	1.14	0.75	-3.07	0.35	-0.44
7. Final demand		8.22	7.88	1.07	-11.01	-5.81	-9.37
8. Imports of goods and services		2.68	4.88	1.23	-7.76	-2.30	-2.47
8.1 Imports of goods		2.13	4.20	0.45	-6.57	-2.72	-1.68
8.2 Imports of services		0.55	0.68	0.78	-1.18	0.43	-0.79
9. External balance of goods and services (net exports)		-1.96	-3.31	-0.52	3.03	3.14	2.39
GDP at market prices		**5.5**	**3.0**	**-0.2**	**-3.2**	**-3.5**	**-6.9**

Source: ELSTAT, National Accounts, provisional data for 2006-11, March 2012.
1 Excluding inventories and statistical discrepancy.

Table V.2 Indicators of consumer demand (2009-2012)

(annual percentage changes)

	2009	2010	2011	2012 (available period)
Volume of retail trade (excluding fuel and lubricants)	-9.3	-6.9	-8.7	-10.2 (Jan.)
Food-beverages-tobacco[1]	-6.1	-5.5	-6.0	-8.8 (»)
Clothing-footwear	1.4	-11.4	-18.8	-19.9 (»)
Furniture-electrical appliances-household equipment	-15.3	-12.7	-15.7	-10.4 (»)
Books-stationery-other	-24.0	-4.3	-5.2	-11.9 (»)
Revenue from VAT (at constant prices)	-10.2	0.1	-5.9	-15.6 (Jan.-Feb.)
Retail trade business expectations index	-21.4	-26.4	-0.5	-15.0 (Jan.-Mar.)
New private passenger car registrations	-17.4	-37.2	-29.8	-36.0 (» »)
Tax revenue from mobile telephony[2]	13.2	37.1	-16.8	-6.2 (Jan.-Feb.)
Outstanding balance of consumer credit[3]	2.0 (Dec.)	-4.2 (Dec.)	-6.4 (Dec.)	-6.8 (Feb.)

Sources: ELSTAT (retail trade, cars), Ministry of Finance (VAT revenue, tax revenue from mobile telephony), IOBE (expectations), Bank of Greece (consumer credit).
1 Comprising big food stores and specialised food-beverages-tobacco stores.
2 Monthly service fee per subscription until July 2009. As of August 2009, new progressive rates apply to mobile telephony contracts and different fees to prepaid mobile telephony.
3 Comprising bank loans and securitised loans. The rates of change are adjusted for loan write-offs, foreign exchange valuation differences and a transfer of loans by one bank to a domestic subsidiary finance company in 2009.

20.7%, contributing 3.6 percentage points to the decline in GDP). The 9.1% decrease in public consumption contributed 1.7 percentage points to the decline in GDP. These decreases were partly offset by the positive contribution (by 2.4 percentage points) of the change in the **real external balance** (i.e net exports of goods and services), which was mainly due to a 3.6% rise in the exports of goods. Exports of services dropped by 3.8%, on account of the reduced freight rates for the transport of commodities by sea (see Chapter VIII).

The fall in **private consumption** is reflected in the significant drop in the volume of retail sales by 10.2% (the volume of retail sales excluding fuel decreased by 8.7%), the number of new passenger car registrations by 29.8% (see Table V.2 and Chart V.2) and the demand for services (see below).

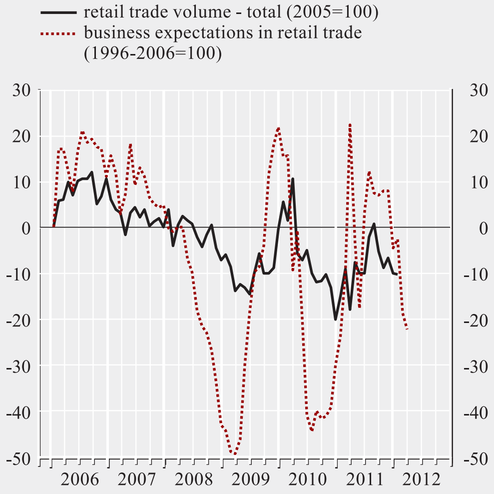
Underlying the decline in private consumption is mainly the decline in disposable income, as a result of job losses (see Chapter VI), wage cuts (see Chapter VII) and higher prices, but most importantly **heightened concerns on employment prospects** and **future income**.[1] Indicatively, in 2011 the 18.8% rise in fuel prices (see Chapter VII) was accompanied by a 16.5% drop in the demand for fuel, while the 0.5% fall in clothing and footwear prices was not enough to boost the sale of such items, whose volume decreased considerably (by 18.8%) on account of reduced income.

For 2011, national accounts data show a 10.2% decline, at current prices, **in total outlays for wages and salaries** (including employer social

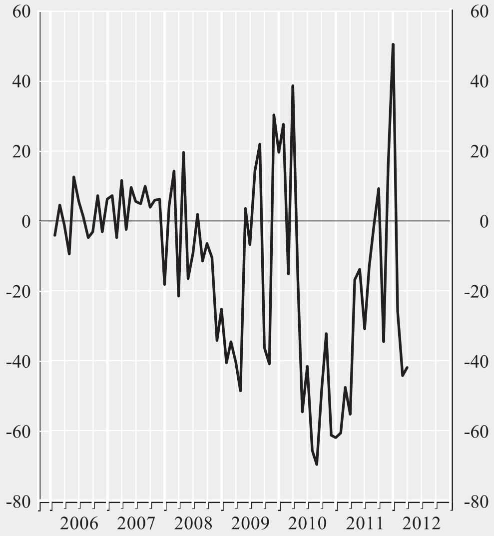
1 It is worth noting that, according to the consumer confidence indicator published by the European Commission on the basis of IOBE's household survey, Greek consumers are the most pessimistic in the EU as regards employment prospects and the economic outlook of their country in the next 12-month period. In March 2012, the percentage balance between consumers' negative and positive employment expectations was 87.5 in Greece, i.e. much higher than the euro area average (34.7), and that of other countries under the support mechanism (Ireland: 20.1, Portugal: 73.2). It is noted, however, that the March value is an improvement from the historically low value 92.9 of December 2011. The percentage balance between consumers estimating that the general economic situation will deteriorate against those estimating that it will improve is 76.9, i.e. a value much higher than the euro area's (21.0). In this case too, the March value is improved compared to the historically low value 88.7 of October 2011. Finally, it is noted that Greek consumers systematically appear more pessimistic than other Europeans (indicatively, in the period 2000-2008 the average value of the balance of expectations for a rise in unemployment was 40.0 in Greece against 19.0 in the euro area).

Chart V.2 Consumer demand indicators

A. Retail trade volume and business expectations[1]
(January 2006 - March 2012)



B. New private passenger car registrations[1]
(January 2006 - March 2012)



Sources: ELSTAT (retail trade and cars) and IOBE (expectations). The index of business expectations is based on firms' estimates of sales and inventories as well as on their forecasts on business activity over the next three months.
1 Percentage changes over same month of previous year.

insurance contributions). As employment fell significantly, the **compensation per employee** declined by 3.1% (cumulatively for the past two years, compensation per employee at nominal prices declined by 6.4%).[2] In 2011, the largest drop in compensation per employee was recorded in the construction sector and the "information and communication" sector (comprising publishing, telecommunications, P/C programming, etc.). The real disposable income was also affected by the notable increase in taxes and prices.

In 2011 total (public and private) **gross fixed capital formation** dropped (at constant prices of 2005) by 20.7%, as already mentioned. This drop mainly reflected the considerable decline in residential investment (-23.6%, i.e. a -6.7 percentage points contribution to the change in gross fixed capital formation),[3] investment in transport equipment (-38.9%, i.e. a -6.5 percentage points contribution) and investment in infrastructure (-19.1%, i.e. a -5.4 percentage points contribution). After its continuous and significant decline each year since 2007, residential investment is (at constant prices) 68.7% lower than in 2006 (and 45.5% lower than in 2000) and now makes up only 28% of total investment, compared with 43.9% on average in 2000-2006.

Enterprises report that, the decline in investment expenditure in 2011, is the result of the negative impact of economic policy, the increase in the tax on profits, the reduced availability and the high cost of capital and the (low) level of their profits.[4] The lack of capital is also confirmed by the considerable slowdown in the annual rate of credit expansion to enterprises (in December 2011 the rate of credit expansion to enterprises was close to -2%, see Table V.3 and Chapter X). The Bank Lending Survey (which also covers enterprises, see also Chapter X) shows that in the last quarter of 2011 reduced credit expansion may be attributed to the tightening of credit

2 It is noted that this change underestimates the reduction of the employed persons' standard average wage, as most of the persons who lost their jobs were low-wage employees. Thus, the percentage of individuals with medium and high wages in total employed persons increased; concomitantly, the average level of wages increased, partly offsetting the wage cuts due to the policy **pursued and the financial crisis.**
3 This is also confirmed by data on housing loans (see Table V.3), the outstanding amount of which was by 2.9% lower in December 2011 year-on-year.
4 See IOBE, *Investment in Manufacturing – Survey Results* [in Greek], October-November 2011 survey, 28 February 2012.

Table V.3 Indicators of investment demand (2009-2012)

(annual percentage changes[1])

	2009	2010	2011	2012 (available period)
Capital goods output	-22.5	-22.1	-11.7	-7.7 (Jan.)
Capacity utilisation rate in the capital goods industry	(73.4)	(66.1)	(62.7)	(56.3) (Jan.-Mar.)
Bank credit to domestic enterprises[2]	5.1 (Dec.)	1.1 (Dec.)	-2.0 (Dec.)	-2.7 (Feb.)
Disbursements under the Public Investment Programme[3]	-2.8	-11.3	-17.1	-25.0 (Jan.-Feb.)
Production index in construction (at constant prices)	-17.5	-31.6	-28.0	...
Volume of private construction activity (on the basis of permits issued)	-26.5	-23.3	-37.7	...
Cement production	-21.4	-14.3	-37.8	-58.8 (Jan.)
Business expectations index in construction	-31.4	-27.4	-27.8	25.6 (Jan.-Mar.)
Outstanding balance of total bank credit to housing[4]	3.7 (Dec.)	-0.3 (Dec.)	-2.9 (Dec.)	-3.2 (Feb.)

Sources: ELSTAT (capital goods output, volume of private construction activity, cement production), IOBE (capacity utilisation rate, business expectations index), Bank of Greece (bank credit to domestic enterprises and housing, disbursements under the Public Investment Programme).
1 Except for the capacity utilisation rate in the capital goods industry, which is measured in percentages.
2 Comprising loans and corporate bonds, securitised loans and securitised corporate bonds but excluding (as of June 2010) loans to sole proprietors. The rates of change are adjusted for loan write-offs, foreign exchange valuation differences, as well as loans and corporate bonds transferred by domestic MFIs to their subsidiaries operating abroad and to one domestic subsidiary finance company in 2009.
3 As of 2012 actual cash payments and not appropriations under the public investment budget.
4 Comprising loans and securitised loans. The rates of change are adjusted for loan write-offs, foreign exchange valuation differences and a transfer of loans by one bank to a domestic subsidiary finance company in 2009.

standards by banks. Moreover, the volume of private construction activity (leading indicator of private construction activity – see Table V.3 and Chart V.5 in Section 2 of this chapter) dropped by 37.7% in 2011.

The decline in investment for fourth consecutive year affects both the current GDP and the rate of change of potential output. However, it is encouraging that investment in equipment, which, due to their integrated technology also contribute to the increase in total factor productivity, has not declined in recent years as much as residential[5] investment.

The fall in consumption and investment led to the contraction of **goods and services imports** by 8.1% in 2011, compared to 2010. This is mainly due to a 7.1% decline in imports of goods (1.7 percentage points contribution), whereas imports of services declined by 11.6% (0.8 percentage point contribution).[6]

National accounts data show a rise in **exports of goods (+3.6%),** but a decrease in **exports of services (-3.8%)** in 2011. As a result, total exports of goods and services remained broadly stable (-0.3%). The underlying causes are presented in detail in Chapter VIII.

Turning to developments on the **supply side**, the output fell **in all sectors with the exception of the primary sector**. The fall in total output was driven by the services sector more, on account of the marked decline in its value added and its large share in the economy.

Gross value added of the tertiary sector (services) decreased for third consecutive year in 2011 (-5.9% at constant prices), contributing by 4.6 percentage points to the change in total gross value added (-6.7%). A considerable decline was recorded in the sectors of trade, hotels-restaurants and logistics (-7.7%), information and communication (-9.5%) and financial and

5 Specifically, it is noted that investment in metal products and machinery in 2011 is, at constant prices, by 14.4% higher than in 2010.
6 Imports of services correspond to about 20% of total imports of goods and services.

Table V.4 Activity indicators in the services sector (2009-2012)

(annual percentage changes)

	2009	2010	2011	2012 (available period)
Services turnover indicators				
Motor trade	-15.7	-36.5	-26.6	...
Wholesale trade	-8.9	-5.9	-13.4	...
Telecommunications	-8.9	-11.3	-8.9	...
Land transport	-31.5	-18.1	-1.7	...
Sea transport	-22.8	-8.5	-2.7	...
Air transport	-11.7	-7.0	-0.9	...
Storage and supporting transport activities	-32.2	-10.8	-7.9	...
Travel agencies and related activities	-9.9	-24.5	-35.3	...
Tourism (accommodation and food service activities)	-9.1	-8.2	-7.4	...
Legal, accounting and management consulting services	-12.4	-7.3	-3.5	...
Architectural and engineering services	-18.6	-20.4	-19.2	...
Advertising and market research	-18.4	-23.8	-21.1	...
Information and Communication Services	...	...	...	...
– Film, video, and TV programme production, recordings and music products	1.4	-6.6	-28.4	...
– Programming and broadcasting activities	-6.7	-2.1	-27.1	...
Passenger traffic				
Athens International Airport	-1.5	-5.0	-6.3	-10.9 (Jan.-Feb.)
Aegean Airlines[1]	9.9	-5.1	4.2	...
Piraeus port (OLP)	-3.8	-6.0	-0.8	-26.9 (Jan.)
Business expectations index in the services sector	-28.3	-9.3	-2.9	-7.9 (Jan.-Mar.)

Sources: ELSTAT (services turnover), Athens International Airport, Aegean Airlines, Piraeus Port Authority (OLP) and IOBE (expectations).
1 Including charter flights.

insurance activities (-9.0%).[7] Moreover, all branches of the services sector saw their turnover drop (see Table V.4). The business expectations index in the services sector (excluding retail trade and banking), following four years of continuous drop (since 2008), reached the historically low level of 61.7 points in 2011.

Gross value added in **industry**, including energy, decreased by 9.1% in 2011 (against a decrease of 5.0% in 2010), contributing by 1.1 percentage points to the drop in gross value added. Construction had a similar contribution – although its share in gross value added is much smaller than its share in industry (4.5% against 13.5%), its activity declined significantly (-17.9%).

According to ELSTAT short-term indicators, industrial output in 2011 fell by 8.6% (manufacturing: -9.6%, see Tables V.5 and V.6 and Chart V.3).[8] The Purchasing Managers' Index

7 According to the Ministry of Finance (*Express*, 29 January 2012), in the two-year period 2010-2011, about 368,000 tradesmen, enterprises and professionals (out of a total of 1,000,572 who in 2009 had an active record in the Internal Revenue Service) discontinued the operation of their head offices (if branches are included too, this figure totals 432,309).

8 The cumulative decline in manufacturing production over the four-year period 2008-2011 was 30.4%. The decline in manufacturing production in 2011 came mainly as a result of the ongoing decline in the production of branches associated with construction activity (non-metallic minerals), as well the large drop in the production of oil and coal products, but also of the "traditional" branches of textiles, clothing-footwear and food & beverage. Nevertheless, in spite of the large recession affecting manufacturing, an increase was recorded in 2011 in the production of the outward-looking branches of basic metals, timber-cork, and tobacco, while the production of pharmaceutical products remained at high levels despite its decrease in 2011.

Table V.5 Industrial production

(2005=100)

	Weights 2005		Average annual percentage changes 2009	2010	2011	Level 2011 (2005=100)
Industry	**100.0**		**-9.4**	**-5.9**	**-8.6**	**77.2**
1. Mining and quarrying	***6.1***	***100.0***	***-11.8***	***-6.5***	***-0.4***	***75.9***
Mining of coal and lignite		56.6	-2.3	-13.1	5.9	85.4
Extraction of crude petroleum and natural gas		1.9	31.2	42.5	-24.3	89.2
Mining of metal ores		9.1	-23.3	16.2	18.5	88.0
Other mining and quarrying		32.4	-27.7	-0.1	-17.1	55.2
2. Manufacturing	***69.8***	***100.0***	***-11.2***	***-5.1***	***-9.6***	***75.7***
Food		18.2	-2.7	-4.1	-4.5	92.3
Beverages		6.0	-4.8	-7.6	-9.4	87.3
Tobacco		1.9	-2.7	-17.5	10.5	82.4
Textiles		3.1	-27.8	-20.6	-21.8	32.8
Wearing apparel		3.4	-23.6	-23.1	-25.4	36.1
Leather and footwear		0.6	-14.9	-36.9	-14.5	42.7
Wood and cork		1.2	-27.3	9.4	2.5	61.9
Paper and paper products		2.3	-3.0	-3.4	-8.5	86.1
Printing and reproduction of recorded media		1.9	-11.3	-14.1	-24.6	57.1
Coke and refined petroleum products		11.3	-0.1	5.7	-14.5	94.7
Chemicals and chemical products		5.3	-14.6	1.5	-4.3	81.0
Basic pharmaceuticals		2.5	18.3	2.4	-0.5	152.8
Rubber and plastic products		4.2	-13.7	-7.0	-7.2	79.2
Non-metallic mineral products		10.3	-24.2	-14.2	-36.2	37.9
Basic metals		8.0	-17.9	12.0	6.4	98.5
Metal products		5.1	-17.7	0.2	-4.8	75.9
Computers, electronics and optical products		1.2	-42.2	-26.6	-17.1	25.4
Electrical equipment		3.0	-20.1	-4.1	-12.1	69.5
Machinery and equipment n.e.c.		2.1	-27.0	-21.0	-8.0	59.7
Motor vehicles, trailers and semi-trailers		0.8	-13.3	-1.6	-30.2	50.0
Other transport equipment		1.6	-18.6	-35.1	-43.5	31.0
Furniture		1.5	-27.2	-19.0	-20.6	49.9
Other manufacturing		0.5	-12.5	-10.5	-13.5	55.7
Repair and installation of machinery and equipment		4.1	-15.2	-22.8	-4.9	55.2
3. Electricity	***20.8***	***100.0***	***-4.2***	***-9.2***	***-8.8***	***78.4***
4. Water supply	***3.3***	***100.0***	***-3.1***	***0.7***	***-1.7***	***101.9***
Industry	**100.0**		**-9.4**	**-5.9**	**-8.6**	**77.2**
Main industrial groupings						
Energy	36.8		-2.9	-4.9	-8.4	84.9
Intermediate goods	28.0		-18.4	-0.9	-9.7	70.3
Capital goods	8.6		-22.5	-22.1	-11.7	49.2
Consumer durables	2.3		-20.7	-13.4	-15.7	56.6
Consumer non-durables	24.3		-4.1	-7.2	-6.5	85.3

Source: ELSTAT, 12 March 2012.

Table V.6 Other indicators of industrial activity (2009-2012)

(annual percentage changes[1])

	2009	2010	2011	2012 (available period)
1. Industrial turnover index[2]	**-23.1**	**5.9**	**7.1**	**13.6 (Jan.)**
Domestic market	-22.1	-0.8	-2.2	4.2 (»)
External market	-25.6	29.3	21.6	33.4 (»)
2. Industrial new orders index[3]	**-27.7**	**3.7**	**1.3**	**-14.7 (»)**
Domestic market	-23.0	-3.9	-24.2	-25,2 (»)
External market	-34.4	27.6	22.1	-5.9 (»)
3. Index of business expectations in industry	**-21.5**	**5.1**	**1.4**	**-8.0 (Jan.-March)**
4. Industrial capacity utilisation rate	**70.5**	**68.5**	**67.6**	**63.5 (» »)**
5. Purchasing Managers' Index (PMI)[4]	**45.3**	**43.8**	**43.6**	**41.3 (March)**

Sources: ELSTAT (industrial turnover and new orders), IOBE (expectations, industrial capacity utilisation rate), Markit Economics and Hellenic Purchasing Institute (PMI).
1 Except for the industrial capacity utilisation rate, which is measured in percentages, and the PMI index.
2 The index refers to the sales of industrial goods and services in value terms.
3 The index reflects developments in demand for industrial goods in value terms.
4 Seasonally adjusted index; values over 50 indicate expansion.

(PMI) in manufacturing (2011: 43.6, 2010: 43.8, see Table V.6 and Chart V.4). Of the individual categories of goods, the largest negative contribution in total industrial output in 2011 was that of energy (-3.4 percentage points)[9] and intermediate goods (-2.5 percentage points).

In 2011, **mines** performed better than manufacturing and energy: their production fell by just 0.4% owing to the increased mining of coal and lignite (+5.9%), and of metal ores (+18.5%[10] – see Table V.6).

The index of business expectations in industry (IOBE – see Chart V.3) has been declining constantly since September 2011 and in December it reached 70.9 points (compared to 71.3 points in December 2010). Meanwhile, the capacity utilisation rate fell by one percentage point (to 67.6%) in 2011.

Developments in industrial production would have been worse, if enterprises had not oriented their production towards exports, as evidenced by the increase in goods exports, the rise in the index of industrial turnover in the external market (at current prices) by 21.6% in 2011 and in external market industrial new orders (leading indicator) by 22.1% on average in 2011.[11] The index of new export orders (which is part of the PMI) rose during May-August 2011 (from 50.1 to 54.4 points), but then dropped.

Finally, the gross value added of the **primary sector** increased by 2.5% in 2011 (having marginally declined by 0.6% in 2010 and 1.2% in 2009). However, according to the index of real agricultural income per labour unit compiled by

9 According to data from the Hellenic Transmission System Operator (HTSO/DESMHE), which, however, refer only to the continental country's grid (excluding islands), total demand for electricity in 2011 declined by 0.9% (2010: -0.9%), as a result of the subdued (2.06%) demand by households and commercial and small industrial enterprises (2010: -1.4%). Conversely, the demand for high voltage electricity by eligible customers (metallurgical and large industrial enterprises) continued to increase (2011: +4.2%, 2010: +5.9%).

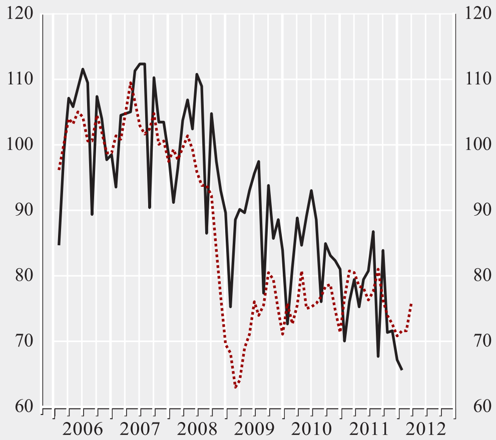
10 By contrast, mining and quarrying activities associated with the construction sector decreased by 17.1%, while the drilling of crude oil and natural gas declined by 24.3%.

11 At the level of individual manufacturing industries, out of 23 industries 12 recorded an increase in their turnover abroad in 2011. The most important export branches were basic metals (+41.4%), oil and coal products (+26.9%), tobacco (+31.1%), metal products (+24.1%), chemicals (12.7%), food (+11.9%), as well as machinery and equipment (+35,9%). With regard to new orders from abroad, it is noted that – out of a total of 12 manufacturing industries monitored – 7 recorded a rise, mainly basic metals (+33.5), metal products (58.0%), machinery and equipment (+24.0%), and chemicals (+13.2%).

Chart V.3 Output and business expectations in manufacturing
(January 2006 - March 2012)

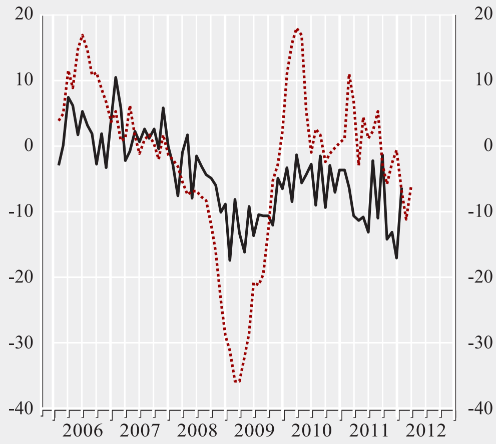
A. Indices

manufacturing output (2005=100)
index of business expectations in manufacturing (1996-2006=100)



B. Percentage changes over same month of previous year

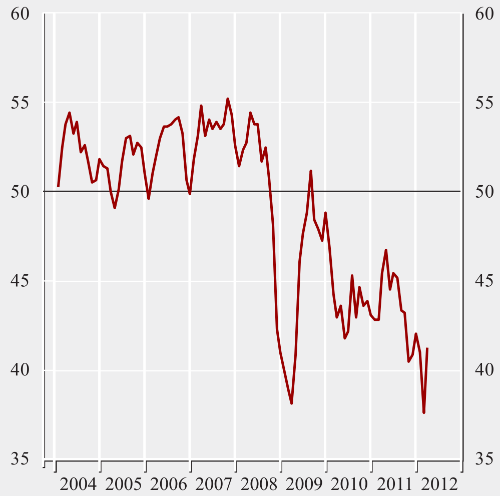
manufacturing output (2005=100)
index of business expectations in manufacturing (1996-2006=100)



Sources: ELSTAT (output) and IOBE (expectations). The index of business expectations is based on business firms' estimates of total demand and stocks, and on output forecasts for the next 3-4 months.

Chart V.4 Purchasing Managers' Index (PMI) in manufacturing
(January 2004 - March 2012)

(seasonally adjusted; values over 50 indicate expansion)



Sources: Markit Economics and Hellenic Purchasing Institute.

Eurostat, the *net* value added at constant prices of production factors[12] *per full-time worker* fell by 5.5% in 2011 (after a drop of 7.6% in 2011 and a rise of 2.1% in 2009),[13] possibly reflecting a reduction in subsidies. It should be noted that the revision of the Common Agricultural Policy after 2013 is expected to bring about changes (such as cuts in subsidies of Greek products) which will call for a more efficient utilisation of the Greek agricultural sector's comparative advantages and an active strengthening of its export orientation.[14]

Year 2011 is the first after 2008 that **labour productivity** (defined as the *gross value added at constant prices* per employee) has not been reduced. What is more, productivity improved in the primary sector (+11%) and the secondary sector (+4.6%), but declined in the tertiary sector (-1.8%). In order to achieve long-term sustainable growth, productivity growth must expand to all sectors of economic activity *and go hand in hand with an increase in employment.*

12 The gross value added minus the depreciation of capital and the production taxes, plus the subsidies.
13 "Indicator A", revised estimates published on the Eurostat website on 28 March 2012.
14 The initiatives of the Greek Ministry of Rural Development and Food for alternative crops, among other things, and the potential turn of young people to the countryside may improve the export penetration of agricultural products. It has already been noted that in 2011 exports of agricultural products increased by 8.6% and of processed food by 18.7%, at current prices.

I.2 ACTIVITY IN THE FIRST QUARTER OF 2012 AND PROSPECTS FOR THE YEAR

Available short-term indicators for the first months of 2012 suggest that recession will continue this year too. The Bank of Greece estimates —taking account also of the latest available data and indications— that the average annual rate of decrease of GDP will near 5%, i.e. recession will be less intense than in 2011, provided that structural measures will be implemented without delay and as planned. In the first quarter of the year, there were indications that the economic climate is being stabilised; however, it remains volatile and high uncertainty continues to prevail.[15]

In the first three months of 2012 it is estimated that, compared with both the last quarter of 2011 and the first quarter of 2011, disposable income was further reduced, due to the ongoing decrease in employment and wage cuts (see Chapter VII). This will certainly squeeze consumer demand, as the few available indicators also confirm. The **volume of retail sales** (including fuel) in January 2012 was by 10.3% lower year-on-year (Jan. 2011: -16.1%); if fuel is not included, the reduction is similar (10.2%).[16] The number of new passenger car registrations in the first quarter of 2012 was by 36.0% lower year-on-year. Moreover, retail trade and services firms (excluding banking and retail trade services) assess that the situation in the first quarter of 2012 was more adverse that in the last months of 2011. Nevertheless, it is important that this assessment generally improved in the course of the quarter, as well as that business confidence of the two sectors was better this year than in the first quarter of 2011 and the last quarter of 2011.

According to the IOBE investment survey conducted in October-November 2011, manufacturing firms plan to cut down on investment costs, at current prices, by 5.6% in 2012. Firms forecast that manufacturing activity (in all industries) will decline, *with the exception of the food & beverage industry.*

On the **supply side**, in January 2012 industrial production decreased by 5.0% year-on-year (against a 12.4% year-on-year decrease in December 2011) and manufacturing production by 6.3% (against a 17.1% year-on-year decrease in December 2011), while mining production increased by 6.1%.[17] **The capacity utilisation rate** continued to decline in the first quarter of 2012 and in March it dropped to the historically low level of 62.8%. The Purchasing Managers' Index (PMI) in manufacturing was very low (39.3%) between January and February, but it recovered in March (by 3.6 points, compared with February) and came to 41.3%. Although this figure is still quite low and suggests a contraction, the size of the recovery compared with February is encouraging (see Chart V.4).

In January 2012, the industrial turnover in the external market rose by 33.4% year-on-year, which is also encouraging. Nevertheless, the rise in industrial new orders from the external market (leading indicator) by 22.1% in 2011 did not continue in January 2012, when a drop of 5.9% was recorded. This development contrasts with firms' forecasts on the volume of their exports in the next three months, which were negative in October 2011 (following a positive course in the period October 2009 – July 2011), but turned positive again in January 2012. However, in March 2012, hotel and tourist enterprises' expectations for demand in the forthcoming months were improved

15 The estimate that uncertainty deepened recession in the US is examined by Baker, Bloom and Davis (2012), "Measuring economic policy uncertainty", mimeo, University of Stanford. They find that the assumption cannot be rejected. Arguments on the negative correlation between activity and uncertainty include the concern of loss of capital committed to investment (Bernanke, 1983, "Irreversibility, Uncertainty and Cyclical Investment," Quarterly Journal of Economics, 98, p. 85-106) and the increased cost of financing on account of uncertainty (Gilchrist, S., J. W. Sim and E. Zakrajsek, 2010, "Uncertainty, Financial Friction and Investment Dynamics", mimeo)

16 The seasonally adjusted data of the volume of retail sales published by Eurostat show a slight improvement in January 2012, compared with December 2011, when fuel is included, and a small decline when it is excluded.

17 This development, which may signal a smaller decline in the production of the industrial sector, is mainly attributed to the recovery of production of oil and coal products, as well as the continuing rise in coal and lignite mining. Moreover, in January 2012 the production of basic metals, computers and electrical equipment was on the rise too.

against early 2012, but were less auspicious than in the first quarter of 2011.

Structural measures that have to be implemented soon include the lifting of all restrictions in the exercise of professional activity ("opening-up of closed professions"), the redesign of the system of negotiations between social partners and the adoption of measures for improving entrepreneurship. The latter is anticipated in the bill of the Ministry for Development that was tabled to Parliament on 22 March 2012: "Improvement of Business Climate – New Corporate Form – Trade Marks – Real Estate Agents – Regulations on Shipping, Ports and Fishing and other provisions". The bill includes 79 actions aimed at lifting major barriers to entrepreneurship. At the same time, liquidity will be provided to enterprises (both existing and new ones) by the Guarantee Fund for Small and Medium-Sized Enterprises, the establishment of which was agreed upon (21 March 2012) by the Greek government, the European Commission and the European Investment Bank (the aim is to provide loans of €1.44 billion by the end of 2015 to the market).

2 THE REAL ESTATE MARKET

2.1 DEVELOPMENTS AND PROSPECTS IN THE REAL ESTATE MARKET

• The Greek real estate market, having shrunk substantially during the current crisis, remains at the same low level without signs of recovery, as medium-term expectations are still negative. It continues to be marked by excessive supply, coupled with a considerable stock of unsold properties and very low demand.[18]

• Despite excessive supply in the real estate market, apartment prices, mainly those of newly built ones, have displayed relative resilience.[19] On the basis of data collected from credit institutions, apartment prices fell by 3.7% in 2009, 4.7% in 2010 and 5.1% in 2011 (-5.4%, -4.9%, -4.3% and -5.9% in the first, second, third and fourth quarters of 2011, respectively; see Table V.7).

• The decline in house prices in the past few years is even greater, according to information collected from real estate agencies.[20] For instance, according to the latter's report to Bank of Greece branches, house prices in other urban areas (except Athens) fell by 6.7% in 2010 and 7.5% in 2011.

• Throughout the crisis, this fall in prices has been stronger for "old" apartments (over 5 years old: -4.8%, -5.0% and -5.6% in 2009, 2010 and 2011, respectively) than for "new" ones (up to 5 years old: -2.0%, -4.2% and -4.4% in 2009, 2010 and 2011, respectively); this reflects the relatively stronger resilience of the prices of newly-built apartments that are normally sold by constructors themselves.

• The Greek residential market possibly doesn't show signs of a major overvaluation,[21] while downward trends in prices will probably

18 Reduced demand in the Greek real estate market reflects household expectations for a further decline in house prices and, mainly, increased uncertainty about employment and future incomes. It is also associated with the overall prospect of addressing the fiscal and structural problems of the Greek economy. It is estimated that the more cautious and selective attitude of banks when granting new loans has also contributed to the decline in demand.

19 It is estimated that the relative resilience of house prices in the current crisis was supported by the high percentage of self-occupancy (over 80%), the large number of very small (family) businesses involved in house construction (about 12,000-14,000) which, before the crisis, had gained substantial profits that enabled them to steer away from bank loans, as well as the low frequency of real estate resale. Price resilience is also associated with increased construction costs that complicate the replacement of the existing stock of houses, the high cost of transactions (transfer tax, notary and lawyer's fees etc.), the traditionally high confidence of households in real estate, as well as the tradition of Greek households, which do not see a residential property as an investment asset but transfer it from one generation to the next (parental donation or bequest to children).

20 Note that, based on international experience and, especially, the comparison of various property price indicators for the UK, indicators based on credit institutions' appraisals of real estate value record the actual decline in prices during the crisis with time lag, compared with indicators based on data from actual transactions or houses offered for sale (advertisements, etc.). Such a time lag in recording real changes in property prices may, to a certain extent, also apply to Bank of Greece indicators, which are based on data collected from credit institutions. In the medium term, however, these indicators would fully record the actual reduction in prices.

21 Moreover, a significant decline was observed in the past five years in the house price-to-rent ratio, which is usually estimated in conjunction with other factors (e.g. interest rates, yields of alternative investment, phase of the economic cycle) in order to examine whether the current property value is overestimated.

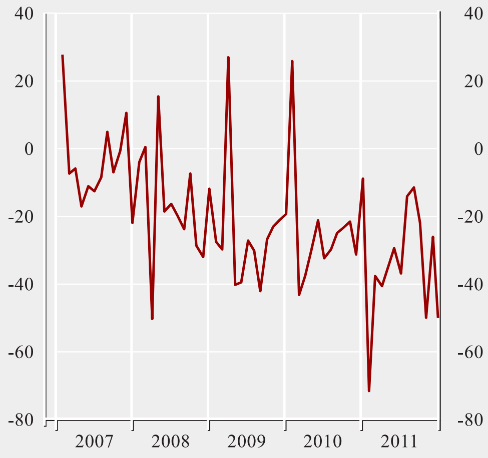
Table V.7 Indices of prices and residential property transactions

Indicators	Average annual percentage changes							
	2005	2006	2007	2008	2009	2010	2011	2012
1. Indices of prices of dwellings (BoG) and rents (ELSTAT)								
1.1 Indices of apartment prices (**new series**)								
a. All apartments (Greece)	-	-	5.9	1.7	-3.7	-4.7	-5.1	...
a1 By age								
a. New (up to 5 years)	-	-	7.2	2.3	-2.0	-4.2	-4.4	...
b. Old (over 5 years)	-	-	5.2	1.3	-4.8	-5.0	-5.6	...
a2 By geographical area: Total								
a. Athens	-	-	6.2	0.9	-4.6	-3.2	-6.3	...
b. Thessaloniki	-	-	7.0	1.5	-6.0	-7.4	-6.6	...
c. Other cities	-	-	6.3	1.8	-2.7	-5.3	-3.9	...
d. Other areas	-	-	4.6	3.3	-1.9	-5.8	-3.2	...
a2.1 By geographical area: New (up to 5 years)								
a. Athens	-	-	9.6	0.0	-3.5	-2.7	-6.4	...
b. Thessaloniki	-	-	3.7	3.5	-5.3	-6.8	-7.3	...
c. Other cities	-	-	7.8	2.4	-2.1	-4.3	-2.9	...
d. Other areas	-	-	4.1	5.4	1.0	-5.7	-1.9	...
a2.2 By geographical area: Old (over 5 years)								
a. Athens	-	-	4.5	1.4	-5.2	-3.5	-6.3	...
b. Thessaloniki	-	-	8.4	0.6	-6.3	-7.6	-6.3	...
c. Other cities	-	-	5.3	1.4	-3.2	-6.1	-4.8	...
d. Other areas	-	-	5.0	1.4	-4.4	-5.9	-4.3	...
1.2 Indices of prices of dwellings (**historical series**)								
a. Urban areas	10.9	13.0	6.2	1.5	-4.3	-4.4	-5.3	...
a1. Athens	8.6	11.7	6.2	0.9	-4.6	-3.2	-6.3	...
b1. Other urban areas[1]	13.4	13.0	3.8	2.6	-2.9	-6.7	-7.5	...
1.3 Price index of rents	4.2	4.4	4.5	3.9	3.6	2.4	0.8	-0.6(3month)
1.4 House price-to-rent ratio (2007=100)[2]	90.9	98.7	100.0	97.9	91.0	84.7	79.7	...
2. Indices of residential property transactions								
2.1 Indices of residential property transactions with MFI intermediation (BoG)[3]								
a. Number of transactions	-	-	36.8	-21.7	-35.7	-0.2	-44.1	...
b. Volume of transactions (in square metres)	-	-	36.6	-23.5	-38.9	-0.1	-41.3	...
c. Value of transactions	-	-	41.1	-20.0	-40.0	-6.2	-41.2	...
2.2 Indices of contracts of real estate transactions signed in the presence of a lawyer: Athens (DSA)								
a. Number of contracts	-	-22.3	1.4	-10.0	-18.0	-16.3	-34.1	...
b. Value of contracts	-	-2.9	12.5	-2.3	-28.3	-20.8	-43.0	...
2.3 Number of notarial acts of real estate transactions[4] (ELSTAT)								
a. Greece, total	29.6	-19.6	-3.0	-5.8	-13.9	-13.3	...	...
b. Athens	49.5	-22.0	-8.2	-9.2	-14.0	-16.8	...	...
2.4 Number of real estate transactions[4] (Ktimatologio SA)								
a. Greece, total	-	-	-	-	-16.3	-9.8	-28.1	...
b. Athens	-	-	-	-	-15.2	-12.5	-34.0	...
2.5 Number of properties sold[4] (Ktimatologio SA)								
a. Greece, total	-	-	-	-	-14.0	-13.0	-28.8	...
b. Athens	-	-	-	-	-8.0	-19.2	-33.6	...
2.6 Number of residential property transfers recorded at the Land Registry of Athens	-	-	-	-	-	-15.5	-30.5	-39.3(3month)

Sources: BoG: Bank of Greece, ELSTAT: Hellenic Statistical Authority, DSA: Athens Bar Association, Ktimatologio SA (Hellenic Cadastre), Land Registry of Athens.
1 Data collected by Bank of Greece branches, mainly from real estate agencies.
2 In absolute terms.
3 The indices of residential property transactions are based on appraisal reports by banks' engineers regarding the value and qualitative characteristics of the residential properties underlying loan agreements. It cannot be excluded that part of such appraisals are not connected with transactions in residential property, but concern a renegotiation of existing loans, registration of a mortgage to back non-housing loans, debt transfers from one bank to another, etc.
4 Including all real estate categories of residential and commercial properties (dwellings, stores, offices, building plots, rural plots of land, etc.).

Chart V.5 Volume of new buildings and extensions on the basis of permits issued (January 2007 - December 2011)

(year-on-year percentage changes)



Source: ELSTAT.

continue in the coming months, with a limited risk of abrupt changes.[22]

• During the crisis, households' purchasing interests shifted towards smaller, older and, mainly, more affordable properties. Moreover, the percentage of cash transactions and the share of cash in total financing for real estate purchase have increased.

• Private construction activity continues to show high rates of decline (-26.5% in 2009, -23.7% in 2010 and -37.7% in 2011; see Chart V.5), similar to those of residential investment (-23.5%, -18.0% and -23.6% in 2009, 2010 and 2011, respectively).

• In the commercial real estate market (offices, retail stores, industrial buildings, warehouses, etc.), there has been reduced demand in the past few years, combined with a shift towards more economically-priced business premises, increased supply and falling prices, tight credit and relative cautiousness in developing new investment projects, increased number of unoccupied retail stores and offices, significant fall in rental prices and renegotiation of lease agreements.[23]

Prospects for recovery in the real estate market depend, inter alia, on the improvement of business and household expectations, better bank financing terms, as well as better prospects for the recovery of the Greek economy and, consequently, reduced uncertainty.

2.2 A BETTER USE OF PUBLIC PROPERTY: POTENTIAL EFFECTS ON THE REAL ESTATE MARKET

The effort make better use of public property is hindered on the long-standing problems of Greek administration. Despite repeatedly pointing out the potential of public property to contribute to economic growth and boost public revenues, any efforts to develop it are deterred by irresolution.[24] This is directly associated both with the recession in the Greek real estate market in recent years and with the significant problems that stand in the way of the effort to develop public property. These problems include the deficient recording of public property, the piecemeal system of the many competent management bodies, the lack of a complete and accurate cadastre, pending matters relating to the redetermination of land uses and the delineation of seashores and beaches, continuous violation of land use and long-standing litigations relat-

22 The reduced risk of an abrupt change in house prices is, inter alia, attributed to the prohibition of auctioning houses that are households' main residence (with an objective value of up to €200,000.00) and the reluctance of commercial banks to auction off properties underlying bad loans at this stage of severe recession.

23 The decline in rent prices and the renegotiation of lease agreements of commercial real estate have contributed to the decrease in the rent paid by the State for the accommodation of its various offices. In 2011, according to estimates of the Ministry of Finance recently submitted to Parliament by the competent deputy minister, a total of €155.8 million was spent for 2,639 lease agreements, while this expenditure came to €169.7 million in 2010 and €178.1 million in 2009. According to these data, this expenditure declined by 8.2% in 2011 and 4.7% in 2010, while a further reduction is foreseen for 2012, as private owners have already been notified of the intention of public organisations to reduce rents by 20%.

24 It is pointed out, however, that after more than ten years of discussions, inaction and debate, the public area of 6,200 thousand m^2 at the old airport of Athens (Hellenikon) is on the international market and discussed among investors and sponsors interested in investing therein. The successful outcome of the process initiated by the Hellenic Republic Asset Development Fund regarding the utilisation of Hellenikon is of great importance, as it will possibly be a point of reference for developing other public properties. Relevant provisions are also included in Law 4062, passed on 27 March 2012.

ing to a substantial part of public property, as well as multiple commitments and restrictions (e.g. protection of the environment or local architectural identity, archaeological restrictions, legislation on bequests).[25] Similar problems are also identified by the Hellenic Republic Asset Development Fund in its effort to implement the public property utilisation programme. Some of the main inhibitors to this effort are:

– The substantial preparation needed for assets, especially land rights, for which there is no active market for the time being.

– The many legal and technical problems that need to be resolved, most of which require special legislative arrangements or even the establishment and operation of new institutions (e.g. new independent authorities).

– The broad coordination required for strategy- and policy-setting in order to maximize the results, given the large size of the anticipated direct investment, which can substantially influence the entire economy.

– The fact that each and every tender must be inspected a priori by the European Commission for matters of competition, procurement and state aid, while every contract before its signing must be inspected by the Court of Audit.

– For every asset to be utilised, it is necessary to have interested investors and the potential to finance the transaction and the utilisation programme. Given the uncertainty on the prospects of the Greek economy and the euro area, it is not easy to find investors, allthough there seems to be substantial strategic interest.

The need for the government to promptly resolve legal and technical issues relating to urban planning and permits for the development of public property is also underlined in the new Memorandum of Economic and Financial Policies.[26] Resolving these problems will certainly create significant surplus value to public property and, above all, will contribute to attracting foreign investors to the Greek real estate market. In any event, however, it is estimated that the dynamics, rational utilisation and development of public property can bring in —constantly and on a long-term basis— revenues for the Greek State, as well as additional development benefits for local communities and economies. However, real estate market experts estimate that if a large number of public properties are put up for sale in this enviroment of marked recession and reduced investor interest (because of the uncertainty and limited liquidity), the recovery of the market will become even more difficult and the Greek State will not obtain commensurate revenues and benefits. On the contrary, it is estimated that concession and long-term lease agreements are particularly effective tools in the development of public property and will trigger direct foreign and other private investment, thereby supporting economic recovery and improving market sentiment and public revenues.

2.3 POTENTIAL EFFECTS OF THE RECENT TAX MEASURES

The significant increase in taxes on real estate in the past three years (in the context of the effort to boost public revenues) is estimated to have intensified recession in the real estate market.[27] Apart from the taxes, repeated announcements and postponements of addi-

25 See *Monetary Policy – Interim Report 2010*, Special Feature 3.

26 In the context of this Memorandum, the Hellenic Republic Asset Development Fund will register about 3,000 properties by end-June 2012, in order to develop them. In respect to the inhibitors to the implementation of the overall public property utilisation programme, the Fund estimates that about €2.8 billion can be received in 2012 and €3 billion in 2013. However, the overall target of the programme remains at €50 billion, while €19 billion must be received by 2015. About 50% of the expected revenues will stem from the development of real estate, 30% from concessions of infrastructure and less than 20% from the sale of corporate shares.

27 The most important recent taxes include the special levy on real estate paid through electricity bills, the significant reduction in the tax-free limits for real estate tax levy and the increase in VAT on newly-built property purchases and "antiparohi" (the exchange of land for apartments, consideration).

tional measures prolong uncertainty about the tax regime on real estate (the increase in objective values, imposing VAT on the commercial property of individuals, etc.) and make the future recovery of the market even more difficult. For instance, objective values (that determine the value of real estate properties for taxation purposes) have not increased, although this measure has been announced many times in the past. In any event, objective values are expected to be adjusted to market prices by June 2012 (new Memorandum of Economic and Financial Policies).

The increase in the objective values of real estate is expected to lead to significant adjustments of the taxable value of real estate (especially in areas where the difference between objective and market value is high), leading to increases in many taxes and accentuating the heightened uncertainty and recession in the Greek real estate market.[28] Any such adjustment must be coupled with rational real estate taxation, in the direction of reducing taxes on transfers[29] and abolishing various charges, as well as of establishing or maintaining a very small number of uniform taxes that would replace the multitude of existing ones (e.g. a single tax on transactions and a single tax on real estate ownership).

It should finally be noted that the objective value of real estate should not adapt to market price levels "horizontally", i.e. by changing all current objective values equally, as the change in the commercial property prices in early 2007 (the more recent adjustment of objective values) varies substantially between geographical areas.[30]

28 Indeed, objective values are used to calculate the level of various taxes, charges, contributions and fines relating to real estate, such as taxes on transfers, acquisitive prescription, exchange, distribution, inheritance, parental donations and gifts, the recently imposed special levy on real estate for residential or commercial use, the real estate tax, the real estate charge (TAP) imposed by local authorities etc. The objective value is also associated with the cost of property transfer contracts (notary and lawyer's fees, registration fees, etc.) and the charges and contributions paid on building permits; it is also used to determine presumed revenues from real estate and presumed minimum income derived from self-owned or leased houses.

29 It should be noted that taxes on property transfers and parental donations in Greece are very high compared with other EU countries, while it is estimated that their reduction will increase the very low frequency of transactions in the real estate market.

30 For instance, according to data collected from credit institutions, apartment prices in the disadvantaged areas of the centre of Athens (Patissia, Metaxourgio, Victoria Square etc.) and Piraeus (Drapetsona, Nikea, Keratsini, Perama etc.) declined four times more than the prices in more advantaged areas of the centre of Athens (Filopappou, Plaka, Kolonaki, etc.).

VI EMPLOYMENT AND UNEMPLOYMENT: DEVELOPMENTS AND PROSPECTS

According to Labour Force Survey (LFS) data, the average number of employed persons declined in 2011 by 297,900 people (-6.8%) against 2010, when it had also decreased by 120,000 people (-2.7%). Increasingly sharp **declines** were seen **in the course of the year** (2001 Q1: -231,200 people or -5.2%; Q2: -270,700 people or -6.1%; Q3: -323,600 people or -7.3%; Q4: -366,200 people or -8.5% year-on-year) (see Chart VI.1).

In the last quarter of 2011, the number of employed persons was 13.6% lower than in the fourth quarter of 2008, the year when economic activity began to decline (see Chart VI.1).

The faster drop in employment in 2011 reflects the higher number of employees exiting the public sector, a rise in the number of employees laid off from the private sector and an increase in the number of self-employed leaving the labour market.

Chart VI.1 Employment (1999-2011)

(percentage changes over corresponding quarter of previous year)

Source: ELSTAT, Labour Force Surveys.
Note: New revised data for 1998-2003, published in January 2005. No changes are shown for 2004, as data are not fully comparable due to a change in the survey sample.
* Other employed persons = self-employed with staff (employers) + self-employed without staff + assistants in family businesses.

Specifically, compared with 2010, the number of persons employed in the public sector fell by 4.9% or 47,700 people, reflecting, among other things, an increase in the number of retirees. The number of those employed in the *private sector* shrank by 7.3%, mainly as a result of an 8.9% drop in the number of *wage and salaried employees* (who account for about 53% of all persons employed in the private sector). The number of *self-employed without personnel* (e.g. independent professionals, approximately 30% of all persons employed in the private sector), dropped by 2,9%, while the number of *self-employed with personnel* (e.g. shopkeepers, about 10% of all persons employed in the private sector) decreased by 11.2%. Finally, the number of assistants in family enterprises dropped by 10.5%.

Job losses put strains on household incomes, with a bearing on social cohesion, total output and the financial situation of insurance funds. As regards the latter, LFS data indicate that the number of persons insured in the Social Insurance Institute (IKA), the Agricultural Insurance Organisation (OGA), the civil servants' fund and the Insurance Organisation for the Self-Employed (OAEE) decreased by 8.7%, 8.6%, 2.8% and 2.3% respectively in 2011 compared with 2010.

The year-on-year decline in the number of employed persons (-366,000 in the last quarter of 2011) came mainly from **construction** (71,600), **wholesale and retail trade** (71,600), **manufacturing** (60,700), the **primary sector** (37,100) and **public administration and defense** (28,100).

The decrease in employment was steeper among **foreign nationals** and those with **lower education**. The number of non-Greek nationals employed dropped by 12.8% in 2010-2011, when the total number of employed persons decreased by 6.8%. Among the up-to-54 age group, the number of those who are employed and also hold a tertiary education degree shrank by 3.5%, while the number of upper or lower

Table VI.1 Population, labour force and employment

	Q2 2011 (in thousands)	Annual percentage changes				
		Q2[4]				
		2007	2008	2009	2010	2011
Population aged 15+[1]	9,338	0.6	0.2	0.3	0.4	0.4
Population aged 15-64[1]	7,231	0.8	0.3	-0.1	0.2	0.0
Labour force[1]	4,967	0.8	0.4	0.7	0.9	-1.1
Employment[1]	4,156	1.5	1.4	-1.1	-2.3	-6.1
– Primary sector[1]	510	-2.6	-0.7	2.1	4.2	-7.6
– Secondary sector[1]	740	3.1	1.1	-6.4	-7.4	-16.5
– Tertiary sector	2,906	1.7	1.9	0.1	-1.9	-2.8
Labour force participation rate[2]		67.0	67.2	67.7	68.3	67.6
Employment rate[3]		61.5	62.2	61.6	60.1	56.4
Unemployment as a percentage of the labour force		8.1	7.2	8.9	11.8	16.3

Source: ELSTAT, Labour Force Surveys.
1 Second quarter-on-second quarter.
2 Labour force participation rate of population aged 15-64.
3 Employed persons aged 15-64 as a percentage of population aged 15-64.
4 Average annual changes and average year levels are reported in the main text.

secondary education graduates decreased by 6.8% and that of employed persons of lower education by 16.2%. Moreover, some **regions** such as the Ionian Islands, the North and South Aegean and Crete, experienced a smaller percentage drop in employment in 2011 (compared with 2010) than the national average. In light of the above, aspects related to the sectoral composition of employment, such as the concentration of foreign nationals in specific sectors, also play a significant part in explaining the differences in the strength of the decline in employment discussed here.

In 2011 the number of people working in SMEs dropped more than that of people working in enterprises employing more than 50 persons, therefore leading to a rise in the share of employees in large enterprises.

Turning to **employment status**, data from the LFS and the Labour Inspectorate point to an increase in the number of part-timers. Also, according to Labour Inspectorate data, 9% of all new labour contracts concluded in 2011 were job rotation contracts (against 6.9% in 2010 and 4.3% in 2009).

In March 2012, **employment expectations**, as registered in IOBE business surveys (see Chart VI.2), pointed to a further decrease in employment in retail trade, construction, services and manufacturing. It should be noted that expectations were less negative in "manufacturing" (marginally) and "retail trade" in March than in January 2012, while in "construction" and "services other than retail trade and banking" they were worse.[1]

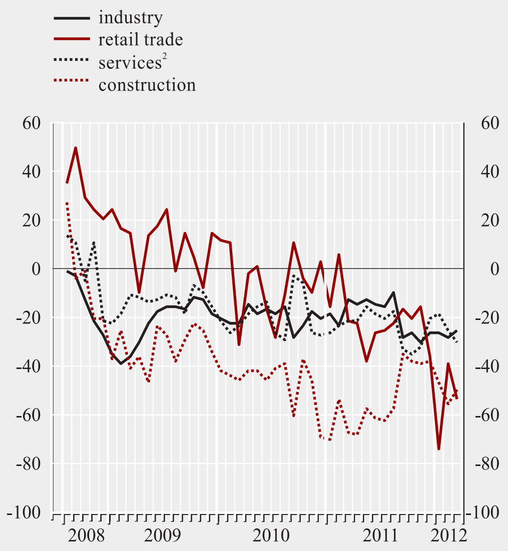
As the number of employed persons declined, the **number of unemployed** rose to 876,900 (on average) in 2011. As a result, the average unemployment rate came to 17.7% in 2011, 5.2 percentage points higher than in 2010 (see Chart VI.3).

In 2011, the unemployment rate for men stood at 14.9% and that for women at 21.4%, up from 9.9% and 16.2% respectively in 2010. Youth unemployment also increased. For the 25-29 age group, the ratio rose by 9.8 percentage points to 29.6% in 2011, up from

1 The first half of 2012 saw a stabilisation, albeit to low levels, of the Alba Recruitment Confidence Index on administrative and managerial staff (see http://www.alba.edu.gr/RCI/Pages/Reports.aspx).

Chart VI.2 Employment expectations[1] (August 2008 - March 2012)

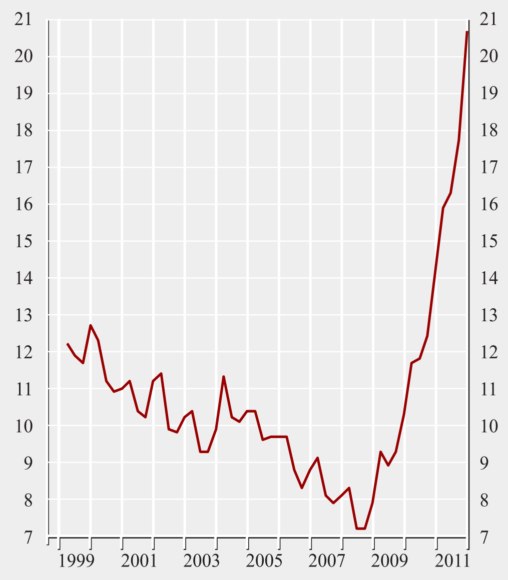
(net percentage balances)



Source: IOBE, Business Surveys.
1 Firms were asked to assess the prospect of an increase in the number of their employees over the coming period.
2 Excluding banks and retail trade.

Chart VI.3 Total unemployment rate (1999-2011)

(percentage of labour force)



Source: ELSTAT, Labour Force Surveys.

19.7% in 2010, while for the 15-24 age group – which traditionally has small participation in the labour force – it also increased, from 32.9% in 2010 to 44.4% in 2011.

The rise in the number of unemployed by a total of 248,200 people was smaller (in each quarter) than the decline in the number of employed persons (297,900 people). This gap, which occurred despite the fact that new entries to the labour market outnumbered those in 2010, is attributable to a significantly higher number of people exiting the labour force due to retirement and to an increase in the number of people who, though they have found themselves out of employment, are not looking for a job because they believe they will not find one.

Taking into account the number of people not looking for a job because they believe they will not find one (13,500), the number of those who would like to work but are not looking for a job for other reasons (55,600) and the number of those working part-time because they cannot find full-time employment (146,200), it is estimated that **underemployment and unemployment combined** stood at 24.7% in the fourth quarter of 2011 (compared with an unemployment rate of 20.7%).[2]

A source of concern is also the increase in **the share of the long-term unemployed**, i.e. those who remain out of work for more than 12 months, in the *total number of unemployed* (2010: 47.2%, 2011: 51.6%). Concerns relate to the fact that the longer the unemployment, the more difficult it gets to find a job, and there is a risk that this additional unemployment may turn structural. Taking a different definition of long-term unemployment (the share of unemployed in the *labour force*), the rate of long-term unemployment was 11.3% in the last quarter of 2011. Moreover, the fact that the long-term unemployed are typically low-edu-

2 In the fourth quarter of 2010, the gap between the two indicators was somewhat smaller, at 3.6 percentage points (rate of unemployment 14.2%, rate of underemployment – broad definition: 17.7%).

Table VI.2 Population, labour force, employment and unemployment: Q2

(thousand persons)

	Population					Labour force					Employed persons					Unemployed persons					Unemployment rate				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Men and women																									
– total (aged 15+)	9,207	9,230	9,262	9,302	9,338	4,918	4,939	4,974	5,021	4,967	4,520	4,582	4,532	4,427	4,156	398	357	443	594	811	8.1	7.2	8.9	11.8	16.3
– 15-64 years	7,208	7,228	7,220	7,231	7,231	4,827	4,854	4,887	4,940	4,889	4,431	4,497	4,445	4,347	4,080	397	357	442	593	809	8.2	7.3	9.0	12.0	16.6
– 15-24 years	1,172	1,151	1,123	1,103	1,088	364	349	343	333	313	284	277	259	229	179	80	72	84	105	135	22.0	20.6	24.5	31.4	43.0
– aged 25+	8,034	8,079	8,140	8,198	8,249	4,554	4,591	4,632	4,688	4,654	4,236	4,305	4,273	4,199	3,978	318	285	358	490	676	7.0	6.2	7.7	10.4	14.5
Men																									
– total (aged 15+)	4,490	4,503	4,518	4,539	4,559	2,906	2,925	2,915	2,918	2,879	2,762	2,789	2,730	2,645	2,485	144	137	185	273	394	5.0	4.7	6.3	9.4	13.7
– 15-64 years	3,602	3,615	3,613	3,622	3,626	2,841	2,862	2,854	2,862	2,826	2,698	2,726	2,670	2,589	2,432	143	136	184	272	393	5.0	4.8	6.5	9.5	13.9
– 15-24 years	590	579	564	554	546	203	197	192	186	171	174	167	157	140	108	29	30	34	46	63	14.1	15.1	18.0	24.8	36.7
– aged 25+	3,900	3,924	3,954	3,985	4,013	2,703	2,728	2,723	2,732	2,707	2,587	2,622	2,573	2,505	2,376	115	107	150	227	331	4.3	3.9	5.5	8.3	12.2
Women																									
– total (aged 15+)	4,717	4,728	4,744	4,762	4,778	2,012	2,014	2,059	2,103	2,089	1,758	1,794	1,802	1,782	1,672	254	221	258	321	417	12.6	10.9	12.5	15.3	20.0
– 15-64 years	3,605	3,613	3,607	3,608	3,605	1,986	1,991	2,033	2,078	2,064	1,733	1,771	1,776	1,757	1,648	254	221	258	321	416	12.8	11.1	12.7	15.4	20.2
– 15-24 years	583	572	559	549	542	161	152	151	147	142	109	110	101	89	70	52	42	50	59	72	32.1	27.7	32.9	39.7	50.7
– aged 25+	4,134	4,155	4,186	4,213	4,236	1,851	1,862	1,908	1,956	1,946	1,649	1,684	1,700	1,693	1,602	202	178	208	263	345	10.9	9.6	10.9	13.4	17.7

Source: ELSTAT, Labour Force Surveys.

cated and low-skilled persons highlights the importance of government intervention with active policies. Encouraging in this respect is an OAED (Manpower Employment Organisation) initiative to provide training programmes for the unemployed (e.g. certified training on ITC).[3]

Moreover, according to OAED data on **salaried employment flows in the private sector** for 2011, the sum of layoffs (including fixed-term contracts that expired) and voluntary quits exceeded recruitments by 126,000, implying a net decrease in wage and salaried jobs (the corresponding decline in 2010 was 96,200). OAED data point to a marked decline (107,000 or 11.3%) in recruitments in 2011, while layoffs (56% of which concerned the expiry of fixed-term contracts) also shrank (by around 34,000 or 4.6%). Voluntary quits were down by 43,000, which is to be expected in times of crisis. It should however be noted that this figure should be treated with caution since exits are not fully recorded. According to OAED data, a net 39,562 jobs were lost in January-February 2012, i.e. roughly the same figure as in January-February 2011 (39,647). According to the same data, job losses occurred every month of 2011 (except during April-July). Since August 2011 though (and with the exception of October and November 2011, and February 2012), the net number of jobs lost every month has moderated year-on-year.

As pointed out in Chapter V, fear of unemployment is high among the Greek. *Indicative in this respect is the fact that, according to LFS data, even persons currently in employment are looking for another job, as they are afraid, among other things, they might lose their current one.* Indeed, despite the decrease in the number of employed persons in 2011, the number of those among them who are looking for a job actually increased year-on-year.

2012 will see a rise in the average **rate of unemployment** compared with 2011. In a recent report by the Bank of Greece (*Monetary Policy 2011-2012*, March 2012), the *average* rate of unemployment is projected to *rise above 19%* in 2012, from 17.7% in 2011. However, *how much* above will depend on the depth of the recession and, in particular, on whether the economic climate will stabilise or improve in the second and third quarters of the year (to allow for employment to increase in the months where economic activity seasonally picks up).

3 On the basis of a new initiative, the unemployed will be able to receive a “training cheque” from the Centres for the Promotion of Employment, and they will be able to “cash in” these cheques in the Vocational Training Centre that offers the vocational training programme they wish to follow.

Box VI.1

REFORMS IN LABOUR LEGISLATION (JUNE 2010-FEBRUARY 2012): OBJECTIVES AND IMPLEMENTATION

1 THE NEED FOR STRUCTURAL REFORMS IN THE LABOUR MARKET

The need for structural reforms in the Greek labour market is demonstrated by the sluggishness of job creation in the private sector and the pervasiveness of the informal economy.[1] Factors behind this sluggishness include high hiring and firing costs,[2] as well as the fact that wage developments do not properly reflect firm-level financial performance. This mismatch is partly associated with the fact that not all firms are represented in collective bargaining at sector level, whereas occupational collective agreements are becoming less and less meaningful in an economy characterised by heterogeneity across individual activities and businesses.

1 The structural shortcomings of the Greek labour market were already discussed at length in previous publications by the Bank. See Bank of Greece, *Monetary Policy - Interim Report*, October 2010, Box VI.1, and Bank of Greece, *Annual Report 2010*, April 2011, Box VI.1.
2 As shown by cross-country comparisons of the components of the OECD Employment Protection Legislation (EPL) Index, layoff costs are higher in Greece than in several other counties.

In the current juncture, and given diminishing competitiveness since 2000 – as product price increases were not accompanied by higher productivity as reflected in soaring unit labour costs and an increasingly stronger real effective exchange rate – it is absolutely necessary (and useful) to lower unit labour costs. This can be done either by lowering wages or by enhancing productivity. Given the time needed to raise productivity, the only way to contain *unit* labour costs in the short run is to lower total labour costs (compensation of employees, employers' social security contributions and other costs).

At the same time, improving labour productivity through an overhaul of public administration, by providing incentives for businesses to grow, improving education/vocational training with the introduction of closer links to the labour market and measures to promote in-house training still constitute a major challenge for social and economic policies in Greece.

The structural weaknesses mentioned earlier, in particular the combination of high hiring/firing costs and onerous employer/employee social security contributions favour the expansion of uninsured labour. The need to contain the informal economy, in order to protect workers and return fiscal aggregates to a sounder footing, constitute another reason to promote structural reforms in the labour market.

The following section presents the most important legislative reforms in the functioning of the labour market from June 2010 to February 2012.

2 MAJOR LEGISLATIVE REFORMS INTRODUCED IN JUNE 2010-FEBRUARY 2012

The major legislative reforms carried out in the period June 2010-February 2012 focused on the following areas:

(a) Cutting dismissal (and therefore hiring) costs

Article 17 of Law 3899/2010 extends **the probationary period of employment** from 2 to 12 months. During this period, an employer may terminate an employment contract without paying compensation to the employee. The new "extended" period could spur recruitment, as the height of dismissal costs often discouraged employers from hiring since, in the event of a downturn, the burden would be high. This measure is not expected to lead to an increase in unjustified dismissals, as enterprises bear the "adjustment costs" of new employees.

The **minimum periods of notice** to be given **in writing** by the employer upon termination of an employment contract were also adjusted. More specifically, Article 74 of Law 3863/2010 halved the minimum period of notice an employer is required to give, in order to pay reduced compensation. Also, Law 3863 specified that those with more than 20 years of uninterrupted service with the same employer would be entitled to a period of notice of up to 6 months, against 24 months that applied before.[3] For more than 10 years of uninterrupted service with the same employer, the minimum period of notice increases by one month for every five years after the first decade. In the event an employer fails to give notice, the compensation for 5 (10) years of uninterrupted service with the same employer is 3 (6) months of the employee's salary. With a three- (four-) month notice, it drops to 1.5 (3) months' salary.

3 For persons with 20 years of employment with the same employer, the period of notice could not exceed 16 months.

Moreover, Article 74 of Law 3863/2010 introduced adjustments to the thresholds above which redundancies are considered to be collective for all firms with more than 20 employees. The differences are particularly noticeable for firms with more than 200 employees, while for firms with 1,500 employees or more the corresponding threshold remains unchanged at 30. Indicatively, for firms with 250 employees, the threshold above which redundancies are considered to be collective is raised from 5 (under the previous law) to 12.

Also, under 3863/2010, it is no longer necessary for collective redundancy thresholds to be adjusted semi-annually by decision of the Minister of Labour and Social Security.

(b) Reducing labour costs

Lowering the minimum pay (salaries and wages) envisaged in the National General Collective Labour Agreement. Law 4046/2012, in conjunction with Cabinet Act No. 6/28 February 2012, resulted in the curtailment of the **minimum pay** envisaged in the National General Collective Labour Agreement. For persons aged 25 and over, the minimum pay is reduced by 22%, whereas for those aged less than 25 the reduction is 32%. This steeper reduction in the minimum pay of the younger (resulting in 12.8% lower wages of this age group compared with older individuals) is to compensate for the group's lower productivity, thus facilitating its absorption by firms. Lower minimum wages for the young is common in several EU countries.[4] The same law also provides for pay cuts by June 2012 (10% on average) of the wages of those paid according to a special public sector wage grid (including judges, diplomats, doctors, university professors, policemen and armed forces personnel).

Moreover, Law 4046/2012 put in place a number of measures that will apply throughout the duration of the programme that accompanies the present MoU. These include: (i) freezing minimum wages until the end of the fiscal adjustment programme under the EU/ECB/IMF loan agreement for Greece; and (ii) suspending all seniority pay increases prescribed by law or collective agreement (i.e. not only the National General Collective Labour Agreement) until unemployment falls below 10%.

Reducing overtime costs. Compared with 2005, the average premium paid for overtime work decreases by 20%.

Other premia: abolishing the 7.5% premium (introduced by Law 2874/2000) for part-time workers working less than four hours a day and **the 10% premium** (introduced by Law 3846/2010) for part-time workers working overtime.

(c) Encouraging collective bargaining at firm level

Law 3899/2010 explicitly amended Law 1876/1990 and introduced a new type of collective agreement, the *special firm-level collective agreement (SFLCA)*. These agreements enable employers and employees to agree on wages and other terms of employment that are less favourable than those stipulated in sectoral agreements, but not less favourable than those of the National General Collective Labour Agreement. Law 3899 explicitly stated that firm-level agreements take precedence over sectoral agreements. Furthermore, under the new law, SFLCAs could be signed also by firms with less than 50 employees, with the employee side

4 Countries which have enacted sub-minimum wages for the young include: Belgium (persons aged under 21), France (under 18), the United Kingdom and Ireland (under 20), the Netherlands (under 23) and Luxembourg (under 18).

being represented by the firm-level union, where available, otherwise by the respective sectoral union or federation. SFLCAs are submitted in advance to the Council of Social Oversight of the Labour Inspectorate (CSOLI) along with an explanation of motives, and CSOLI issues a non-binding opinion within 20 days.

However, SFLCAs proved difficult to implement in practice. On the one hand, firms with less than 20 employees, with no company unions, were quasi-excluded from such arrangements. On the other hand, the requirement for a CSOLI opinion only added to bureaucratic hurdles, as evidenced by the fact that fewer than 15 firms signed an SFLCA during the life of this type of collective agreement.

Subsequently, Law 4024 of October 2011 abolished the SFLCAs altogether and includes a provision enabling employers and employees to sign, until completion of the Mid-term Fiscal Strategy 2012-2015, firm-level agreements, that may depart from the sectoral ones, without having to consult CSOLI. Most importantly, under the new law, the employees can be represented by an **"association of persons"**, the establishment of which does not require the prior approval of the Court of First Instance (unlike what is typically the case for workers' and non-workers' unions), provided that at least three-fifths of the firm's employees are members of the association, regardless of the firm's total staff. Also, the new law explicitly suspended, throughout the duration of the Mid-term Fiscal Strategy 2012-2015, the right to extend the scope of sectoral and occupational agreements to include enterprises that are not represented in the bargaining.

Between late October 2011 and 23 March 2012, at least 182 new firm-level collective agreements were signed in firms covering all sectors of economic activity. The agreements concern around 40,000 workers and generally included pay cuts or wage freezes (see Chapter VII).[5] It is presumed that, without these agreements, total job losses would have been even higher. According to OAED data on wage/salaried employment flows in the private sector, terminations of indefinite duration contracts have been falling every month since October 2011, both month-on-month and year-on-year. Of course, this does not imply that unemployment has stopped rising; one should bear in mind that the self-employed are not included in OAED data and that job creation —as was also the case before October 2011— is still not strong enough to compensate for job losses. However, the rate of increase in unemployment may have moderated compared to end-2011.

(d) Ensuring greater flexibility in the labour market

Law 4046/2011 imposed a three-year **limit on the maximum duration of collective agreements** and stipulated that agreements in force (with a duration of two or more years) would expire no later than one year after its promulgation. Although Law 1876/1990 enabled parties to a collective agreement to proceed to a premature reopening of an agreement (even one year ahead of its expiry) in the event of significant changes in the circumstances, terminating the agreement was often a source of friction.

Under Law 4046/2011, the grace period after an agreement expires was shortened from six to three months. Moreover, it explicitly stipulates that, at the end of the three months, the

5 The texts of the agreements are available at the Ministry of Labour and Social Security website.

"after-effect" of the collective agreement will be limited exclusively to basic wages, as well as seniority, child, education and arduous job allowances.

(e) Abolishing tenure in public enterprises and entities (including former public enterprises and entities)

Law 4024 abolished the security of tenure enjoyed by employees in public enterprises and entities.

(f) Mediation and arbitration procedures

Law 4024 repealed mandatory recourse to arbitration. From now on, requests for arbitration will only be allowed if **both parties consent**, to encourage settlement discussions between the parties.

VII INFLATION, WAGES, BUSINESS PROFITS AND COMPETITIVENESS: DEVELOPMENTS AND PROSPECTS – INCOME INEQUALITY AND POVERTY

1 INFLATION

• Inflation levels in the course of 2011 were largely affected by increases in indirect taxes. The average annual rate of HICP inflation declined to 3.1% in 2011, from 4.7% in 2010 (see Tables VII.1 and VII.2, and Chart VII.1), while average annual core inflation (i.e. excluding energy and unprocessed food prices) reached 1.7%, down from 3.0% in 2010 (see Chart VII.2). The downward trend of inflation continued. Thus, HICP inflation declined from 2.2% in December 2011 to 1.4% in March 2012. At the same time, core inflation fell to 1.1% in December 2011, down from 3.0% in December 2010, and further to 0.3% in March 2012. Without taking into account the impact of higher indirect taxes, HICP inflation averaged just 1.1% in 2011 and decreased from 0.8% in December 2011 to 0.3% in March 2012. Similarly, core inflation without this impact averaged only 0.2% in 2011 and dropped from 0% in December 2011 to -0.7% in March 2012.

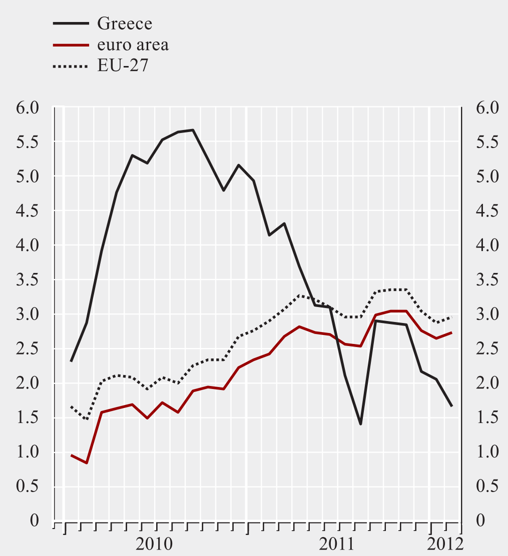
• The **inflation differential** between Greece and the euro area narrowed considerably in 2011, to 0.4 percentage point, down from 3.1 percentage points in 2010 and 1.0 percentage point in 2009. The core inflation differential came to zero in 2011, from 2.0 percentage points in 2010 and 0.9 percentage point in 2009. Moreover, **in March 2012 the inflation differential moved into negative territory** (-1.2 percentage points – see Tables VII.3 and VII.4, as well as Chart VII.3).

• The decline in inflation in **2011** reflected the gradual attenuation of the effect of higher indirect taxation, the larger fall in unit labour costs in the business sector compared to 2010, the large decline in consumer demand and the slightly lower, but still significant, increase in crude oil prices (in euro) at the global market compared to 2010 (average increase: 31.3% in 2011, against 36.1% in 2010 – see Charts VII.4 and VII.5).

• It is estimated that the effect of these factors will continue into **2012**, as – according to the

Chart VII.1 Harmonised index of consumer prices in Greece, the euro area and the European Union (January 2010 - February 2012)

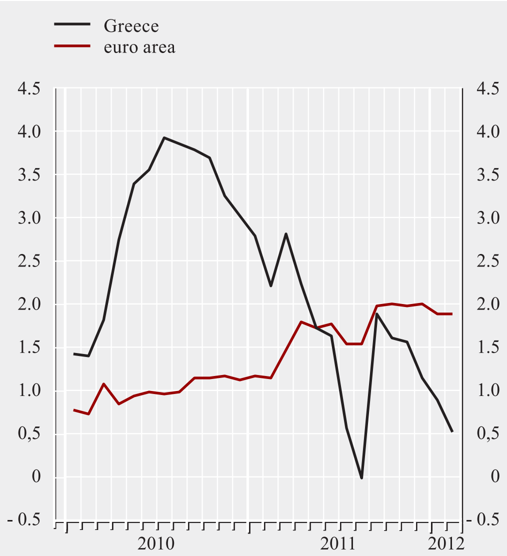
(year-on-year percentage changes)



Sources: ELSTAT and Eurostat.

Chart VII.2 Core inflation in Greece and the euro area on the basis of the HICP excluding energy and unprocessed food (January 2010 - February 2012)

(year-on-year percentage changes)



Sources: ELSTAT and Eurostat.

Table VII.1 Price indicators

(annual percentage changes)

Year or quarter	Consumer Price Index								Industrial Producer Price Index					Import price index in industry	
	General index	Sub-indices							Domestic market				External market		
									General index	Sub-indices					
		Goods	Services	CPI excl. fuel & fresh fruit and vegetables	CPI excluding food & fuel	Food and non-alcoholic beverages	Fresh fruit and vegetables	Fuel		General index excl. energy	Interme-diate goods	Consumer goods	General index	General index	General index excl. energy
2005	3.5	3.4	3.7	3.1	3.2	0.6	-8.1	18.0	5.9	3.0	3.8	2.5	3.7	8.8	1.2
2006	3.2	3.4	3.0	2.7	2.5	3.7	3.3	10.9	7.3	6.5	7.3	6.2	4.8	4.2	2.7
2007	2.9	2.5	3.5	2.9	3.0	3.2	5.6	1.3	4.1	2.7	6.1	-0.3	3.0	2.6	3.0
2008	4.2	4.3	3.9	3.4	3.0	5.4	4.6	14.7	10.0	6.4	8.4	4.5	6.4	7.1	2.5
2009	1.2	-0.5	3.6	2.4	2.6	1.9	5.3	-15.7	-5.8	-0.1	-1.2	0.9	-6.0	-1.8	0.5
2010	4.7	5.6	3.6	3.0	3.4	0.1	-4.3	36.2	6.1	0.9	2.3	-0.3	8.8	6.6	1.4
2011	3.3	4.2	2.3	1.5	1.3	3.1	5.1	18.8	7.4	2.7	4.8	1.1	8.8	7.6	1.5
2008 Q1	4.3	5.0	3.3	2.9	2.3	6.1	7.1	24.0	11.5	6.9	9.3	4.9	8.5	8.1	2.5
Q2	4.8	5.6	3.6	3.6	3.0	6.4	5.3	21.5	13.5	7.2	9.4	5.3	10.0	10.1	2.3
Q3	4.7	5.1	4.2	3.7	3.2	4.5	-3.1	22.9	14.2	7.2	9.7	4.9	9.8	10.1	2.8
Q4	2.9	1.7	4.5	3.5	3.4	4.5	8.9	-7.4	1.3	4.2	5.4	3.0	-2.4	0.4	2.3
2009 Q1	1.5	-0.5	4.3	3.2	3.3	3.6	8.2	-22.6	-5.2	1.1	0.5	1.5	-7.8	-2.4	1.4
Q2	0.7	-1.5	3.7	2.3	2.5	2.7	11.0	-23.0	-8.8	-0.7	-2.2	0.5	-9.5	-4.4	0.5
Q3	0.7	-1.2	3.3	2.1	2.3	2.1	8.3	-18.5	-9.1	-1.0	-2.9	0.8	-8.2	-3.7	-0.2
Q4	2.0	1.0	3.2	2.0	2.4	-0.7	-5.8	4.8	0.4	0.4	0.1	0.7	2.0	3.7	0.1
2010 Q1	3.0	2.8	3.3	1.7	2.1	-1.7	-9.4	33.0	6.4	1.1	1.5	0.8	9.4	8.3	0.8
Q2	5.2	6.2	3.8	3.3	3.8	-0.9	-9.3	42.9	7.5	1.1	2.3	0.0	10.2	8.0	1.4
Q3	5.5	6.7	4.0	3.7	4.1	1.4	1.2	35.3	4.9	0.6	2.3	-0.9	7.5	5.2	1.4
Q4	5.1	6.6	3.1	3.3	3.6	1.6	2.1	33.5	5.6	1.0	3.2	-0.9	8.3	5.1	1.9
2011 Q1	4.7	5.9	3.2	2.5	2.5	2.5	3.4	29.2	7.6	2.6	6.3	-0.3	10.2	7.4	2.1
Q2	3.5	4.5	2.4	1.7	1.6	3.4	10.2	17.1	7.1	3.0	5.7	1.0	8.4	7.1	1.8
Q3	2.4	2.9	1.8	0.7	0.3	2.8	2.0	16.1	8.1	2.8	4.7	1.6	9.3	7.8	1.5
Q4	2.8	3.6	1.9	1.3	0.8	3.7	4.7	14.3	6.9	2.2	2.8	1.9	7.5	8.1	0.7

Source: ELSTAT.

Table VII.2 Price developments in Greece and the euro area

(annual percentage changes)

	2010	2011	2011 May	2011 June	2011 July	2011 Aug.	2011 Sept.	2011 Oct.	2011 Nov.	2011 Dec.	2012 Jan.	2012 Feb.
A. Euro area												
Harmonised Index of Consumer Prices (HICP) and its components												
Overall index	**1.6**	**2.7**	**2.7**	**2.7**	**2.5**	**2.5**	**3.0**	**3.0**	**3.0**	**2.7**	**2.7**	**2.7**
Goods	1.8	3.3	3.4	3.2	2.9	3.0	3.7	3.9	3.9	3.3	3.2	3.4
Food	1.1	2.7	2.8	2.7	2.6	2.7	3.0	3.3	3.4	3.1	3.1	3.3
Processed food[1]	0.9	3.3	3.2	3.1	3.4	3.6	4.0	4.3	4.3	4.1	4.1	4.1
Unprocessed food	1.3	1.8	2.4	2.0	1.3	1.1	1.4	1.8	1.9	1.6	1.6	2.2
Industrial goods	2.2	3.7	3.6	3.5	3.1	3.1	4.1	4.2	4.1	3.4	3.2	3.4
Non-energy industrial goods	0.5	0.8	1.0	0.9	0.0	0.0	1.2	1.3	1.3	1.2	0.9	1.1
Energy	7.4	11.9	11.1	10.9	11.8	11.8	12.4	12.4	12.3	9.7	9.2	9.5
Services	1.4	1.8	1.8	2.0	2.0	1.9	1.9	1.8	1.9	1.9	1.9	1.8
Industrial producer prices	*2.9*	*5.9*	*6.2*	*5.9*	*6.1*	*5.8*	*5.8*	*5.5*	*5.4*	*4.3*	*3.8*	*3.6*
B. Greece												
Harmonised Index of Consumer Prices (HICP) and its components												
Overall index	**4.7**	**3.1**	**3.1**	**3.1**	**2.1**	**1.4**	**2.9**	**2.9**	**2.8**	**2.2**	**2.1**	**1.7**
Goods	5.9	4.0	3.9	4.0	2.8	1.6	3.7	3.7	3.7	2.7	2.9	2.5
Food	3.1	4.2	3.5	3.6	3.3	2.4	3.1	3.7	4.0	4.3	3.3	2.5
Processed food[1]	5.0	4.7	2.5	2.1	2.4	2.7	4.6	4.6	4.2	4.2	3.5	3.2
Unprocessed food	0.2	3.4	5.1	6.1	5.0	2.0	0.6	2.3	3.5	4.4	2.8	1.4
Industrial goods	7.7	3.9	4.2	4.2	2.4	1.1	4.0	3.7	3.5	1.7	2.6	2.5
Non-energy industrial goods	1.9	-0.2	1.0	1.0	-1.4	-3.3	0.7	0.0	0.1	-0.9	-0.5	-0.7
Energy	30.4	16.7	14.3	13.9	13.8	13.9	14.5	15.2	14.1	9.5	13.2	14.3
Services	3.1	1.9	2.0	1.9	1.2	1.1	1.8	1.7	1.7	1.5	0.9	0.3
Industrial producer prices	*6.1*	*7.4*	*7.1*	*6.3*	*8.7*	*7.5*	*8.1*	*7.9*	*7.2*	*5.7*	*7.7*	*6.9*

Source: Calculations based on ECB and ELSTAT data.
1 Including alcoholic beverages and tobacco.

Table VII.3 Harmonised index of consumer prices: Greece and the EU (2010-2012)

(annual percentage changes)

Country	2010 (year average)	February 2011	2011 (year average)	February 2012
Austria	1.7	3.1	3.6	2.6
Belgium	2.3	3.5	3.5	3.3
Bulgaria	3.0	4.6	3.4	2.0
Cyprus	2.6	3.1	3.5	3.1
Czech Republic	1.2	1.9	2.1	4.0
Denmark	2.2	2.6	2.7	2.7
Estonia	2.7	5.5	5.1	4.4
Finland	1.7	3.5	3.3	3.0
France	1.7	1.8	2.3	2.5
Germany	1.2	2.2	2.5	2.5
Greece	**4.7**	**4.2**	**3.1**	**1.7**
Hungary	4.7	4.2	3.9	5.8
Ireland	-1.6	0.9	1.2	1.6
Italy	1.6	2.1	2.9	3.4
Latvia	-1.2	3.8	4.2	3.3
Lithuania	1.2	3.0	4.1	3.7
Luxembourg	2.8	3.9	3.7	3.3
Malta	2.0	2.7	2.4	2.4
Netherlands	0.9	2.0	2.5	2.9
Poland	2.7	3.3	3.9	4.4
Portugal	1.4	3.5	3.6	3.6
Romania	6.1	7.6	5.8	2.7
Slovakia	0.7	3.5	4.1	4.0
Slovenia	2.1	2.0	2.1	2.8
Spain	2.0	3.4	3.1	1.9
Sweden	1.9	1.2	1.4	1.0
United Kingdom	3.3	4.4	4.5	3.4
European Union - 27	2.1	2.9	3.1	3.0
Euro area	**1.6**	**2.4**	**2.7**	**2.7**

Source: Eurostat.

Table VII.4 Contributions to the inflation differential between Greece and the euro area (2006-2011)

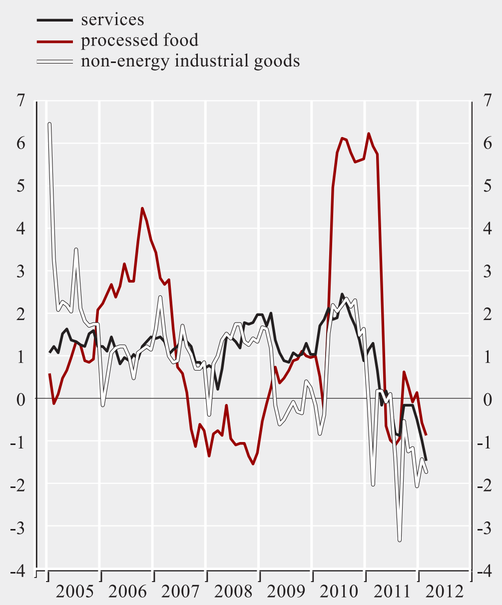
(percentage points)

	2006	2007	2008	2009	2010	2011
HICP inflation differential	**1.1**	**0.9**	**1.0**	**1.1**	**3.1**	**0.4**
Contributions:						
Core inflation	1.15	1.00	0.77	0.91	1.60	-0.04
of which						
Services	0.43	0.50	0.56	0.64	0.71	0.01
Processed food	0.44	0.13	-0.14	0.14	0.52	0.21
Non-energy industrial goods	0.28	0.35	0.35	0.13	0.37	-0.26
Unprocessed food	-0.12	-0.06	0.03	0.39	-0.12	0.08
Energy	0.11	-0.03	0.24	-0.25	1.66	0.40

Source: Calculations based on Eurostat and ECB data.

Chart VII.3 Annual inflation differentials between Greece and the euro area (2005 - 2012)

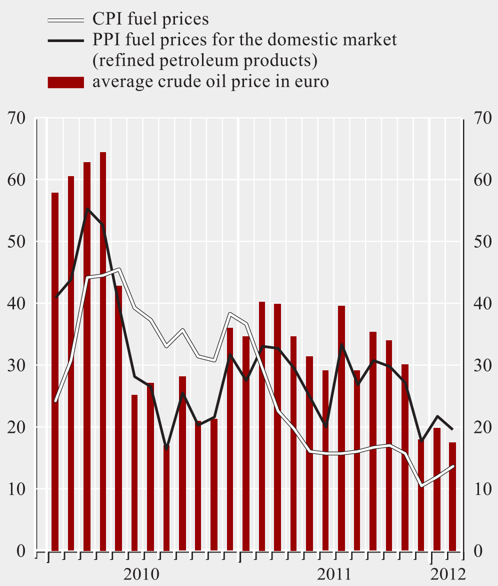
(selected price indicators; differentials in percentage points)



Source: Calculations based on Eurostat and ECB data.

Chart VII.4 Evolution of CPI/PPI fuel prices and of Brent crude oil prices (in euro) (January 2010 - February 2012)

(year - on - year percentage changes)



Source: Calculations based on ELSTAT data and, for crude oil prices (UK Brent), on ECB data.

latest data— average annual HICP inflation is expected around 1.2%, while core inflation should average zero. Indeed, no significant changes in indirect taxation are expected, unit labour costs in the business sector are estimated to decline at a rate nearly double that of 2011 and consumer demand will continue to contract. Furthermore, the most recent forward prices imply an increase of 10% in the price of crude oil in US dollars (and by 15-16% in euro), which translates into a sharp decline compared to the 2011 increase referred to above. By contrast, the prices of other raw materials and commodities are expected to fall this year, having recorded strong increases in 2010 and 2011.

Finally, in **2013**, according to some scenarios, HICP inflation is expected to decline further, possibly under 0.5%, while average core inflation should be negative (around -0.3%).

- **Current trends in consumer prices and the general outlook until the end of 2013 could be summarised as follows:**

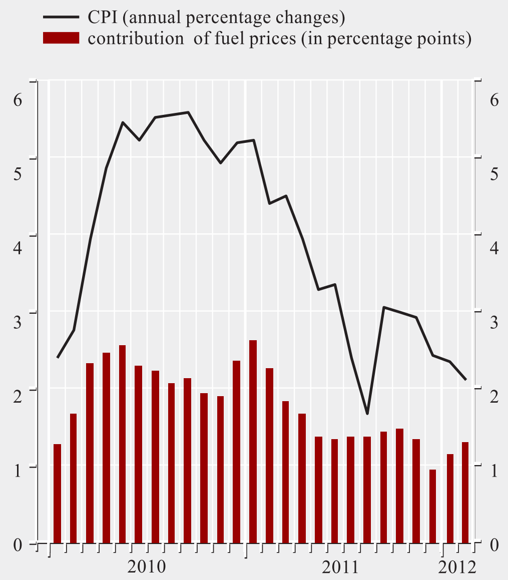
– Disinflationary pressures —which reflect both weak demand and declining labour costs— mainly stem from **the prices of "non-energy industrial goods"** (food is also excluded from this category), whose annual growth rate has been negative since December (March 2012: -1.0%) and is expected to range between -1% and -3¼% by the end of 2013.

– The **prices of services** have fallen markedly (March 2012: 0.5%), due to weak demand and lower labour costs and rents. The annual rate of change in the prices of services should be, on average, almost zero by the end of 2013.

– By contrast, **energy prices** have recorded a double-digit annual rate of increase (March 2012: 12.7%), which is expected to remain above 10% until early 2013, slow down later in the year and perhaps turn negative in the last months.

– Despite their considerable decline in the last 12-month period (to 2.0% in March 2012,

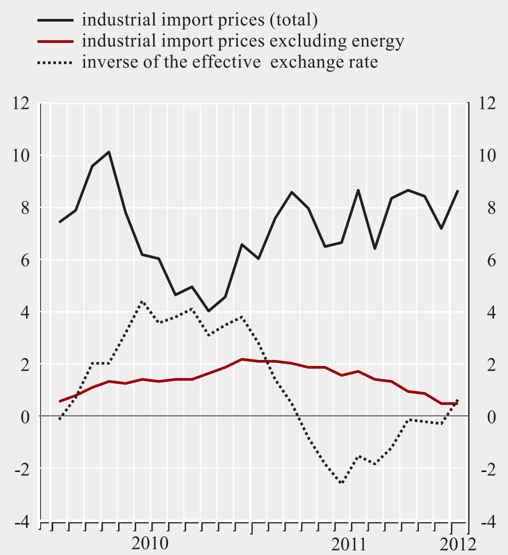
Chart VII.5 Contribution of fuel prices to inflation (January 2010 - February 2012)



Source: Calculations based on ELSTAT data.

Chart VII.6 Industrial import price index and the inverse of the effective exchange rate of the euro, weighted on the basis of Greece's external trade (January 2010 - January 2012)

(percentage changes over same month of previous year)



Sources: ELSTAT and Bank of Greece.

down from 8.2% in March 2011), processed food prices continue to exert inflationary pressures. Although the annual growth rate of these prices should be relatively moderate (between 0.7% and 1.8% in the period up to the first two months of 2013), it could rise above 3%, reflecting the strong increases in the prices of food commodities in the global market in 2011 with a significant time lag. It should be reminded that imported products are important to the domestic production of processed food.

2 EARNINGS – UNIT LABOUR COSTS

• Average nominal pre-tax earnings of employees in the total economy are estimated to have declined by 3.0% in 2011 and real earnings by 6.1%. Furthermore, compensation per employee, including employers' social security contributions and civil servants' pension costs, is estimated to have declined by 2.0%. The average earnings of civil servants are estimated to have seen a larger decline (by 4.9% in nominal terms and 7.9% in real terms), while average earnings in the business sector have also decreased significantly (-2.4% in nominal terms, -5.5% in real terms). More detailed estimates are presented in Table VII.5.

Taking into account that productivity in the total economy rose slightly (in the business sector at a rate of about 2%), it is estimated that unit labour costs declined for second consecutive year – by 2.6% in the total economy (2010: -3.8%) and by 4.5% in the business sector (2010: -2,7%).

• The decline in employee earnings in 2011 and 2012 was and will continue to be driven by (a) important policy interventions, directly related to the level of earnings (initially in the public sector and, as of 2012, in the private sector as well) and to the institutional framework that determines these earnings (see also Box VI.1 in Chapter VI); and (b) negative economic developments, which shape conditions in the labour market too.

Table VII.5 Earnings and labour costs (2005-2012)

(annual percentage changes)

	2005	2006	2007	2008	2009	2010	2011	2012 (estimate)
Greece								
Average gross earnings (nominal):								
– total economy	4.4	5.7	5.2	6.2	4.6	-4.8	-3.0	-8.4 to -9.2
– central government[1]	2.3	3.1	3.8	7.1	5.2	-8.5	-4.9	-7.4
– public utilities	7.6	7.0	7.1	8.2	7.7	-5.5	-7.9	-9.5
– banks	1.5[2]	10.8	8.9	0.0	3.7	-1.8	0.1	-7.5
– non-bank private sector	5.6	6.8	6.1	6.5	2.8	-2.9	-1.7	-8.5 to -10.1
Minimum earnings	**4.9**	**6.2**	**5.4**	**6.2**	**5.7**	**1.7**	**0.9**	**-19.6[4]**
Average gross earnings (real)	**0.9**	**2.4**	**2.2**	**1.9**	**3.3**	**-9.1**	**-6.4**	**-9.5 to -10.3**
Total compensation of employees	**5.8**	**7.8**	**8.2**	**8.5**	**3.2**	**-7.2**	**-8.4**	**-10.5 to -11.4**
Compensation per employee	**3.9**	**5.9**	**5.6**	**6.8**	**4.9**	**-4.3**	**-2.0**	**-6.3 to -7.2**
Unit labour costs:								
– total economy	3.4	2.2	5.0	8.7	6.6	-3.8	-2.6	-5.9 to -6.8
– business sector[3]	3.8	2.8	5.8	7.9	4.6	-2.7	-4.5	-7.8 to -9.1

Sources: ELSTAT (GDP 2005-2011), Bank of Greece estimates/forecasts (for 2012 GDP and the other annual aggregates in 2005-2012).
1 Average compensation per employee.
2 The relatively low growth rate of bank employees' average earnings mainly reflects changes in staff structure.
3 The business sector includes private and public enterprises and banks.
4 Average annual change, based on the cut of minimum earnings by a percentage between 22% (for persons aged 25+) and 32% (for persons under 25), as of 15 February 2012.

– Already from the onset of the crisis, private companies sought to adapt labour costs to lower demand in various ways: reduction/elimination of overtime work, suspension of personnel, introduction of reduced weekly working hours, conversion of full-time work contracts to part-time or short-time, cuts in salaries on the basis of individual work contracts, staff layoffs.

– Moreover, in the first ten months of 2011, private companies took advantage –to a very limited extent– of the newly-offered possibility of entering into "special" firm-level collective agreements and set wages below the thresholds of the collective agreements at sectoral or occupational level. All in all, only 12 such contracts have been entered into, covering 3,555 workers.

New trends in collective bargaining in the business sector and wage policy in the public sector. Forecasts for 2012-2013

Since end-October 2011, following the enactment of Law 4024 (Article 37), which has substantially facilitated the conclusion of firm-level agreements (by lifting the remaining obstacles), a clear shift of private enterprises towards such contracts is observed. In most cases, firm-level collective agreements provide for a downward adjustment of actual earnings by 10%-40% –relative to the level of earnings in sectoral and occupational agreements for each individual case– towards the levels of the National General Collective Agreement, i.e. the levels of the minimum wage and the corresponding allowances. Already by 23 March 2012, at least 182 firm-level collective agreements had been entered into, covering more than 40,000 employees (including collective agreements in the Hellenic Telecommunications Organisation (OTE) and Emporiki Bank, covering about 15,000 employees). In the two thirds of these agreements, the labour side was represented by associations of persons, as permitted by the new Law, and in

Table VII.6 Average earnings and unit labour costs in total economy: Greece and the euro area (2001-2012)

(annual percentage changes)

Year	Average earnings		Unit labour costs	
	Greece	Euro area	Greece	Euro area
2001	4.7	2.8	3.9	2.4
2002	6.6	2.7	5.5	2.5
2003	5.6	2.9	2.3	2.2
2004	7.2	2.6	4.3	1.0
2005	4.4	2.2	3.4	1.3
2006	5.7	2.5	2.2	1.1
2007	5.2	2.5	5.0	1.4
2008	6.2	3.3	8.7	3.7
2009	4.6	1.8	6.6	4.1
2010	-4.8	1.6	-3.8	-0.8
2011	-3.0	2.3	-2.6	1.0
2012 (forecast)	-8.4 to -9.2	2.0	-5.9 to -6.8	1.4

Sources: For Greece, Bank of Greece estimates. For the euro area: European Commission, *Economic Forecasts,* Autumn 2011.

the remaining one third by formal workers' unions at firm level.

– In the course of 2011, the salaries of civil servants were cut, pursuant to the provisions of Laws 3899/2010, 3986/2011, 4002/2011 and 4024/2011. Furthermore, the structural reforms in the labour market that are envisaged in the Memorandum passed by Parliament on 12 February (Law 4046/2012) involve the following: (a) an immediate cut of 22% in the minimum wage for those over 25 and 32% for those under 25; (b) suspension of automatic wage increases due to seniority; (c) limitation of the continued effect of collective agreements after they expire and establishment of a maximum duration for collective agreements; (d) conversion of long-term employment contracts with definite duration (quasi-permanency) for the staff of enterprises (currently or formerly) within the public sector into contracts with indefinite duration; (e) adoption, by July 2012, of a 10% reduction (on average) in special wage regimes (applying to judges, diplomats, doctors, university professors, the military and police).

• Assuming that the cuts in the minimum wage, combined with the expansion of firm-level collective agreements, will influence about 25% to 33% of employees in the business sector (excluding banks and public utilities), some provisional estimates were made regarding the level of wages and labour costs in 2012 (see also Table VII.5) and in 2013. In particular:

– In 2012, average nominal pre-tax earnings of employees in the total economy are estimated to fall by 8.4%-9.2% in nominal terms and by 9.5%-10.3% in real terms. A larger reduction on average is expected in the business sector (-8.7% to -10.0% in nominal terms, -9.8% to -11.1% in real terms), while the average earnings of civil servants should fall by 7.4% in nominal terms and by 8.5% in real terms. Assuming that GDP will contract by almost 5% and that the number of employees will decline by 4.5%, it is calculated that unit labour costs will decrease considerably (for third consecutive year), namely by **5.9%-6.8%** in the whole economy and by **7.8%-9.1%** in the business sector.

– As many collective agreements are going to expire in the course of 2013 (and most likely the wages set out therein will be adjusted downwards), average nominal earnings could fall by about 7% in the total economy (about 3% in the public sector and almost 9% in the business sector), which would bring about a further reduction in unit labour costs by 6%-6.5% in the total economy and by about 8% in the business sector.

• Based on the above –provisional and approximate– calculations, unit labour costs in 2012-2013 should record a cumulative reduction of 11.9%-12.7% in the total economy and 15.3%-16.5% in the business sector. The Memorandum passed by Parliament sets the goal of reducing these costs by 15% in the period 2012-2014.

3 COST COMPETITIVENESS: PERFORMANCE AND PROSPECTS OF RECOVERING PAST LOSSES

• Reducing labour costs has a bearing on the prices of industrial products, although this is reflected only partly in export prices, as these are recorded in the Industrial Producer Price Index for the external market, excluding energy. Indeed, the annual growth rate of the Index fell considerably, from 4.9% in February 2011 to 1.9% in February 2012, but did not turn negative. However, the PMI survey in manufacturing shows a continuous decline in the prices of industrial firms' final products in the period from March 2011 through to March 2012 (latest available data) and underlines that Greek firms have made significant cuts in prices due to reduced demand and increased competition and also with the aim to attract customers.

• Of course, as the Bank of Greece has pointed out in recent reports, after a necessary initial "corrective" period, a sustainable improvement in competitiveness cannot rely on reduced nominal earnings combined with falling or stagnant productivity, as the negative impact that a continuous fall in wages would exert on domestic demand would outweigh the positive effects on external demand. Therefore, any improvement in cost competitiveness should also rely on enhanced productivity. Structural reforms geared towards a more efficient operation of product and labour markets are intended to achieve precisely this and could lead to both a higher potential growth rate and improved structural competitiveness.

• It should be reminded that the simplest approach to investigate the impact that changes in labour costs have on productivity, would be to measure the change in relative unit labour costs in a common currency, the so-called "real effective exchange rate based on relative unit labour costs in the total economy". This indicator is calculated vis-à-vis Greece's 28 main trading partners, including euro area countries.[1] According to *recently revised* estimates of the Bank of Greece, this indicator rose by 32.5% in the 2001-2009 period, which suggests an equal loss of cost competitiveness. Given that in the same period the nominal effective exchange rate of the euro rose by 15.5%, which means that the euro appreciated against other currencies (see Table VII.7), it follows that the higher growth of labour costs in Greece compared to other countries accounts for about half of this loss of competitiveness. In particular, relative labour costs rose by 14.7% between 2001 and 2009 and the euro appreciated by 15.5%, which ultimately led to a loss of competitiveness equal to 32.5% (1.147 x 1.155 = 1.325).

After 2009, the situation changed. According to the aforementioned *revised* estimates, the "real effective exchange rate, based on relative unit labour costs in the total economy" fell by 6.6% in 2010 and 3.7% in 2011, which suggests an equal improvement in cost competitiveness vis-à-vis the 28 trading partners. The cumulative improvement by 10.5% in the 2010-2011 period reflects a cumulative fall in relative labour costs by 7.9% and a cumulative depre-

1 The weight for each country is calculated on the basis of Greece's trade volume with the country concerned.

Table VII.7 Greece: nominal and real effective exchange rate (EER) indices[1]

(annual percentage changes in year averages)

		Real EER	
	Nominal EER	On the basis of relative consumer prices	On the basis of relative unit labour costs in total economy
2000	-6.3	-6.9	-5.0
2001	1.7	1.1	0.7
2002	2.3	2.6	4.2
2003	5.0	5.5	3.8
2004	1.7	1.9	4.4
2005	-1.0	-0.1	0.4
2006	0.0	0.8	0.9
2007	1.3	1.6	4.1
2008	2.4	2.5	6.7
2009	1.2	1.6	3.7
2010	-2.8	-0.5	-6.6
2011*	0.5	0.4	-3.7
Cumulative percentage change between 2001 and 2011	12.7	18.5	19.1

Sources: Exchange rates: ECB, euro reference exchange rates. CPI: ECB, HICP where available. Unit labour costs in total economy: Bank of Greece estimates for Greece, ECB for the other countries.
* Provisional data and estimates.
1 These indices are compiled by the Bank of Greece and include Greece's 28 main trading partners. Weights were revised on the basis of imports and exports of manufacturing goods (SITC 5-8) in the years 1998-2000 for the period 1993-2000 and in the years 2004-2006 for the period 2001-2010. Weights take account of third-market effects.

ciation of the euro by 2.4% (in particular: 2.8% depreciation in 2010 and 0.5% appreciation in 2011).

Therefore, in the 11-year period from 2001 to 2011, the loss of competitiveness was only **19.1%** (compared to 32.5% in the 2001-2009 period) and was attributable only by one third to the increase in relative labour costs (**5.7%** cumulative increase in the 2001-2011 period) and by two thirds to the appreciation of the euro (12.7% in the same period).

- The loss of competitiveness against Greece's trading partners in the euro area only has also been calculated. In this calculation, the exchange rate is irrelevant, as there is a single currency, and, therefore, changes in this indicator reflect solely changes in relative labour costs. According to estimates of the Bank of Greece, the cumulative loss of competitiveness vis-à-vis Greece's trading partners in the euro area, on the basis of relative labour costs, reached **22.9%** in the 2001-2009 period, but it is estimated to have improved by **3.1%** in 2010 and by **3.5%** in 2011 thus coming down to **14.9%** for the 2001-2011 period.

- Furthermore, according to ECB's harmonised competitiveness indicators,[2] the "real harmonised competitiveness indicators based on unit labour costs indices for the total economy"[3] for Greece rose (which means competitiveness losses) by 22.9% in the 2001-2009 period and fell (which means improved competitiveness) by a total of 6.2% between 2009 and 2011. From 2001 to 2011, the rise in this indicator (hence competitiveness losses) was only 15.2%.

2 See http://www.ecb.int/stats/exchange/hci/html/hci_ulct_201104.en.html.
3 This indicator is calculated against Greece's 36 trading partners, including all other euro area countries.

If account is taken of the ECB's "nominal" indicator ("nominal harmonised competitiveness indicator"[4]), which is similar to the nominal effective exchange rate of the euro calculated by the Bank of Greece, it follows that: (i) in the nine-year period from 2001 to 2009, the increase in the relevant labour costs contributed about three tenths to the total loss of cost competitiveness and the remaining loss came from the appreciation of the euro, and (ii) in the eleven-year period from 2001 to 2011, the increase in the relevant labour costs contributed about one sixth to the total loss in cost competitiveness and the remaining loss came from the appreciation of the euro.

The aforementioned provisional projections of the path of unit labour costs in 2012 and 2013 imply that competitiveness based on relative labour costs would be substantially improved in 2012: by 8.8%-9.7% compared to the 28 trading partners and by 7.5%- 8.4% compared to the euro area. This improvement will continue in 2013 (by 5.2-5.4% vis-à-vis both the 28 trading partners and the euro area, according to available estimates). It follows from the above that by the end of 2012 two thirds to three fourths of total competitiveness losses over the 2001-2009 period will be recovered. Furthermore, in the course of 2013, the entire losses vis-a-vis Greece's trading partners will be recovered.

4 BUSINESS PROFITS

The decline in demand, which continued into 2011, is also reflected in narrower profit margins. Indeed, profit margins declined, as evidenced by available data on the annual results of 171 Athex-listed non-financial firms[5] for 2011, pointing to a 7.9% fall in gross profits and net pre-tax losses of €229 million, compared to net pre-tax profits of €810 million in 2010. At the same time, sales fell in nominal terms by 5.5%, which reduced the gross profit margin by 0.5 percentage point (to 16,4%), while the net profit margin turned negative (-1.1%) from positive (3.7%) in 2010. These refer to Athex-listed firms. In general, however, a comparison between the aforementioned fall in unit labour costs in the total economy in 2011 and the rise in the GDP deflator (by 1.6%) shows that profit margins in the total economy have widened. The same conclusion can be drawn from the forecasts for 2012-2013.

5 INCOME INEQUALITY, POVERTY AND KEY INDICATORS OF LIVING CONDITIONS IN GREECE

- Based on the latest data,[6] 20.1% of the Greek population or 868,597 households numbering 2,204,800 people in total live below the relative at-risk-of-poverty threshold (based on 2009 incomes). This poverty risk indicator rose slightly in the first year of the crisis (2008 incomes: 19.7%) and remains significantly higher than in most EU countries (EU-27, EU-SILC 2010: 16.4%, see Table VII.8). Greece has a similarly poor ranking among EU countries also in terms of income inequality.[7]

It should be reminded that, according to the concept of ***relative*** poverty, a person is considered poor when their income is not sufficient to ensure a standard of living compatible with the habits and standards of the society they live in. This approach implies that the poverty line changes with the average standard

4 It rose by 15.9% in the nine-year period from 2001 to 2009 and fell by 2.7% in the two-year period 2010-2011.
5 Both the Public Power Corporation (DEH) and the Hellenic Telecommunications Organisation (OTE) are not in the sample. Also, the sample does not include the two refineries and a large chemicals/plastics company, whose indices have been influenced by specific factors.
6 Data from the sample survey on income and living conditions (Statistics on Income and Living Conditions – EU-SILC) for the year 2010, with 2009 as income reference period, announced by ELSTAT and published by Eurostat. EU-SILC is the main source of comparable statistics on income distribution, the risk of poverty and social exclusion in EU countries. It should be noted, however, that the surveyed population does not include groups which are poor by inference, including homeless or institutionalised persons, a large number of illegal economic immigrants, Romà, etc. See ELSTAT Press Release of 3 January 2012.
7 In particular, the same survey (EU-SILC 2010) indicates that in terms of inequality Greece ranks high (Gini coefficient: 32.9) among EU countries (EU-27: 30.5). Moreover, the wealthiest 20% of the country's population holds a 5.6 times higher income share than the poorest 20% (S80/S20 indicator), while this ratio is 5.0 for EU-27 as a whole.

Table VII.8 Selected indicators of social cohesion

Indicator	Greece 2005	2006	2007	2008	2009	2010	EU-15[1]	EU-27[1]
I. Risk of poverty								
1. At-risk-of-poverty rate								
1.1 Total population	*19.6*	*20.5*	*20.3*	*20.1*	*19.7*	*20.1*	*16.2*	*16.4*
a. People aged 65+	27.9	25.6	22.9	22.3	21.4	21.3	16.1	15.9
b. Children aged 0-15	19.3	21.5	22.8	22.7	23.4	22.3	19.5	20.2
c. Single-parent households	43.5	29.6	34.2	27.1	32.1	33.4	37.1	36.8
d. Two adults with 3 or more children	32.7	38.0	29.7	27.2	28.6	26.7	24.0	25.9
1.2 In-work poverty	*12.9*	*13.9*	*14.3*	*14.3*	*13.8*	*13.8*	*8.0*	*8.5*
a. Part-time employment	24.2	26.4	27.2	26.0	26.9	29.4	13.2	12.9
b. Temporary employment	17.4	18.2	19.0	15.9	15.1	13.4	13.2	12.9
1.3 Unemployed	*33.2*	*33.1*	*35.4*	*36.8*	*38.1*	*38.5*	*44.9*	*45.1*
2. At-risk-of-poverty gap [2]								
Total population	23.8	26.1	27.2	24.7	24.1	23.4	22.5	23.1
a. People aged 65+	23.3	24.4	23.6	20.8	14.7	14.6	16.0	16.3
b. Children aged 0-15	22.5	26.1	29.0	26.5	26.4	27.3	22.2	23.7
3. At-risk-of-poverty line (in euro)								
a. Single-member households	5,650	5,910	6,120	6,480	6,897	7,178	...	...
b. Two adults with two children	11,866	12,411	12,852	13,608	14,484	15,073	...	...
II. Inequality indicators								
1. Gini coefficient	33.2	34.3	34.3	33.4	33.1	32.9	30.5	30.5
2. S80/S20 ratio[3]	5.8	6.1	6.0	5.9	5.8	5.6	5.0	5.0
III. Social welfare								
1. Social expenditure, % of GDP								
Total	24.9	24.7	24.8	26.3	28.0	...	30.3	29.5
a. Pensions	12.2	12.1	12.3	12.7	13.4	...	13.3	13.1
b. Social transfers	12.7	12.6	12.5	13.5	14.5	...	17.0	16.4
2. Reduction in the at-risk-of-poverty rate:								
Social expenditure (total)	19.6	20.0	21.6	21.4	22.3	22.7	27.1	27.0
a. Pensions	16.6	17.1	18.2	18.2	19.3	19.0	17.2	17.5
b. Social transfers	3.0	2.9	3.4	3.2	3.0	3.7	9.9	9.5

Source: Eurostat.
1 Data for the EU-15 and the EU-27 refer to the latest available year (2010 data referring to the earnings of 2009).
2 Distance of the income of the poor from the poverty line as a percentage of the poverty line.
3 Share ratio, defined as the ratio of total income received by 20% of the households with the highest income (highest quantile) to that received by 20% of the households with the lowest income (lowest quantile).

of living, while, under the concept of ***absolute*** poverty, it remains stable over time in terms of real purchasing power. **In the 2010 survey, the relative poverty threshold was set at €7,178 per year for a single-member household and at €15,073 for a four-member household with two adults and two children**. This threshold has been set at 60% of the median equivalised disposable income of all households (Eurostat definition). **The average annual disposable income of total Greek households amounted to €24,224 euro.**

• Relative poverty has been broadly stable over the last 15 years (for which comparable data are available) and up to the beginning of the crisis, namely over 1994-2009.[8] However, in absolute terms, i.e. with the poverty threshold remaining stable over time in real terms, the poverty rate during this period has been significantly reduced. For example, the at-risk-of-poverty rate for the year 2010 (20.1%), calculated using the poverty threshold for the year 2005 (60% of the median income for 2005 expressed in 2010 prices, on the basis of the harmonized index of consumer prices) would be only 16.0%, i.e. 4.1 percentage points lower. In other words, 16% of the population in 2010 would be considered as being at risk of poverty under the conditions prevailing in 2005.

• In Greece, groups at high risk of poverty include principally the unemployed (38.5%), particularly unemployed women (40.0%), single-parent households with at least one dependent child (33,4%), households with one adult over 65 years of age (30.1%), households with 3 or more adults with dependent children (29.3%), part-time workers (29.4%), economically inactive persons excluding pensioners (27.4%), households living in rented accommodation (27.2%), but also children 0-17 years of age (23.0%).

• An examination of the indicators of living conditions in Greece shows that material deprivation (difficulties in meeting basic needs, poor housing conditions, housing costs, inability to repay loans or instalments for purchases, difficulty in paying bills and in meeting ordinary needs, quality of life) concerns not only the poor, but also a significant part of the non-poor population. For example, the percentage of the population living in an overcrowded dwelling is 25.5% of the total population, 23.2% of the non-poor population and 34.7% of the poor population. Moreover, 27.8% of the non-poor population reports that housing costs are too high, while the corresponding percentage for the poor population is estimated at 50.6%.[9]

• The distributional impact of social benefits in Greece, although it has improved in recent years, remains limited compared to other EU countries. The reduction of poverty on account of total social expenditure came to just 22.7 percentage points (19.0 on account of pensions and only 3.7 on account of social transfers)[10] to in Greece, compared with an EU average of 27.0 percentage points (17.5 attributable to pensions and 9.5 to social transfers). **It should be pointed out, however, that the above efficiency ratio has improved over the past few years in Greece, as it rose from 19.6 percentage points in 2005 to 22.7 in 2010.** This improvement is considered to be associated with the significant increase in social expenditure as a percentage of GDP, from 24.9% in 2005 to 28.0% in 2009.[11]

In recent years, poverty in Greece seems to have shifted away from the elderly towards younger couples with children and young workers. In particular, the percentage of children up to 15 years of age, who live below the relative poverty threshold rose to 22.3% in 2010 (EU-27: 20.2%), up from 19.3% in 2005. It is more than two percentage points higher than the corresponding percentage for the general population. By contrast, the poverty rate among the elderly (aged 65 years or over) fell sharply, to 21.3% in 2010 (EU-27: 15.9%), down from 27.9% in 2005 (see Table VII.8).

During the fiscal crisis and the deep recession, some negative developments, mainly the dramatic rise in unemployment (from 7.2% in the second and third quarter of 2008 to 20.7% in the fourth quarter of 2011), are estimated to

8 The poverty risk indicator, calculated using the same methodology, ranged between 19.5% and 23% in the 1994-2009 period, for which comparable data are available.
9 See ELSTAT press release of 3 January 2012.
10 Social transfers include social solidarity (Pensioners' Social Solidarity Supplement, income support to households in mountainous and disadvantaged areas, benefit paid to the long-term unemployed aged 45-65, etc.), family allowances, unemployment benefits, sickness benefits or aids, disability benefits or aids, and educational benefits. Pensions include retirement pensions and pensions to the surviving sponse.
11 This improvement can be attributed mainly to the poverty-mitigating effect of pensions (from 16.6 percentage points in 2005 to 19.0 in 2010, see Table VII.8), given the significant increases in minimum pensions and the Pensioners' Social Solidarity Supplement.

have contributed to an exacerbation of relative poverty and economic inequality in Greece. Moreover, it should be pointed out that the significant increase in the number of unemployed persons (from 355 thousand in the third quarter of 2008 to 1,026 thousand in the fourth quarter of 2011) comes on top of other, even more alarming parameters. For example, **unemployment has now hit the core of the social fabric, as the share of unemployed persons that report themselves as "heads of household" has increased by more than five percentage points in the past three years.**

Finally, given that detailed data on incomes after 2009 are not yet available, it is difficult to draw safe conclusions on how the dimensions of inequality and poverty have developed in more recent years. The prevailing view both in Greece and in most other countries is that in periods of economic crisis unemployment rises and, therefore, inequality and relative poverty rise as well. However, this view overlooks the fact that some other developments, which also mark periods of sharp economic crisis, may have a dampening effect on social indicators. Such developments include, for example, the significant decrease in profits, which are an income of wealthier persons mostly and the one-off extraordinary levy usually imposed on higher incomes and large real estate property.[12] Initial estimates for Greece, based on simulations of income distribution after 2009, along with available data on the first year of the crisis (2009), indicate that **income inequality and *relative* poverty most likely increased, yet not dramatically, during the current crisis, although the composition of the poor population changed considerably**. However, the sharp decline in available income has most likely led to a significant deterioration of economic prosperity and absolute poverty, i.e. when the poverty line remains stable in real terms.

12 See Bank of Greece, *Monetary Policy Report 2010-2011* (Chapter III, Section 2.B).

VIII EXTERNAL BALANCE: DEVELOPMENTS AND PROSPECTS

1 INTRODUCTION

The conditions that prevailed in the domestic and the international markets during 2011 led to a decline of 8.2% in the current account deficit (see Table VIII.1) to €21.1 billion or 9.8% of GDP, from 10.1% of GDP in 2010, 11.1% in 2009 and 14.9% in 2008. As a result of the recession in the domestic market during 2009-2011, the import bill fell for almost all product categories, with the exception of oil. Moreover, the economic recovery in foreign markets until mid-2011 boosted export receipts, at least up to and including the third quarter of 2011. At the same time, underlying the reduction of the deficit was also an improvement in the international cost competitiveness of Greek products during the past two years (see Chapter VII.3 and Table VII.7).

It is worth noting that the current account deficit, excluding the net oil import bill and general government interest payments, took a downward course in the past four years and almost fell to zero in 2011. Moreover, in 2011 the balance of goods and services excluding oil and ships showed a surplus of €1.8 billion for the first time since 2000 (when the new method of compilation of the current account balance statistics was introduced).

In this light, and taking into account the effects of the PSI (which will contribute to a considerable reduction in interest payments), it is expected that this year the current account deficit will drop to around 7.5% of GDP, and will continue to decline over 2013-2014.

Certainly, in order for this narrowing of the current account deficit to be sustainable, it should be based on the effective tackling of the structural weaknesses of the Greek economy that caused it to widen. The most important among them is the dysfunction of product and labour markets, which has kept the structural competitiveness of products and services at low levels (this dysfunction has already started to be addressed); the high dependence of the economy on energy imports; the high "import content" of exports; and the low substitution of imports for domestically produced goods due to the inability of domestic output to respond to changes in, and the composition of, domestic demand. Such weaknesses keep the trade deficit persistently high and often affect the services balance as well, the components of which are by nature sensitive to external factors and therefore volatile.

2 CURRENT ACCOUNT BALANCE

2.1 TRADE BALANCE

The €1.1 billion decline in the trade deficit in 2011 reflects a €3.2 billion reduction in the trade deficit excluding oil and ships and a €0.4 billion decrease in net payments for the purchase of ships, which more than offset a €2.5 billion rise in the net oil import bill. Specifically, the import bill excluding oil and ships fell by 4.5%, while the corresponding export receipts grew by 17.3%; as a result, the coverage of payments by receipts increased to 51% in 2011, from 41.4% in 2010.

The drastic reduction of the trade deficit was primarily a result of the recession, given that the fall in the import bill, which is more than double that of export receipts, is mainly attributable to a decline in consumption and investment activity, while the rise in exports is also associated with the exporters' effort to gain access to foreign markets in order to offset reduced domestic demand.[1]

The trade deficit excluding oil and ships dropped considerably, but this improvement was achieved at a decelerating rate in the course of 2011 (from 22.9% in the first quarter to 19.7% in the fourth quarter). This chiefly reflects a slowdown in the rate of decrease in

1 The cumulative decline in the import bill excluding oil and ships over 2009-2011 reached 36.5% (2009: -24.0%, 2010: -12.6%, 2011: -4.5%). Export receipts excluding oil and ships, after falling by 17.8% in 2009 due to the global recession, started to rebound from mid-2010 onwards (recording very low rates of decline for the year as a whole: -1.3%), before rising by 17.3% in 2011.

Table VIII.1 Balance of payments

(million euro)

	January – December		
	2009	**2010**	**2011***
I CURRENT ACCOUNT BALANCE (I.A+I.B+I.C+I.D)	**-25,818.7**	**-22,975.6**	**-21,096.1**
I.A Trade balance (I.A.1 – I.A.2)	**-30,767.3**	**-28,279.6**	**-27,221.2**
Oil trade balance	-7,596.5	-8,627.2	-11,126.9
Non-oil trade balance	-23,170.8	-19,652.4	-16,094.2
Ships balance	-3,356.9	-3,621.3	-3,261.2
Trade balance excl. oil and ships	-19,813.9	-16,031.1	-12,833.0
I.A.1 Exports of goods	*15,318.0*	*17,081.5*	*20,233.0*
Oil	3,063.2	4,950.0	6,187.7
Ships (receipts)	771.7	798.6	754.7
Other goods	11,483.1	11,332.9	13,290.6
I.A.2 Imports of goods	*46,085.3*	*45,361.0*	*47,454.1*
Oil	10,659.8	13,577.1	17,314.6
Ships (payments)	4,128.6	4,419.9	4,015.9
Other goods	31,296.9	27,364.0	26,123.7
I.B Services balance (I.B.1 – I.B.2)	**12,640.2**	**13,248.5**	**14,630.8**
I.B.1 Receipts	*26,983.3*	*28,477.8*	*28,609.2*
Travel	10,400.3	9,611.3	10,504.7
Transport	13,552.2	15,418.4	14,096.6
Other services	3,030.9	3,448.1	4,007.9
I.B.2 Payments	*14,343.2*	*15,229.4*	*13,978.4*
Travel	2,424.6	2,156.0	2,266.5
Transport	7,073.4	8,155.4	7,233.2
Other services	4,845.1	4,917.9	4,478.7
I.C Income balance (I.C.1 – I.C.2)	**-8,984.3**	**-8,143.4**	**-9,066.5**
I.C.1 Receipts	*4,282.9*	*3,571.9*	*3,339.4*
Wages, salaries	294.6	199.7	188.0
Interest, dividends, profits	3,988.3	3,372.2	3,151.4
I.C.2 Payments	*13,267.2*	*11,715.2*	*12,405.9*
Wages, salaries	411.9	377.6	470.0
Interest, dividends, profits	12,855.2	11,337.7	11,936.0
I.D Current transfers balance (I.D.1–I.D.2)	**1,292.6**	**198.9**	**560.8**
I.D.1 Receipts	*5,380.7*	*4,654.3*	*4,435.0*
General government (mainly receipts from the EU)	3,527.9	3,188.5	3,254.9
Other sectors (emigrants' remittances, etc.)	1,852.8	1,465.8	1,180.1
I.D.2 Payments	*4,088.1*	*4,455.4*	*3,874.2*
General government (mainly payments to the EU)	2,679.6	2,860.4	2,485.4
Other sectors	1,408.5	1,595.0	1,388.8
II CAPITAL TRANSFERS BALANCE (II.1–II.2)	**2,017.4**	**2,071.5**	**2,671.8**
II.1 Receipts	**2,328.1**	**2,356.2**	**2,932.7**
General government (mainly receipts from the EU)	2,133.2	2,239.3	2,798.5
Other sectors	194.9	116.9	134.2
II.2 Payments	**310.7**	**284.7**	**260.8**
General government (mainly payments to the EU)	14.4	15.8	12.7
Other sectors	296.3	268.9	248.1
III CURRENT ACCOUNT AND CAPITAL TRANSFERS BALANCE (I+II)	**-23,801.3**	**-20,904.1**	**-18,424.3**
IV FINANCIAL ACCOUNT BALANCE (IV.A+IV.B+IV.C+IV.D)	**24,395.4**	**21,323.5**	**17,887.0**
IV.A Direct investment[1]	**274.5**	**-457.4**	**25.1**
By residents abroad	-1,479.3	-738.8	-1,286.2
By non-residents in Greece	1,753.8	281.4	1,311.3
IV.B Portfolio investment[1]	**22,663.8**	**-20,855.0**	**-17,778.3**
Assets	-8,973.0	13,278.7	6,139.0
Liabilities	31,636.8	-34,133.6	-23,917.3
IV.C Other investment[1]	**1,563.1**	**42,538.8**	**35,621.2**
Assets	-23,875.7	7,658.7	5,432.9
Liabilities	25,438.8	34,880.2	30,188.3
(General government borrowing)	2,865.0	29,978.2	39,873.9
IV.D Change in reserve assets[2]	**-106.0**	**97.0**	**19.0**
V ERRORS AND OMISSIONS	**-594.1**	**-419.4**	**537.0**
RESERVE ASSETS	**3,857.0**	**4,777.0**	**5,332.0**

Source: Bank of Greece.
* Provisional data.
1 (+) net inflow, (–) net outflow.
2 (+) decrease, (–) increase.

the relevant import bill. The corresponding export receipts followed a strong upward course – a small decline of 3% was only observed in December, while other indicators also recorded a negative annual rate, reflecting developments in the economic activity of Greece's trade partners.[2]

This trend continued in January 2012, when the trade deficit excluding oil and ships shrank by €218 million, while a decrease (by €379 million) was recorded also in February.[3] The trade deficit excluding oil and ships contracted mainly as a result of increases by 23.6% and 1.6% in export receipts excluding oil and ships in January and February, respectively, while the corresponding import bill remained virtually unchanged (-0.1%) in January, before dropping by 17.8% in February.

Available ELSTAT data on commercial transactions show that in 2011 the value of Greek exports to the EU excluding oil and ships rose at a rate (11%) slightly higher than that of exports to the whole world. The value of exports to Italy, Bulgaria, Romania, Russia and China increased at a much stronger pace. The corresponding imports from EU countries (in value terms) dropped faster than imports from non-EU countries.

Besides, according to detailed Bank of Greece data, the rise in exports observed in 2011 is broadly based across product categories. Metallurgy, which recorded a 45% increase in receipts (mainly due to higher prices), made the largest contribution to the considerable rise in non-oil export receipts, followed by chemicals, agricultural products (mainly packaged foods) and mechanical equipment. The picture remained almost unchanged in January 2012, with the exception of agricultural products, the export receipts of which remained relatively stagnant.[4]

In 2011, the index of new export orders in industry, which captures the trends of external demand for Greek products, continued to rise rapidly across most manufacturing sectors (albeit slower than in 2012), at an increasing rate for some sectors, such as paper, metal products, machinery and vehicles. In January 2012, however, the new export orders index dropped year-on-year, with the exception of the above-mentioned sectors, as well as of computers and electrical equipment.

By contrast, the industrial and manufacturing output indices decreased faster than in 2010. The rate of decrease remained high in January 2012 as well. In 2011, the index rose in just a few manufacturing sectors that recorded increased export activity, such as tobacco, wood-cork and basic metals (at slower rates than in 2010), as well as in metal mining.

Prima facie, these developments do not augur well for the export performance outlook. At the same time, however, account should be taken of a considerable improvement in cost competitiveness in 2010-2011, which is projected to gather pace in 2012-2013, due to both the expected evolution of labour costs and the improvement in productivity on account of the implementation of structural reforms in product and labour markets.

It should be noted that the cumulative drop in the import bill excluding oil and ships in the 2009-2011 period was broadly based. The largest decline was recorded in the import bill for consumer durables (-63.1%) and capital goods (-63.8%), while a smaller decrease was

2 According to ELSTAT data on commercial transactions, there was an almost 10% increase in export values excluding oil and ships for 2011 as a whole, despite the decline observed in the last three months (10.3% in October and 3.5% in November, while in December the decline was negligible). The increase was mainly attributable to raw materials and chemicals. It should be noted, however, that the fall in exports in October and November 2011 is calculated in comparison with the highs that were recorded in the same months of 2010. The value of imports excluding oil and ships had risen at a year-on-year rate of 24%, 36% and 27% in October, November and December 2010, respectively.

3 According to provisional ELSTAT data, in January 2012 the value of exports excluding oil and ships rose by 0.9% only, while the fall in the value of corresponding imports continued by 11.3%. Besides, according to provisional ELSTAT estimates, in February the value of non-oil exports rose by 1.4%, while the value of corresponding imports fell by 13.7%.

4 Export receipts in vehicles, which account for a small share of total receipts, were reduced as well.

observed in the import bill for consumer non-durables (-34.8%), non-oil raw materials and semi-finished/intermediate goods (-32.4%). This divergence reflects the way the aggregates of the Greek economy evolved: Specifically, the steep fall in investment led to significantly lower spending for capital goods imports, while the decrease in incomes affected households' expectations and estimates of their "permanent" (i.e. long-term) income, squeezing the share of imported consumer durables in total imported goods. Finally, the rise in prices in the world market in 2011 and the inadequacy of domestic output limited the potential of cutting the import bill for raw materials and semi-finished goods. Actually, 2011 saw an increase in the import bill for metallurgy products and chemicals (raw materials and intermediate goods).

Export performance and import penetration in manufacturing

In 2011, **the value of goods exports (excluding oil and ships)**, on the basis of Bank of Greece balance of payments statistics, rose by 17.3% compared with 2010. The **export performance** of manufacturing (excluding oil), i.e. the share of output sold in foreign markets, improved by 9.0 percentage points (see Table VIII.2). In more detail, the export performance of most manufacturing subsectors improved, with the exception of *basic pharmaceuticals, non-metallic minerals, computers-electronics-optics* and *furniture*. In several sectors, improved export performance was accompanied by higher export values, with the exception of – in addition to the sectors that saw a worsening in export performance – *textiles, clothes* and *motor vehicles*. In most of the sectors that recorded a rise in export performance, this was combined with a decline in output (at current prices), which, in percentage terms, overshot the rise in export values. In only few cases increased exports were combined with increased output (at current prices) and a higher percentage rise in exports than in output: *tobacco, wood-cork* and *basic metallurgy*.

At the same time, in 2011 **the import bill for goods (excluding oil and ships)** dropped. However, this drop was accompanied by a 2.3% rise in **import penetration**[5] due to a decrease in domestic output and, as a result, an even larger decline in apparent consumption. It should be pointed out that the overall picture masks considerable divergences among sectors. Specifically, the import bill fell in almost all cases, with the exception of *foods, basic pharmaceuticals* and *basic metals*, where import penetration increased because the rise in imports overshot the rise in "apparent consumption". Import penetration declined in seven sectors – *beverages, tobacco, wood-cork, paper, computers-electronics-optics, motor vehicles* and *furniture*, where the import bill decreased more than apparent consumption. In most of the other sectors that saw reduced imports, the decline in apparent consumption was smaller than the decrease in imports, therefore import penetration rose (as was the case on average for the total).

2.2 SERVICES BALANCE

In 2011, the surplus of the services balance grew by €1.4 billion or 10.4% against 2010. This increase reflects higher net travel receipts, as well as lower net payments for "other" services, which more than offset a drop in net transport receipts.

Underlying the rise in net travel receipts was mainly a considerably increase (of 9.3% or €893 million) in non-residents' travel spending in Greece compared with 2010, also because tourist traffic moved away from North Africa due to political developments in the region. According to data from the Bank of Greece "border survey", in 2011 non-residents' arrivals rose at an average annual rate of 9.5%, to 16.5 million. Residents' travel spending abroad recorded an increase, which, however,

5 That is, the ratio of imports to "apparent consumption". Apparent consumption is the sum of gross output and imports, minus exports.

Table VIII.2 Export performance – Import penetration by sector[1]

a. Export performance

Sectors	2005	2006	2007	2008	2009	2010	2011
Food	19.1	20.0	18.8	20.8	23.3	21.1	25.3
Beverages	6.3	6.1	4.1	4.3	3.2	3.0	3.7
Tobacco	77.5	66.9	65.2	84.9	61.0	59.8	61.2
Textiles	78.6	68.5	56.9	63.7	97.9	139.1	160.8
Wearing apparel	58.4	60.2	62.1	68.6	71.7	68.3	88.8
Leather-footwear	24.0	39.8	41.6	34.6	26.0	47.6	79.2
Wood and cork	10.6	8.0	8.9	9.7	11.4	5.8	7.9
Paper and paper products	13.6	10.8	11.8	14.9	15.8	12.9	17.8
Printing	4.6	2.8	1.5	2.1	3.2	2.0	2.8
Coke and refined petroleum products	30.6	33.0	31.5	38.8	38.2	42.9	50.8
Chemicals and chemical products	26.9	29.6	22.8	33.1	34.4	32.0	36.7
Basic pharmaceuticals	87.7	77.8	63.5	65.5	61.0	61.8	59.5
Rubber and plastic products	39.6	49.7	52.2	48.4	37.9	39.3	64.2
Non-metallic mineral products	8.8	8.6	7.9	10.0	11.5	11.4	9.5
Basic metals	27.1	33.1	33.9	34.2	24.3	25.9	35.7
Metal products	33.9	36.1	42.1	61.2	57.6	50.3	62.9
Computer, electronics and optical products	8.4	5.1	7.9	11.7	26.3	28.4	13.5
Electrical equipment	42.5	40.3	68.9	53.8	47.4	44.2	53.8
Machinery and equipment n.e.c.	56.1	51.7	64.5	80.3	87.5	100.8	117.3
Motor vehicles, trailers and semi-trailers	19.5	29.9	38.9	17.8	14.5	16.4	17.3
Furniture	5.9	8.0	9.5	9.4	9.2	11.5	9.0
Other manufacturing activities	169.7	162.6	228.3	192.1	110.1	115.2	153.3
Total manufacturing	**28.5**	**30.3**	**31.1**	**34.1**	**32.3**	**36.1**	**45.0**
Total manufacturing excluding fuel	**27.9**	**29.4**	**31.0**	**32.3**	**30.4**	**32.6**	**41.6**

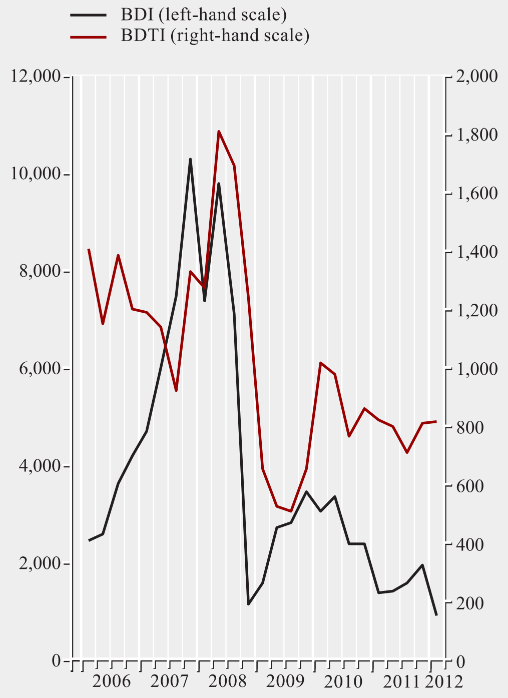
b. Import penetration

Sectors	2005	2006	2007	2008	2009	2010	2011
Food	38.6	39.5	40.5	43.4	41.5	38.8	40.7
Beverages	18.0	18.9	18.6	17.6	15.4	14.6	9.3
Tobacco	71.4	65.7	66.6	83.4	63.6	63.7	57.2
Textiles	76.1	71.5	65.2	72.5	98.0	186.7	334.2
Wearing apparel	76.2	81.3	82.3	87.9	90.1	89.6	96.3
Leather-footwear	81.4	85.5	85.9	85.8	84.4	90.1	95.2
Wood and cork	59.9	60.6	65.7	65.2	62.1	49.0	37.2
Paper and paper products	58.4	59.3	61.0	61.6	53.8	48.8	45.0
Printing	27.3	27.0	25.9	20.8	21.3	19.4	21.6
Coke and refined petroleum products	63.4	66.3	64.9	70.6	68.3	67.7	74.3
Chemicals and chemical products	68.2	70.0	67.1	70.8	69.8	68.4	69.1
Basic pharmaceuticals	94.9	90.8	85.4	86.0	82.5	82.4	85.1
Rubber and plastic products	70.5	75.1	76.9	74.5	67.8	65.5	76.5
Non-metallic mineral products	19.2	18.2	20.1	19.8	19.1	16.8	20.7
Basic metals	40.1	47.5	48.4	49.2	35.5	34.4	39.0
Metal products	61.8	55.5	62.2	72.2	66.5	58.9	60.3
Computer, electronics and optical products	74.5	77.4	82.3	83.2	88.4	88.4	85.5
Electrical equipment	81.1	78.5	88.4	84.9	82.2	77.8	79.4
Machinery and equipment n.e.c.	94.6	93.4	95.6	97.7	98.6	100.1	102.5
Motor vehicles, trailers and semi-trailers	85.8	89.8	90.5	88.0	84.1	82.7	80.5
Furniture	55.1	60.6	63.4	65.3	66.9	67.0	66.1
Other manufacturing activities	112.1	111.4	125.5	114.5	101.7	103.0	111.8
Total manufacturing	**61.7**	**63.8**	**64.9**	**67.7**	**64.1**	**63.7**	**68.2**
Total manufacturing excluding fuel	**61.2**	**62.9**	**64.9**	**66.5**	**62.6**	**61.7**	**64.0**

Sources: ELSTAT (Industrial output index; annual industrial survey); Bank of Greece for imports and exports data.
1 *Import penetration* is defined as the ratio of imports (in value terms) to apparent consumption (domestic production plus imports minus exports), and *export performance* is defined as the share of production that is exported.

Chart VIII.1 Developments in sea freight indices

(quarterly data)



Source: Clarkson Research Services.

was lower than that in the corresponding receipts (5.1% or €110 million); as a result, net receipts grew by €783 million or 10.5%. Net payments for "other" services dropped considerably by €999 million or 68.0%.[6] By contrast, following the marked drop in freight rates in international markets in 2011 (the BDI and the BDTI fell by 44% and 13.1%, respectively – see Chart VIII.1), gross transport receipts (mainly from merchant shipping) shrank by 8.6%, while the corresponding payments decreased by 11.3%; as a result, net receipts fell by €400 million.

In **2012**, the surplus of the services balance is projected to increase on account of the expected overall positive developments in tourism (arrivals are forecast to increase by 3-4% worldwide), given the full liberalisation of the cruise market, as well as encouraging signs from new markets (of visitors), e.g. China and Russia.[7] The cruise market saw a considerable increase in tourist traffic in 2011, even though the market had not been fully liberalised at the time.[8] Regarding the shift to new markets, there is still a considerable margin for increase as regards arrivals in Greece, mainly improving the infrastructure and conducting a consistent pricing policy. At the same time, however, there are negative signs from old markets.[9] For this reason, it is vital to ensure conditions of normality and a tourist-friendly environment, especially in Athens, which is both the main gateway to Greece and a tourist destination on its own.

By contrast, net transport (chiefly sea transport) receipts are expected to continue falling, as in 2011 the transport capacity of the world fleet continued to grow faster than world trade volumes, driving freight rates down. The 36% and 1% declines in the BDI and the BDTI, respectively, in the first quarter of 2012 suggest that this trend will continue at least until the fourth quarter, taking into account the rise in new ship deliveries, coupled with a projected showdown in world GDP growth and world trade volumes. The only factor that can halt the declining course of freight rates this year is the increase in the number of ships of the world fleet being decommissioned or placed into reserve status.

2.3 INCOME ACCOUNT BALANCE

The income account deficit grew by €923 million in 2011, primarily because net payments for interest, dividend and profit rose by 10.3%. This stemmed from a rise in net interest pay-

6 This considerable increase was the combined result of higher receipts, mainly due to the activity of Greek construction companies abroad, and lower payments.
7 In particular for Russia, the corresponding receipts showed a considerable increase of 50% in 2011 (€743 million) and arrivals recorded a 64% hike.
8 The relevant legislative arrangement is included in the draft law of the Ministry of Development, Competitiveness and Shipping tabled to Parliament on 22 March 2012.
9 According to the Association of Greek Tourism Enterprises (SETE), in 2012, bookings for Greece are alarmingly down by some 15% (the largest declines, in the order of 30%, are recorded in bookings from Germany, Austria and the Netherlands). Moreover, according to the Bank of Greece's border survey, in the January-February 2012 period non-residents' arrivals fell by 11.1%.

ments, which, however, is expected to decline significantly in upcoming years due to the PSI. This development, coupled with a reduced interest rate on the loan granted by the other euro area countries, is expected to help drive down interest payments considerably and, therefore, reduce the current account deficit. Preliminary estimates and the data so far available suggest that the PSI will reduce the income account deficit by some €2.5 billion or 1-1.5% of GDP.

2.4 CURRENT TRANSFERS BALANCE

The current transfers surplus more than doubled in 2011 compared with 2010, as the large increase in general government net transfer receipts, mainly from the EU, more than offset a small rise in net transfer payments of other (non-general government) sectors – chiefly emigrants' remittances. However, this category of inflows has shown a declining trend over time, therefore its contribution in the financing of the deficit of the goods and services balance should continue to decline.[10]

3 CAPITAL TRANSFERS BALANCE

The surplus of the capital transfers balance[11] came to €2.7 billion in 2011, from €2.1 billion in 2010. Absorption from the Structural Funds improved considerably in the second half of the year. Thus, the annual target set in the Memorandum was achieved and the cumulative rate of absorption up until end-February 2012 reached 40% (about €8.0 billion) of total Community financing for the period 2007-2013, slightly exceeding the corresponding EU-27 average and contributing to lowering the fiscal deficit. The other Memorandum targets were also achieved, such as the annual target of submitting 15 applications for large projects.[12]

The rate of absorption of the remaining Community funds of about €15 billion (including funds for agricultural development and fisheries) is expected to increase as a result of: (i) the ratification of the decision to increase the percentage of Community co-financing of projects and programmes under the NSRF to 95%, with advance disbursement of Community funds;[13] (ii) the enhanced role of the European Investment Bank (EIB);[14] and (iii) the revision of NSRF operational programmes in 2012, with a focus on the enhancement of liquidity and entrepreneurship. According to provisional data, the first quarter of 2012 saw inflows of €1.3 billion from the Structural Funds and the Cohesion Fund.

With the support of the European Commission Task Force, priority was given to high-added-value projects, which will contribute decisively to achieving economic recovery, tackling

10 Current transfers from the EU mainly include direct aid and subsidies under the Common Agricultural Policy (CAP), as well as receipts from the European Social Fund (ESF), while current transfers to the EU include Greece's contributions (payments) to the Community Budget. The bulk of this year's total funds, which involve direct aid and subsidies, flow into Greece as per the relevant procedures within the first two months (€2.1 billion in the first two months of 2012) of each year.

11 Capital transfers from the EU mainly include receipts from the Structural Funds – except for the European Social Fund – and the Cohesion Fund under the Community Support Frameworks (CSF) and the National Strategic Reference Framework (NSRF), i.e. receipts from the European Regional Development Fund (ERDF), the Cohesion Fund and other amounts, e.g. from community initiatives. It should be stressed that the Cohesion Fund is, for the time being, the only Fund that links inflows to fiscal adjustment. Specifically, if the Council considers, according to Article 126 of the Treaty on the Functioning of the European Union (TFEU), that an excessive deficit in a Member State exists, and establishes that there has been no effective action, financial assistance will be suspended, wholly or partly, from 1 January of the next year. This provision was first applied to Hungary recently. See European Commission, Proposal for a Council Decision suspending commitments from the Cohesion Fund for Hungary, COM (2012)75 final, Brussels, 24 February 2012.

12 See European Commission, *Second Quarterly Report of the Task Force for Greece*, March 2012, p. 6, and European Commission, *The Second Economic Adjustment Programme for Greece*, March 2012, p. 43.

13 The European Commission first approved in October 2011 an increase in co-financing rates to 85%, retrospectively to 1 January 2007. The further increase to a maximum of 95% took effect as from 11 May 2010. This extraordinary and provisional measure applies to another five countries that implement fiscal consolidation programmes or receive financial assistance under the balance of payments support mechanism (Ireland, Portugal, Romania, Latvia, Hungary) and has resulted in additional inflows of €1.5 billion.

14 Financing of banks by the EIB for the purpose of lending small and medium-sized enterprises and large projects will be facilitated by two guarantee mechanisms that will provide guarantees using the resources of the Structural Funds. An agreement to establish a Small and Medium-Sized Enterprises Guarantee Fund has already been signed, under which loans of €1.5 billion will be granted by the EIB until the end of 2015 (Ministry of Development, Competitiveness and Shipping announcement of 21 March 2012).

unemployment, strengthening competitiveness, and training.[15]

Growth will also benefit considerably from the implementation of the Law on public-private partnerships and the investment Law (3908/11); the utilisation of the Community initiatives JEREMIE, JESSICA etc. (in which the private sector also participates); the operation of the National Fund for Entrepreneurship and Development (ETEAN); and the activation of the operational programme "National Contingency Reserve", which is co-financed by the European Social Fund.[16]

Up to and including 2013, direct aid and subsidies under the CAP will remain broadly unchanged, at around €2.5 billion per year, since the CAP reform will be implemented from 2014 onwards. Specifically, EU capital transfers are estimated at €3.8 billion per year in 2012-2013 and €3.3 billion in 2014, from €2.8 billion in 2011. As a result, total net transfer of resources from the EU in 2012 and 2013 (current and capital transfers minus payments to the Community Budget) will reach some €4.5 billion on a cash basis per year and €3.8 billion in 2014, compared with €3.6 billion in 2011.

Regarding **prospects after 2013**, total transfers of Community resources to Greece (structural interventions and transfers to the agricultural sector) will decline and will be conducted on totally different terms. According to the European Commission's proposals for the Community Budget 2014-2020, Greece, under the cohesion policy, is expected to receive much less funding from the structural funds compared with the 2007-2013 period (estimated at around €12 billion, compared with €20.4 billion).

Income support (first pillar of the CAP)[17] will decline by some 5% per year in nominal terms and stand at about €2.0 billion per year. 70% of these amounts will be granted almost automatically, while the remainder will be granted subject to strict environmental conditions.

Under the current circumstances, emphasis should be placed on the contribution to growth from Community resources under the CAP (both income support and resources for agricultural development and fisheries), which may help boost employment and reduce the deficit of the agricultural products balance. Large-scale subsidies and direct aid under the CAP, despite reducing the current account deficit on a cash basis, resulted in increased consumption and imports without any material contribution to tackling the chronic problems of the agricultural sector. The agricultural products balance remains in deficit.[18] Given that the channels through which the balance of payments and generally the economy are affected differ between the two forms of transfers, making good use of synergies and the complementarity between CAP resources and structural funds would is advisable.

4 FINANCIAL ACCOUNT BALANCE

In 2011, the financial account balance showed a net inflow (i.e. a rise in residents' net foreign liabilities) of €17.9 billion, compared with

15 In November 2011, a list of 181 priority projects budgeted at €11.5 billion was published. These projects potentially have a significant impact on growth and employment. They represent 56% of available financing during the planning period, they will be closely monitored and will receive strong support from the Greek authorities and the European Commission (see European Commission, 29 November 2011, MEMO/11/854). For the importance of Community structural funding to growth under fiscal constraints, see European Commission, "Cohesion Payments Increase as Member States Tap EU Funding for Growth", Press Release, IP/12/78, 27 January 2012. For the important decisions on the expedited utilisation of NSRF resources, see (a) Statement by President Barroso after agreement for a second financial programme for Greece MEMO-12-123, 21 February 2012; (b) Statement by President Barroso at the pre-European Council press conference SPEECH-12-135, 29 February 2012; (c) Statement by President Barroso following his meeting with Mr. Lucas Papademos SPEECH-12-137, 29 February 2012; and (e) Letter from the President of the European Commission to the Greek Prime Minister (MEMO/12/167, Brussels, 6 March 2012).

16 Three out of five actions of the Entrepreneurship Fund of ETEAN are already available to firms (see Ministry of Development, Competitiveness and Shipping announcement of 2 February 2012). For the positive course of the operational programme "National Contingency Reserve", see Ministry of Development, Competitiveness and Shipping announcement of 21 February 2012.

17 It should be pointed out that in Greece income support accounts for 1% of GDP – the highest percentage in the EU on the basis of subsidy per hectare.

18 For the macroeconomic effects of CAP transfers on the Greek economy and the balance of payments in particular, see Bank of Greece, *The Greek current account: causes of imbalances and policy recommendations* (in Greek), June 2010.

Table VIII.3 Geographical breakdown of inward foreign direct investment

(million euro)

	2009	2010	2011*
EU-27	1,561	180	722
Euro area	1,601	725	845
Other OECD countries[1]	87	93	547
Balkan countries[2]	0	3	-2
Middle East, Mediterranean and former USSR[3]	6	9	15
Other countries	100	-3	28
Total direct investment by non-residents	**1,754**	**281**	**1,311**

Source: Bank of Greece.
* Provisional data.
1 Australia, Canada, Iceland, Japan, S. Korea, Mexico, New Zealand, Norway, Switzerland, Turkey and United States.
2 Albania and former Yugoslavia (Bosnia-Herzegovina, Croatia, FYROM, Serbia and Montenegro).
3 Greece's main trading partners in the Middle East, the Mediterranean and former USSR countries.

Table VIII.4 Geographical breakdown of outward foreign direct investment

(million euro)

	2009	2010	2011*
EU-27	1,142	605	1,298
Euro area	1,118	459	120
Other OECD countries[1]	18	108	68
Balkan countries[2]	143	90	46
Middle East, Mediterranean and former USSR[3]	21	17	5
Other countries	155	-81	-130
Total direct investment by residents	**1,479**	**739**	**1,286**

Source: Bank of Greece.
* Provisional data.
1 Australia, Canada, Iceland, Japan, S. Korea, Mexico, New Zealand, Norway, Switzerland, Turkey and United States.
2 Albania and former Yugoslavia (Bosnia-Herzegovina, Croatia, FYROM, Serbia and Montenegro).
3 Greece's main trading partners in the Middle East, the Mediterranean and former USSR countries.

€21.3 billion in 2010. Direct investment recorded a net inflow of €25 million, portfolio investment a net outflow of €17.8 billion and "other" investment a net inflow of €35.6 billion. Therefore, "other" investment, which includes mainly loans and deposits, more than financed the current account deficit, while direct investment, same as every year, did not contribute materially to covering the deficit, and portfolio investment recorded a net outflow.

As regards **direct investment**, the small net inflow of €25 million was a result of an inflow of €1.3 billion (2010: €0.3 billion) representing non-residents' direct investment in Greece and an outflow of €1.2 billion (2010: €0.7 billion) for residents' direct investment abroad (see Tables VIII.3 and VIII.4). The most important direct investments in Greece mainly concern inflows of funds for participation in capital increases, such as by Crédit Agricole (France) in the capital increase of Emporiki Bank, Société Générale (France) in the capital increase of Geniki Bank and Deutsche Telekom (Germany) in the capital increase of the Hellenic Telecommunications

Organisation (OTE). The breakdown of direct investment in Greece by geographical region of origin shows that €0.8 billion (2010: €0.7 billion) came from euro area countries and €0.5 billion (2010: €0.1 billion) from other OECD member countries. The breakdown of residents' direct investment abroad by geographical region shows that the EU countries remain the main destination of Greek direct investment.

FDI in Greece predominantly takes the form of participation in capital increases, in particular of banks, and —to a much lesser extent— establishment of new production units. This is explained by the dysfunctional domestic product and labour markets;[19] inadequate infrastructure; complex and time-consuming bureaucratic procedures; delays in the resolution of litigations; and lack of a stable tax framework with appropriate incentives.

Under **portfolio investment**, 2011 saw a net outflow of funds as a result of a €24.1 billion decline in non-residents' holdings of Greek government bonds and Treasury bills, compared with an outflow of €33.0 billion in 2010. This development was only partly offset by a €4.8 billion decrease in resident credit institutions' and institutional investors' holdings of foreign bonds and Treasury bills, compared with an outflow of €14.1 billion in 2010. This investment behaviour by both foreign and Greek investors has been observed since 2009 and is explained by developments in the Greek economy and the domestic banking system (see Box VIII.1 for a detailed presentation of developments in all components of the financial account during 2000-2011).

In 2011, **"other" investment** recorded a net inflow (i.e. a rise in liabilities) of €35.6 billion, compared with a net inflow of €42.5 billion in 2010. This came as the combined result of a net increase of €30.2 billion in liabilities and a net

19 These problems have been highlighted repeatedly in reports of the Bank of Greece, as well as by international bodies and organisations: (a) Transparency International, *Corruption Perception Index 2011*; (b) World Bank, *Doing Business 2012*; (c) World Economic Forum, *Global Competitiveness Report 2011-2012.*

Table VIII.5 Greece's international investment position

(million euro)

	2009	2010[1]	2011*
1. Direct investment	-1,835	5,686	11,983
Abroad by residents	27,387	31,899	33,185
In Greece by non-residents	29,222	26,213	21,202
2. Portfolio investment	-140,750	-79,792	-9,314
Assets	97,815	80,209	72,322
Liabilities	238,565	160,001	81,636
3. Financial derivatives	1,771	1,395	2,104
4. Other investment	-62,449	-142,328	-180,498
Assets	129,561	112,576	106,281
Liabilities	192,010	254,904	286,779
5. Reserve assets	3,857	4,777	5,332
Net international investment position (i.i.p.) (1+2+3+4+5)	-199,406	-210,262	-170,393
GDP	231,641	227,318	215,088
Net i.i.p. as % of GDP	-86.1	-92.5	-79.2

Source: Bank of Greece.
* Provisional estimates.
1 Revised data.

reduction of €5.4 billion in assets. The rise in net liabilities is mainly attributable to general government net borrowing of €39.9 billion under the support mechanism for the Greek economy, while liabilities out of non-residents' deposits dropped by €8.8 billion. Regarding "other" investment assets, a net inflow of €5.4 billion reflects exclusively a €5.5 billion decrease in residents' (mainly resident credit institutions') deposits. At end-December 2011, **Greece's reserve assets** stood at €5.3 billion.

5 INTERNATIONAL INVESTMENT POSITION AND GROSS EXTERNAL DEBT

Greece's *negative* **international investment position** reflects the country's foreign liabilities.

According to the latest data (see Table VIII.5), at end-2011 the outstanding balance of Greece's *negative* international investment position was €170.4 billion, compared with €210.3 billion at end-2010, i.e. the country's net liabilities fell by €39.9 billion. The outstanding balance of the international investment position corresponded to 79.2% of GDP in 2011, compared with 92.5% of GDP in 2010.

Data collected by the Statistics Department of the Bank of Greece (see Table VIII.6) show that Greece's **gross external debt** at market prices came to €367.7 billion (171.0% of GDP) at end-2011, compared with €407.2 billion (179.1% of GDP) at end-2010, i.e. it was reduced by €39.4 billion. In more detail, the *general government* gross external debt fell by €24.9 billion in the course of 2011 (end-2011: €157.0 million, end-2010: €181.9 billion). The decline in both the international investment position and the gross external debt in 2011 chiefly reflect a decrease in the market value of Greek government securities held by non-residents.

Box VIII.1

CURRENT ACCOUNT FINANCING: DEVELOPMENTS DURING 2000-2011

A country's current account deficit reflects the excess of residents' payments over residents' receipts. The difference should always be financed by an equal net inflow of funds. In the case of Greece, usually a small part is financed by net unilateral capital transfers, which primarily include EU transfers. However, the bulk of the deficit is financed either by the increase in residents' foreign liabilities or by the decrease in residents' foreign assets. These financial flows that create assets and liabilities determine the increase or decrease in residents' net foreign liabilities and are recorded in the financial account balance, which, together with the capital transfers balance, should always be equal to the current account deficit. The financial account further includes direct investment, portfolio investment, "other" investment and changes in reserve assets. This box focuses on the evolution of the financial account and the contribution of its components to the financing of Greece's current account deficit during 2000-2011.

Aspiring to a more complete analysis and comparison of developments, the reviewed period has been divided into three sub-periods: 2000-2005, which is characterised by a smooth and relatively stable evolution of the current account deficit and by Greece's euro area entry; 2006-2008, during which the current account deficit deteriorated strongly and continuously; and 2009-2011, the years of fiscal and sovereign debt crisis in Greece. Such a division allows for a comparison of the recent period with two different situations, not only in terms of the evolution of the current account deficit, but also of the overall economic circumstances in Greece and worldwide.

Table A The current account and its financing

(billion euro)

	2000-2005			2006-2008			2009-2011		
	Cumulative	Average	Share in the financing of the current account (%)	Cumulative	Average	Share in the financing of the current account (%)	Cumulative	Average	Share in the financing of the current account (%)
Current account	**-68.1**	**-11.4**		**-91.2**	**-30.4**		**-69.9**	**-23.3**	
as a percentage (%) of GDP	*-6.9%*			*-13.7%*			*-10.4%*		
Capital account	**12.0**	**2.0**	**17.6**	**11.5**	**3.8**	**12.6**	**6.8**	**2.3**	**9.7**
as a percentage (%) of GDP	*1.2%*			*1.7%*			*1.0%*		
Financial account	**56.7**	**9.5**	**83.3**	**77.9**	**26.0**	**85.5**	**63.6**	**21.2**	**91.0**
as a percentage (%) of GDP	*5.7%*			*11.7%*			*9.4%*		
Direct investment	0.3	0.0	0.4	0.2	0.1	0.2	-0.1	0.0	-0.1
Portfolio investment	62.9	10.5	92.3	42.0	14.0	46.1	-15.9	-5.3	-22.2
Other investment	-14.6	-2.4	-21.5	36.4	12.1	39.9	79.7	26.6	113.3
Change in reserve assets	8.2	1.4	12.0	-0.6	-0.2	-0.6	0.0	0.0	0.0
Errors and omissions	**-0.6**	**-0.1**	**-0.8**	**1.8**	**0.6**	**1.9**	**-0.5**	**-0.2**	**-0.7**

Sources: Bank of Greece and ELSTAT.

Over 2009-2011, the cumulative current account deficit reached €69.9 billion, down by €21.3 billion in comparison with the three years (2006-2008) of sharp deterioration (€91.2 billion), but marginally higher than the cumulative deficit over 2000-2005 (€68.1 billion, see Table A). As a percentage of GDP, the deficit in 2009-2011 dropped to 10.4% from 13.7% in 2006-2008, but remained notably higher than in 2000-2005 (6.9% of GDP). Thus, although there was an improvement in 2009-2011 in comparison with 2006-2008, the average deficit over 2009-2011 (€23.3 billion) remains more than double the corresponding average of 2000-2005 (€11.4 billion).

If the financing of the current account deficit is broken down, we see that the share of the financial account in the financing of the current account deficit grew in 2009-2011 to 91.0%, from 85.5% and 83.3% in 2006-2008 and 2000-2005, respectively. By contrast, the share of capital transfers, mainly unilateral EU transfers, narrowed to 9.7% over 2009-2011, from 12.6% and 17.5% over 2006-2008 and 2000-2005, respectively (see Table A).

Moreover, throughout the reviewed period, FDI (a component of the financial account) is low and always has a minimal share in the financing of the current account deficit. Specifically, in 2000-2005 and 2006-2008, the share of FDI in the financing of the current account deficit was 0.4% and 0.2%, respectively, while in 2009-2011, FDI did not contribute at all, since a new outflow of €0.1 billion was recorded, as outflows for residents' direct investment abroad (€3.5 billion) exceeded inflows for non-residents' direct investment in Greece (€3.4 billion, see Table A).

This reflects a serious problem of the Greek economy, since FDI not only has minimal contribution with healthy, long-term funds to the financing of the current account deficit, but the production base is also deprived of the advantages of technology and know-how transfer that usually accompany FDI.

Turning to the share of portfolio investment and "other" investment in the financing of the current account deficit, we see that it followed a reverse course. In more detail, the share of portfolio investment (92.3% in 2000-2005) declines to half in 2006-2008, while over 2009-2011 it no longer contributed to the financing of the current account deficit, as it recorded a negative net flow of €15.9 billion. By contrast, "other" investment (mainly loans and deposits), which did not contribute to the financing of the current account deficit over 2000-2005 (recording a net outflow of €14.6 billion), financed 39.9% of the current account deficit (recording over 2006-2008 a net inflow of €36.4 billion) and more than offset (113.3%) the deficit over 2009-2011, posting a net inflow of €79.7 billion (see Table A).

In more detail, residents' and non-residents' investment behaviour towards **portfolio investment** changed after 2008, as they both started restructuring their portfolios and disinvest, albeit for different reasons. Specifically, between 2000 and 2008 resident credit institutions and institutional and private investors increased their holdings of securities issued by non-residents by €66.0 billion (2000-2005: €42.4 billion, 2006-2008: €23.6 billion), with a focus on foreign bonds/Treasury bills (2000-2005: €37.1 billion, 2006-2008: €22.9 billion). By contrast, over 2009-2011 resident investors reduced their holdings of securities issued by non-residents by €10.4 billion, particularly bonds/Treasury bills (down by €13.4 billion, see Table B).

As regards the breakdown of foreign securities holdings by economic sector to which the resident investor belongs, both credit institutions and the other sectors (mainly institutional investors) have had a uniform response in the three years of the economic crisis, selling their previous years' investments, obviously due to the serious liquidity and capital shortage problems facing them. Specifically, credit institutions, which had invested €7.9 billion and €20.5 billion in foreign bonds in the periods 2000-2005 and 2006-2008, respectively, sold foreign bonds of €8.3 billion in 2009-2011. Likewise, the non-banking sectors of the economy, which had invested €29.2 billion and €2.4 billion in foreign bonds in the periods 2000-2005 and 2006-2008, respectively, between 2009 and 2011 reduced their net holdings of foreign bonds by €5.1 billion (see Table B).

Likewise, foreign investors increased their net holdings of Greek securities throughout the 2000-2008 period, when these holdings reached €170.9 billion (2000-2005: €105.3 billion, 2006-2008: €65.6 billion). This investment behaviour was reversed during 2009-2011 when, under the pressure of fiscal developments and the continuous increase in public debt, foreign investors gradually shifted away from Greek securities; as a result, a net outflow was recorded, i.e. a decline of €26.4 billion in liabilities out of non-residents' portfolio investment (2010-2011: net outflow of €58.0 billion). Sales of Greek securities affected Greek government bonds most heavily, which recorded sales of €25.6 billion in 2009-2011 (2010-2011: net outflow of €56.7 billion), while in the same period non-residents' holdings of Athex-listed shares decreased by €0.9 billion (see Table B and Chart).

In the light of the above data, it is obvious that in 2009-2011, contrary to previous years, both FDI and portfolio investment did not contribute to the financing of the current account deficit. By contrast, under "other" investment (which includes loans and deposits) net liabilities dropped by €14.6 billion in 2000-2005, while in 2006-2008 they increased by €36.4 billion, and recently (2009-2011) they rose even further, by €79.2 billion. This means that Greece is increasing its foreign loan and deposit liabilities (see Table C).

Taking a closer look to "other" investment in deposits and loans, in both 2000-2005 and 2006-2008, net loan liabilities fell by €16.7 billion and €4.6 billion, respectively, while in 2009-2011 net borrowing from non-residents rose by €80.0 billion (see Chart C).

Moreover, the breakdown of "other" investment by economic sector shows that the increase in loan liabilities stemmed almost exclusively from general government borrowing of €72.2 billion and reflects the borrowing that started in May 2010 under the support mechanism for the Greek economy set up by Greece's European partners and the IMF.[1] Moreover, the TARGET account kept with the Bank of Greece, the balance of which is recorded in the balance of payments under "other" investment (liabilities-deposits), recorded a large increase of €69.4 billion in its debit balance over 2009-2011, compared with an increase of only €28.1 billion over 2006-2008, largely reflecting the provision of liquidity by the ECB to resident credit institutions through the Bank of Greece[2] (see Table C). It should be noted that banks' liquidity constraints due to the lack of access to international money and capital markets were also aggra-

1 It should be noted that the total amount disbursed between May 2010 and December 2011 under the first bailout came to €73.1 billion.
2 The balance of the TARGET account is always in debit and stood at €7.2 billion at end-2005, €35.3 billion at end-2008 and €104.8 billion at end-2011.

Table B Portfolio investment

(billion euro)

	2000-2005		2006-2008		2009-2011	
	Cumulative	Average	Cumulative	Average	Cumulative	Average
Assets	**42.4**	**7.1**	**23.6**	**7.9**	**-10.4**	**-3.5**
Shares	5.2	0.9	-0.1	0.0	1.7	0.6
Bonds and Treasury bills	37.1	6.2	22.9	7.6	-13.4	-4.5
of which						
Credit institutions' assets	7.9		20.5		-8.3	
Other sectors' assets	29.2		2.4		-5.1	
Other assets	0.1	0.0	0.8	0.3	1.3	0.4
Liabilities	**105.3**	**17.5**	**65.6**	**21.9**	**-26.4**	**-8.6**
Shares	16.2	2.7	10.4	3.5	-0.9	-0.3
Bonds and Treasury bills	89.1	14.8	54.6	18.2	-25.6	-8.4
of which						
General government lialilities	90.0		48.1		-21.0	
Other lialilities	0.0	0.0	0.5	0.2	0.1	0.0
Net liabilities	**62.9**	**10.5**	**42.0**	**14.0**	**-15.9**	**-5.3**
Shares	11.0	1.8	10.5	3.5	-2.6	-0.9
Bonds and Treasury bills	52.0	8.7	31.7	10.6	-12.2	-3.9
Other net lialilities	-0.1	0.0	-0.2	-0.1	-1.2	-0.4

Source: Bank of Greece.

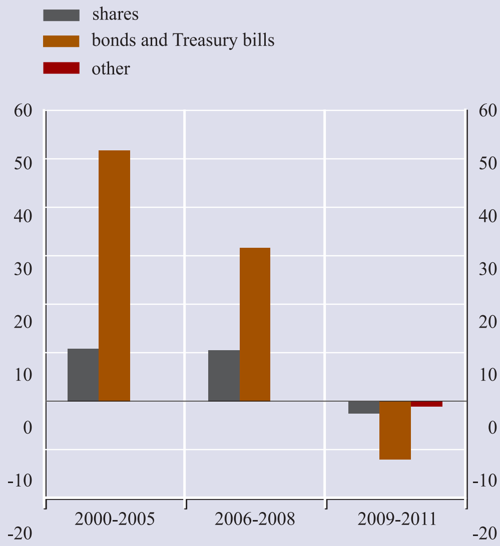
vated by a large decrease in household and corporate deposits. This decrease, according to the consolidated balance sheet of credit institutions, reached €63.6 billion in 2010-2011 and is reflected in a large outflow of Greek private deposits abroad (€9.6 billion in 2010, €7.6 billion in 2011), which is recorded in the balance of payments as an increase in assets under "other" investment, specifically in the "deposits and repos" account. Certainly, resident credit institutions, as already mentioned, partly dealt with their liquidity constraints by reducing their holdings of both foreign bonds and deposits with banks abroad (mainly their own branches).

Conclusions and proposals

This review of the main components of the financial account in 2000-2011 leads to the following conclusions:

Portfolio investment net liabilities

(billion euro)



Source: Bank of Greece.

1. In the 2009-2011 period, the current account deficit came to €23.3 billion on average, i.e. it was lower than the average for the 2006-2008 period (€30.4 billion), when the largest deterioration in the current account deficit was recorded, but more than double the average for the period 2000-2005 (€11.4 billion).

2. The financing of the current account deficit by capital transfers declined from 17.6% in 2000-2005 to 9.7% in 2009-2011 (see Table A), resulting in an equal increase in the financing of the current account deficit by financial flows (in particular portfolio investment and "other" investment) under the financial account.

3. In 2000-2005 and 2006-2008, the financing of the current account deficit relied on international capital market funding, mainly through the issuance of bonds/Treasury bills (€143.7 billion). In 2009-2011, however, i.e. when the sovereign debt crisis unfolded in Greece, as the country was shut out of international capital markets and the spreads on Greek government bonds were high, the current account deficit was financed by borrowing obtained under the support mechanism for the Greek economy (€72.2 billion), while foreign holders of Greek bonds reduced their holdings considerably, by €25.6 billion.

4. Domestic credit institutions, having lost access to international markets and seeing a decrease of €63.6 billion in their deposit base in 2010-2011, addressed their serious liquidity constraints by restructuring their assets and, in this context, reducing their foreign assets. Namely, they sold bonds issued by non-residents (€8.3 billion) and they reduced (€7.5 billion) their deposits with foreign credit institutions (mainly their own branches abroad).

Table C Other investment

(billion euro)

	2000-2005		2006-2008		2009-2011	
	Cumulative	Average	Cumulative	Average	Cumulative	Average
Assets	**17.7**	**3.0**	**49.9**	**16.6**	**10.8**	**3.6**
Loans	0.0	0.0	1.6	0.5	0.2	0.1
Deposits and repos	16.5	2.7	48.3	16.1	10.2	3.4
Other assets	1.2	0.2	0.1	0.0	0.4	0.1
Liabilities	**3.1**	**0.5**	**86.3**	**28.8**	**90.5**	**30.2**
Loans	-16.7	-2.8	-3.0	-1.0	80.2	26.7
of which						
Loans to general government	-10.9		-2.4		72.7	
Deposits and repos	17.6	2.9	89.6	29.9	10.7	3.6
of which						
Change inTARGET balance	7.2		28.1		69.4	
Other liabllities	2.2	0.4	-0.3	-0.1	-0.4	-0.1
Net liabllities	**-14.6**	**-2.4**	**36.4**	**12.1**	**79.7**	**26.5**
Loans	-16.7	-2.8	-4.6	-1.5	80.0	26.7
Deposits and repos	1.1	0.2	41.3	13.8	0.5	0.2
Other net liabllities	1.0	0.2	-0.4	-0.1	-0.8	-0.3

Source: Bank of Greece.

5. Liquidity constraints and pressing capital needs were covered by the ECB through liquidity injections to Greek banks, which are reflected in a large increase of €69.4 billion over 2009-2011 in the debit balance of the TARGET account kept with the Bank of Greece.

Therefore, liquidity provision by the ECB and borrowing under the support mechanism for the Greek economy compensated for the liquidity constraints of the banking system and the government's lack of access to international money and capital markets. Thus, the financial account deficit, despite falling considerably over 2009-2011, remained quite high as a percentage of GDP (10.4%) and is financed on the one hand by official lending by Greece's European partners and the IMF and liquidity provision by the ECB and on the other hand by the reduction of domestic investors' claims from foreign bond and deposit holdings.

Finally, although developments in the financing of the current account deficit over 2009-2011 are very different from developments over 2000-2008, the conclusions with respect to the problems facing the external sector[3] still hold true today. Especially following the wholesale shift to official borrowing (discussed above) in the financing of the current account deficit, stronger efforts are needed to further reduce deficits in external transactions to a sustainable level, as the sources of deficit financing are not permanent and involve considerable servicing costs.

It should be recalled that reducing external deficits is a condition for maintaining the growth potential and, in this sense, should be accompanied by the restoration of fiscal equlibrium, fiscal consolidation, efficient use of Community resources and, most notably, structural reforms in the labour and product markets. At the same time, fiscal equilibrium and structural changes are a necessary condition for the creation of an environment that favours privatisation and foreign direct investment. FDI is the soundest way to finance the current account deficit, since it does not entail short- or long-term costs and does not increase public debt, but on the contrary brings considerable short- and long-term benefits for growth and the competitiveness of the Greek economy.

3 See also Bank of Greece, *The Greek current account: causes of imbalances and policy recommendations* (in Greek), June 2010, Chapter 5.

IX FISCAL DEVELOPMENTS AND PROSPECTS

1 REVIEW OF DEVELOPMENTS AND PROSPECTS[1]

The continued delays in the implementation of fiscal measures and structural reforms, the negative economic climate and the sharp decline in economic activity made it necessary —during 2011 and early 2012— to repeatedly adjust budgetary targets and take additional measures, as well as to restructure the Greek public debt. In this context, the target for the 2011 general government deficit set in the 2011 Budget (7.4% of GDP) was revised slightly in the Medium-Term Fiscal Strategy Framework (MFSF 2012-2015) in June 2011 (to 7.3% of GDP) and considerably in the Introductory Report on the 2012 Budget in November 2011 (to 9.0% of GDP).

Despite the above mentioned constraints, the fiscal effort has had tangible results. Specifically, the general government deficit on a national accounts basis is expected to decline by around 1.4 percentage point of GDP over the corresponding figure for 2010, and to stand at 9.2% of GDP[2] (see Table IX.1). Thus, the cumulative decline in the deficit in 2010-2011 is expected to reach about 6.5 percentage points of GDP.

The significant effort for fiscal adjustment is better reflected in the general government primary deficit, which is expected to fall by around 2.5% of GDP against 2010 and by around 8.2% of GDP cumulatively against 2009. This is the lowest primary deficit as a percentage of GDP since 2007. This development is an important achievement, given the significant worsening of economic conditions, i.e. the cumulative decline in real GDP of over 10% in the 2010-2011 period. In addition, as mentioned by the European Commission (Autumn Forecast 2011), the cyclically adjusted (or structural) general government deficit on a national accounts basis is estimated to have improved by more than 10.0% of GDP in the 2010-2011 period.

A significant part of the progress accomplished in 2011 stemmed from the performance of other entities of the general government, which are not classified in the state budget, i.e. local government (OTA), public enterprises and organisations (DEKO) and other public entities. Social security organisations (OKA) were an exception, as their results worsened during 2011 due to the economic conjuncture (lower wages and employment and higher contribu-

1 This chapter takes into account data available up to 6 April 2012.
2 Final estimates on the general government deficit and debt were expected to be announced by Eurostat on 23 April 2012, i.e. after the cut-off date of the present report.

Table IX.1 General government and state budget deficits

(percentages of GDP)

	2007	2008	2009	2010	2011*
General government deficit[1] *(national accounts data – convergence criterion)*	-6.5	-9.8	-15.8	-10.6	-9.2
– Central government	-6.5	-9.9	-15.6	-11.7	-
– Social security organisations, local government, legal entities in public law	0.0	0.1	0.3	1.1	-
State budget deficit[2] *(administrative data)*	-4.7	-6.3	-14.3	-9.8	-10.6
State budget deficit[3] *(cash data)*	-5.6	-7.5	-14.1	-10.3	-10.8

Sources: Bank of Greece, Ministry of Finance and ELSTAT.
* Provisional data.
1 ELSTAT data, as notified to the European Commission (Excessive Deficit Procedure). Data on the general government deficit for 2011 are estimates from the State General Accounting Office's general government cash data of February 2012. Figures may not add up due to rounding.
2 State General Accounting Office data, as shown in the state budget.
3 Bank of Greece data referring to the state budget deficit on a cash basis excluding movements in the OPEKEPE account.

tion evasion), which further aggravated the state budget, owing to increased grants to these organisations.

Irrespective of deviations and delays, during 2011 the foundations for the medium-term planning of the fiscal policy were set. Specifically, in June 2011 the Medium-Term Fiscal Strategy Framework (MFSF) 2012-2015 was legislated, which included measures for 2011 (implementation started gradually in the second half of the year), as well as a first detailed documentation and quantification of the measures to be adopted in 2012-2015.

However, fiscal adjustment has had negative effects on economic activity in the short term. The strength and duration of these effects might had been reduced, if full priority had been given to structural changes, privatisations, as well as mergers/abolition of entities that are unproductive. Delays in these fields further aggravated macroeconomic figures, which made fiscal adjustment even more of a challenge. Characteristically, 73% of the increase of the debt-to-GDP ratio in 2011 is attributable to developments in GDP and the average rate on government borrowing (the "snowball effect"), while just a mere 11% is attributable to the estimated primary deficit. By contrast, 86% of the increase in the debt-to-GDP ratio in 2008 was attributable to that year's deficit, and only around 1.5% to macroeconomic developments (see Table IX.6 of Section 2.6 in this Chapter).

Nevertheless, apart from any short-term negative effects, fiscal adjustment, together with the successful outcome of the PSI, will reduce borrowing costs and lead to a stabilisation and deceleration of the debt-to-GDP ratio in the medium term. Lower borrowing costs should contribute to higher investment, which should boost the long-term growth potential of the economy.

As noted in various OECD studies,[3] the short-term negative effects of the fiscal adjustment are narrowing and the medium- to long-term positive effects evolve faster if the fiscal adjustment programme is based on measures focusing on better targeted expenditure, so as to increase their efficiency and effectiveness, and on structural reforms leading to more competitive product, services and labour markets, in order to boost growth and increase future tax earnings.

2 FISCAL DEVELOPMENTS IN 2011 BASED ON FISCAL DATA

As mentioned before, the drastic decline in economic activity, together with delays and indecision in the implementation of measures (mostly of a structural nature), made it necessary to repeatedly readjust budgetary targets.

In this context, the target for the state budget deficit was revised in June in the Medium-Term Fiscal Strategy Framework (MFSF) to 9.3% of GDP (against an initial target of 9.1% of GDP in the Introductory Report on the 2011 Budget) and in November, in conjunction with the preparation of the 2012 Budget, to €22,958 million, or 10.5% of GDP.

According to available provisional data, the state budget deficit stood at €22,882 million, or 10.6% of GDP. The deficit in absolute terms is not much different than that of 2010 (€22,284 million), but appears increased as a percentage of GDP (2011: 10.6% of GDP, 2010: 9.8% of GDP) due to the decline in nominal GDP by 5.4% (see Table IX.9 of Section 4.1 in this Chapter). The improvement is more visible in the state budget primary deficit, which declined significantly, both in absolute terms (2011: €6,534 million, 2010: €9,061 million) and as a percentage of GDP (2011: 3.0% of GDP, 2010: 4.0% of GDP). However, it should be noted that this improvement is solely attributed to the public investment budget.

3 See D. Sutherland, P. Hoeller and R. Merola (2012), "Fiscal Consolidation: Part 1. How Much is Needed and How to Reduce Debt to a Prudent Level?", OECD Working Paper no. 932; and R. Hagemann (2012), "Fiscal Consolidation: Part 6. What Are the Best Policy Instruments for Fiscal Consolidation?", OECD Working Paper no. 937.

The contraction of GDP had a negative impact mainly on the state budget revenue, which came to €53,861 million (0.1% lower than 2010, while the revised target projected an increase of 1.4%) despite repeated additional tax measures and a significant increase in the revenue of the public investment budget. By contrast, the state budget primary expenditure narrowed further than expected and fell by 4.1%, against a revised targeted decline of 2.8%. These developments are detailed further below.

2.1 ORDINARY BUDGET REVENUE

In 2011, ordinary budget revenue (pre-tax refund) declined by 1.4% against 2010 and came to €55,373 million (2010: €56,178 million, see Table IX.2). This development suggests a shortfall of €935 million, compared with the revised target (an increase of 0.2%) included in the Introductory Report on the 2012 Budget. It should be noted that the initial target, according to the 2011 Budget, was a 3.5% decrease in revenue. This target was revised to an increase of 3.0%, owing to the tax measures provided for in the MFSF, and then revised again to an increase of 0.2%. The shortfall in tax revenue (against the revised target) is attributable to the large decline in economic activity and to tax evasion, which intensified due to increases in tax rates and liquidity shortages. The shortfall in revenue was contained as a result of increased revenue through the one-off tax on businesses, the extraordinary solidarity contribution on personal income, revenue from licensing and the special levy on real estate.

Specifically, revenue from direct taxation increased slightly by 0.5%, mostly due to the new, revenue-enhancing measures taken in the second half of the year (extraordinary levies and special levy on real estate), as follows:

- Receipts from personal income tax fell by 11.9%. The significant decline in receipts in this tax category is attributed to lower income tax withheld due to reduced employment and wages, as well as the lack of liquidity in businesses.

- Receipts from taxation on corporate income also fell (by 13.1%), as the majority of businesses suffered losses in 2010.

- Receipts from inheritance, gifts, parental donations and real estate increased substantially (140.7%) due to the collection (in December) of the special levy on real estate property (collected through electricity bills).[4] The collection of the Property Tax (FAP) for 2011 was not completed as planned in 2011 and has been shifted to 2012.

- Revenue from tax arrears fell by 33.5%, as receipts from the settlement of tax arrears for 2010[5] continue to decline. In addition, revenue from new measures (Law 4002/2011),[6] which (a) provides tax-payers the possibility of a favourable settlement of tax obligations; and (b) broadens the categories of sole proprietors and professionals eligible for the settlement of tax arrears for the financial years 2000-2009, were not as high as expected. This category also includes receipts from the Real Property Tax (ETAK) 2009 and the FAP for 2010, which were shifted to 2012, due to delays in the dispatch of the tax notifications.

- Increased yields from other direct tax categories by 67.0% are attributable to significant receipts from the one-off tax on the profits of large enterprises (€1,127 million),[7] the extraordinary solidarity contribution on personal income (€1,161 million), and the levy on sole proprietors (€250 million).[8] These receipts partly offset losses from all other revenue categories.

- Receipts from indirect taxation fell significantly by 7.8% (against a revised targeted decline of 6.3%), mostly due to low receipts

4 Law 4021/2011; see Appendix to this chapter.
5 Law 3888/2010.
6 See Appendix to this chapter.
7 Law 3845/2010.
8 Law 3986/2011.

Table IX.2 Ordinary budget revenue[1]

(million euro)

	2008	2009	2010	2011*	Percentage changes 2009/2008	2010/2009	2011*/2010
I. Direct taxes	**20,864**	**21,432**	**20,224**	**20,316**	**2.7**	**-5.6**	**0.5**
1. Income tax	16,670	16,590	14,287	12,931	-0.5	-13.9	-9.5
– Personal	10,816	10,841	9,398	8,283	0.2	-13.3	-11.9
– Corporate	4,191	3,790	3,149	2,736	-9.6	-16.9	-13.1
– Special categories of income tax	1,583	1,880	1,670	1,856	18.8	-11.2	11.1
(tax on shipping)	11	13	14	14	21.2	7.7	0.0
(tax on interest income from bonds, deposits, etc.)	635	504	567	1,008	-20.6	12.5	77.8
2. Property taxes	486	526	487	1,172	8.3	-7.4	140.7
3. Direct taxes collected on behalf of third parties	1	2	1	1	92.5	-70.0	0.0
4. Tax arrears	2,077	2,446	2,874	1,911	17.8	17.5	-33.5
5. Extraordinary and other direct taxes	1,631	1,868	2,575	4,301	14.5	37.8	67.0
II. Indirect taxes	**30,221**	**28,291**	**31,042**	**28,632**	**-6.4**	**9.7**	**-7.8**
1. Customs duties and special contributions on imports-exports	320	254	217	198	-20.6	-14.6	-8.8
2. Consumption taxes on imports	3,246	2,229	2,046	1,910	-31.3	-8.2	-6.6
– VAT	2,403	1,756	1,796	1,810	-26.9	2.3	0.8
– Cars	783	441	226	89	-43.7	-48.8	-60.6
– Special consumption tax	59	32	24	11	-46.1	-25.0	-54.2
3. Consumption taxes on domestic products	23,798	23,758	27,150	25,106	-0.2	14.3	-7.5
– Turnover tax	1	1	1	0	72.1	0.0	
– VAT	15,840	14,826	15,578	15,077	-6.4	5.1	-3.2
– Fuel	3,689	4,374	5,698	4,653	18.6	30.3	-18.3
– Tobacco	2,516	2,566	2,913	3,045	2.0	13.5	4.5
– Road duties	997	1,046	1,591	1,117	4.9	52.1	-29.8
– Special levies and contributions on cars	73	63	52	42	-14.0	-17.5	-19.2
– Other[2]	683	882	1,317	1,172	29.1	49.3	-11.0
4. Transaction taxes	2,063	1,453	1,120	903	-29.6	-22.9	-19.4
– Capital transfers	1,130	831	702	509	-26.5	-15.5	-27.5
– Stamp duties	685	459	414	392	-33.0	-9.8	-5.3
– Licence fees for gambling	247	163	4	2	-34.1	-97.5	-50.0
5. Other indirect taxes	794	597	509	515	-24.8	-14.7	1.2
III. Total tax revenue	**51,085**	**49,723**	**51,266**	**48,948**	**-2.7**	**3.1**	**-4.5**
IV. Non-tax revenue	**4,249**	**3,720**	**4,912**	**6,426**	**-12.4**	**32.0**	**30.8**
V. Total ordinary budget revenue	**55,334**	**53,443**	**56,178**	**55,374**	**-3.4**	**5.1**	**-1.4**

Source: State General Accounting Office.
* Provisional data.
1 For comparability purposes, tax refunds have not been deducted from revenue.
2 Including the special consumption tax on domestic products.

from VAT. It should be noted that, with the exception of receipts from tobacco taxes, receipts from all other indirect tax categories declined. In more detail:

– VAT receipts fell by 2.8%, despite the increase in the reduced rate since the beginning of 2011,[9] the higher VAT rate on catering and non-alcoholic beverages as of 1 September 2011[10] and the rise in oil prices. This revenue category registered a continuous deceleration since the beginning of 2011 (original annual target of 3.8%), mainly due to intensified tax evasion and the decline in economic activity.[11]

– Receipts from taxation on liquid fuels were 18.3% lower, which is partly associated with the 4,4% decline in liquid fuel consumption[12] and the change in the taxation of heating oil as of 1 January 2011.

– The contribution of road duties was also smaller in 2012, despite the 10% increase,[13] as the collection was not complete until end-December 2011 and there was an extension of the deadline for their payment. Moreover, the number of registered cars declined. A decline was also recorded in receipts from the property transfer tax (-27.1%), stamp duties (-5.3%) and the tax on stock exchange transactions (-31.3%).

- Non-tax revenue increased substantially (30.8%) due to receipts from incorporated off-budget accounts (€985 million) and bank liquidity support measures (€909 million). Furthermore, receipts to the amount of €1,157 million were recorded, stemming from licensing to gambling and radio frequencies use.

In 2011, tax refunds practically remained unchanged from the high levels recorded in 2010 (falling by a mere 0.7%), while the revised target provided for a decline of 6.1%. This is attributable to increased refunds for personal income tax, as well as the implementation, for the first time, of the clearing of tax payers' claims from the State against respective tax arrears. As a result, net ordinary budget revenue in 2011 fell by 1.5%, while the revised target provided for an increase of 0.9%. It should be noted that, while tax revenue in 2011 virtually remains at 2007 levels (2011: €48,948 million, 2007: €48.404 million), tax refunds doubled, both in absolute terms (2011: €2,283 million, 2007: €2,623 million) and as a percentage of GDP (2011: 2,46%, 2007: 1.18% of GDP).

2.2 ORDINARY BUDGET EXPENDITURE

Ordinary budget expenditure (excluding tax refunds, but including grants to hospitals for the repayment of past debts, spending for the procurement of military equipment and NATO expenditure, as well as guarantees called in to bodies classified inside and outside general government) increased by 3.5% in 2011, against a revised estimated increase of 4.4% in the Introductory Report on the 2012 Budget. This is attributable to the larger decline in ordinary budget primary expenditure, which fell in 2011 by 1.2%, against a targeted decline of 0.7%. It is worth mentioning that the corresponding expenditure category had decreased by 10.1% in 2010, due to successive measures taken during 2010 in the context of the efforts to swiftly reduce the deficit. By contrast, interest payments increased by 23.6% in 2011, against a rise of around 7.3% in 2010 (see Table IX.3).

Based on the available detailed data, developments in the main ordinary budget expenditure categories are as follows:

- Personnel outlays (including pension outlays) declined further by 3.6% in 2011, against 7.8% in 2010 (see Table IX.3). Excluding pension outlays, the decline stands at 6.7% in 2011, against 9.2% in 2010, and is attributable to

9 Pursuant to Law 3899/2010, as of 1 January 2011 the lowest VAT rate increased from 11% to 13% and the super-reduced rate from 5.5% to 6%.
10 Law 3986/2011; see Appendix to this chapter.
11 According to ELSTAT, the turnover indicator in January-December 2011 fell by 7.2%.
12 January-November 2011 consumption data.
13 Law 3986/2011; see Appendix to this chapter.

Table IX.3 Outlays under the ordinary budget and the public investment budget

(million euro)

	Annual data				Percentage changes		
	2009	2010	Execution 2010*	Supplementary budget after the PSI 2012	2010/09	2011*/10	2012/11*
I. Outlays under the ordinary budget	**74,625**	**67,759**	**70,135**	**62,999**	**-9.2**	**3.5**	**-10.2**
1. Personnel outlays	25,870	23,854	22,990	21,364	-7.8	-3.6	-7.1
of which: pensions	6,487	6,253	6,572	6,511	-3.6	5.1	-0.9
2. Interest payments[1]	12,325	13,223	16,348	13,050	7.3	23.6	-20.2
3. Payments to the European Union	2,484	2,363	2,155	2,075	-4.9	-8.8	-3.7
4. Transfer of revenue collected on behalf of third parties	6,452	5,775	5,000	4,012	-10.5	-13.4	-19.8
5. Subsidies to farmers	665	538	666	752	-19.1	23.8	12.9
6. Grants	19,015	16,895	18,581	16,409	-11.1	10.0	-11.7
– to social security organisations[2]	15,266	13,666	15,896	14,027	-10.5	16.3	-11.8
– to the Intergenerational Solidarity Fund	522	560	571	579	7.3	2.0	1.4
– extraordinary social solidarity aid	489	0	0	0			
– other grants	2,738	2,669	2,114	1,803	-2.5	-20.8	-14.7
7. Consumer and other expenditure	3,508	2,722	2,136	3,014	-22.4	-21.5	41.1
of which:							
– conduct of elections	293	120	12	...	-59.0	-90.0	
– reserve				1,000			
8. Grants to hospitals for past debt settlement	1,498	367	435	400	-75.5	18.5	-8.0
9. Ministry of National Defence programmes for the procurement of military equipment	2,175	1,017	359	700	-53.2	-64.7	95.0
10. NATO expenditure	51	33	16	60	-35.3	-51.5	275.0
11. Guarantees called in (by organisations other than the general government)	100	145	192	137	45.0	32.4	-28.6
12. Guarantees called in (by general government organisations)	484	827	1,254	1,026	70.9	51.6	-18.2
II. Outlays under the public investment budget	**9,588**	**8,454**	**6,608**	**7,300**	**-11.8**	**-21.8**	**10.5**
1. Project execution	3,421	3,198	...	...	-6.5		
2. Grants	6,135	5,236	...	...	-14.7		
3. Administrative costs	32	20	...	...	-37.5		
III. Outlays under the state budget (I+II)	**84,213**	**76,213**	**76,743**	**70,299**	**-9.5**	**0.7**	**-8.4**
Primary expenditure under the state budget	71,888	62,990	60,395	57,249	-12.4	-4.1	-5.2
Primary expenditure under the ordinary budget[3]	57,992	52,147	51,532	47,626	-10.1	-1.2	-7.6
Amortisation payments	29,135	19,549	28,843	41,900	-32.9	47.5	45.3

Source: State General Accounting Office.
* Provisional data.
1 Including "other expenditure" for public debt servicing.
2 Including expenditure for the implementation of social welfare measures (e.g. Social Solidarity Pension Supplement for Pensioners – EKAS, allowance to families with many children, etc.)
3 Excluding grants for the repayment of public hospitals' arrears, spending for the procurement of military equipment, NATO expenditure and guarantees called in.

measures mostly relating to the freeze in public sector hiring, non-renewal of short-term contracts, the implementation of the unified wage grid for civil servants, as well as the full effect of the measures implemented in 2010 involving cuts in civil service benefits ("carry-over"). Pension expenditure, despite cuts in main and supplementary pensions, rose by 5.1%, due to the large increase in the number of pensioners. Nevertheless, compared with 2009, total personnel outlays (including pensions) show a cumulative decline of 11.1%, while excluding pensions the decline stands at 15.3%.

- The economic contraction, lower employment and remuneration, and increased contribution evasion had a negative impact on the revenue of social security organisations. This development, combined with the increase in the number of pensioners, contributed to a widening in the deficits of these organisations, resulting in increased grants from the ordinary budget. Thus, expenditure for grants to social security organisations rose by 16.3% in 2011 (against a targeted increase of 5.6%), more than offsetting the 10.5% decline achieved in 2010.

- Consumer and other expenditure, as well as spending for the procurement of military equipment, declined further by 21.5% and 64.7% respectively in 2011, against a fall of 22.4% and 53.2% respectively in 2010, thus contributing to the containment of the ordinary budget expenditure.

2.3 PUBLIC INVESTMENT BUDGET

Despite available National Strategic Reference Network (NSRF) resources, cuts in expenditure under the Public Investment Budget continued in 2011; as a result, investment expenditure were further reduced by 21.8%, after a decline of 11.8% in 2010, to stand at €6,608 million, or 3.1% of GDP (see Table IX.9 of Section 4.1 in this Chapter). In contrast, revenue under the Public Investment Budget rose by 22.7% in 2011, against an increase of 50.6% in 2010. Due to these developments, the Public Investment Budget deficit came to €2,838 million, or 1.3% of GDP, against 2.4% of GDP in 2010.

2.4 SOCIAL SECURITY AND WELFARE FUNDS

The annual social budget for the entire social security system, which is included in the 2012 Budget, provides estimates on the results of social security organisations for 2011 and forecasts for 2012, while no review data for 2010 are presented. In this respect, these recent data are not comparable with previous years data.

In brief, social security funds faced increased borrowing needs in 2011, burdening the state balance by almost €1.5 billion more than the initially projected amount (2011 Budget grants: €14,415 million, realisations: €15,896 million). This development reflects the large decline in social security contributions collected by social security funds in 2011, due to the rapid increase in unemployment, the slowdown in economic activity and the increase in social contribution evasion. Thus, although a significant reduction in personnel outlays and a decline in pension expenditure were achieved, the attempts to rationalise expenditure did not offset the negative impact from the economic crisis on the results of social security organisations.

2.5 PUBLIC ENTERPRISES

In 2011, despite a significant decline in DEKO expenditure, the overall deficit (of the operating and capital accounts) rose to €1,207 million (or 0.6% of GDP), against a deficit of €829 million (or 0.4% of GDP) in 2010 (see Table IX.4). The deterioration in the results of public enterprises is mostly attributable to increased working capital needs, lower "special purpose resources and provisions" and a decline in current revenue.

Specifically, revenue under the operating account, due to the generally negative economic conjuncture, fell by 13.1% to stand at

Table IX.4 Results of public enterprises and their financing

(million euro)

	2008	2009	2010[1]	2011*	Budget 2012	Percentage changes			
						2009/2008	2010/2009	2011*/2010	2012/2011*
A. Operating account									
1. Revenue	1,806	1,853	2,318	2,016	2,450	2.6	25.1	-13.1	21.6
2. Expenditure	3,676	3,820	4,521	3,960	3,435	3.9	18.4	-12.4	-13.2
3. Balance (1 - 2)	-1,870	-1,967	-2,203	-1,944	-985				
B. Capital account									
4. Revenue	0	0	0	0	0				
5. Expenditure	1,330	755	1,385	1,604	1,417	-43.3	83.6	15.8	-11.6
Investment	1,112	1,244	1,291	664	386	11.9	3.8	-48.5	-42.0
Working capital	-10	-645	-545	167	389	-	-	-	-
Other expenditure	228	155	639	773	643	-31.9	311.2	20.9	-16.8
6. Balance (4 - 5)	-1,330	-755	-1,385	-1,604	-1,417				
7. Special funds and provisions[2]	1,136	1,249	2,759	2,340	11,201[3]	10.0	120.8	-15.2	378.6
Total balance (3+6+7)	***-2,065***	***-1,472***	***-829***	***-1,207***	***8,799[3]***				
Percentage of GDP	***0.9***	***0.6***	***0.4***	***0.6***	***4.3***				
Financing									
8. Ordinary budget subsidies[4]	191	232	210	389	367	21.2	-9.4	85.2	-5.6
9. Depreciation	255	276	524	570	450	8.5	89.8	8.7	-21.0
10. Net borrowing requirements	1,619	964	95	249	-9,616[3]	-40.5	-90.2	-	-
Total financing	***2,065***	***1,472***	***829***	***1,207***	***-8,799***	***-28.7***	***-43.7***	***45.7***	***-828.7***
11. Amortisation[5]	520	403	699	454	5,112	-22.6	73.5	-35.0	-
12. Credit repayments[5]	14	12	299	195	2,191	-11.1	-	-35.0	-
13. New commercial credit	38	3	428	733	0	-90.9	-	71.5	-
14. Gross borrowing requirements (10+11+12-13)	2,115	1,376	665	164	-2,313	-35.0	-51.7	-75.4	-

Source: Ministry of Economy and Finance.
* Estimates.
1 According to Law 3899/2010, the Special Secretariat for Public Enterprises and Entities (EGDEKO) oversees –without exceptions any more– those sociétés anonymes (SA) on which the Greek state has a direct or indirect influence as well as legal entities in private law in which the Greek state has a majority interest and performs their administration and management. This definition increases the number of entities supervised to 75 public enterprises and 57 legal entities in private law in 2010 (from 52 public enterprises in 2009). It should be noted that as of 2011 the EGDEKO supervises 73 public enterprises and 57 legal entities in private law, since as of 4 March 2011 (i) the Athens-Piraeus Trolley Buses (ILPAP) was absorbed by the THERMAL BUSES SA and the ODIKES SYNGKOINONIES S.A., and (ii) the Athens-Piraeus Electric Railways (ISAP) and the TRAM S.A. were merged into the AMEL S.A. (ATTIKO METRO OPERATION COMPANY S.A.) and the STASY S.A. Table IX.4 presents only financial results from DEKOs since 2010, to ensure comparability with previous years.
2 Advance payments and participations by DEH consumers, one-off contribution by OTE subscribers, private participations in EYDAP projects and own reserves (from surpluses) of certain public enterprises. Since 1997, subsidies through the public investment budget and the EU have gradually taken the form of share capital increases, thus have gradually stopped appearing under "subsidies" and are now recorded as "special funds".
3 The large improvement in the total result and the net borrowing requirements has stemmed from the assumption of the debt of OSE and OASA-TRAM by the Greek government. Thus, the "total balance" (€8,799 million) minus the amount assumed by the government (€7,200 million and €2,501 million, respectively), shows a deficit of €903 million.
4 Ordinary budget subsidies to public enterprises with deficits, minus revenue payments by enterprises with surpluses.
5 Estimated breakdown of amortisation and repayments, due to the lack of relevant data.

€2,016 million. On the contrary, expenditure under the operating account stood at €3,960 million, falling by 12.4% against 2010. This development reflects a €389 million decline in the wage bill in 2011, after the implementation of Law 3899/2011, which provided for further cuts in the wages of DEKO workers as of 1 January 2011.[14] At the same time, the number of workers in DEKOs declined, as Law 3986/2011 allows for one recruitment for every ten retirements.

Moreover, it is worth mentioning that in 2011 legal arrangements were made (Law 3920/2011) for the restructuring of public urban transportation in Attika, with the absoption of Athens-Piraeus Trolley Buses (ILPAP) by Thermal Busses SA and the establishment of the Odikes Syngkoinonies SA (OSY), and the merger of Athens-Piraeus Electric Railways (ISAP) and Tram SA into AMEL S.A. (Attiko Metro Operation Company SA) and the establishment of STASY SA. The Athens Urban Transport Organisation (OASA) is the unique shareholder of the new companies and is responsible for the organisation, coordination and control of transport services on all surface and underground public transportation in Attika. Lastly, Law 4002/2011 provides for a restructuring of ERT SA (Greek Radio Television), as well as further restructuring-mergers among public corporations.

2.6 PUBLIC DEBT

According to the latest estimates, the consolidated debt of the general government as a percentage of GDP is expected to stand at around 165% of GDP in 2011, against almost 145.0% in 2010 (see Table IX.5).

The deterioration of macroeconomic conditions, and especially the dramatic fall in economic activity, weights heavily on the efforts for fiscal consolidation and the sustainability of debt-to-GDP. More specifically, debt rose by €23,794 million in 2008 (almost as much as in 2011), but the increase in the debt-to-GDP ratio was only 5.6 percentage points. During the same year, 86% of the increase was attributable to the primary deficit, and almost 1.5% to the difference between GDP growth and the average rate on government borrowing (the "snowball effect"). In 2011, the increase in the debt-to-GDP ratio is expected to be around 20 percentage points (from 145.0% to 165% of GDP). Of this, it is estimated that only 11% is attributable to primary deficit in 2011, while 73% is due to the negative snowball effect (see Tables IX.5 and IX.6). From all the above it is clear that, improved macroeconomic conditions and the return of the economy to positive rates of growth should give a significant boost to the ongoing fiscal consolidation. Furthermore, it is essential that efforts towards fiscal consolidation are intensified when the economy is experiencing a period of rapid growth, as repeatedly proposed. Otherwise, fiscal consolidation during downturns requires greater efforts to be made and more painful measures to be taken, putting into considerable risk the achievement of fiscal targets, as structural deficits are transformed into cyclical ones.

The bond exchange agreement (PSI)[15]

The agreement with private investors holding Greek government bonds together with the new agreement to receive liquidity of €130 billion from the European Financial Stability Facility (EFSF) and the IMF until 2014 set the foundations for improving the outlook of the Greek economy. In particular, the public debt restructuring through bond exchange, on the basis of the PSI terms and conditions agreed upon in the Eurogroup meeting of 21 February 2012, will contribute substantially in controlling the dynamics and the decline in the public debt-to-GDP ratio.

The agreement included a 53.5% cut in the nominal value of bonds for private bond-

14 Specifically, a 10% decline in all categories of remuneration exceeding €1,800 per month, a readjustment of the maximum monthly earnings to €4,000 and a ceiling (10% of the total wage bill) on allowances for overtime work, overwork, travel expenses, etc.
15 See also Chapter V.5.

Table IX.5 Consolidated debt of general government[1]

(million euro)

	2005	2006	2007	2008	2009	2010	2011*
Short-term	1,337	2,479	2,180	5,790	12,334	11,745	14,363
– securities	1,156	943	1,625	5,496	10,820	9,121	11,758
– loans	181	1,536	555	294	1,514	2,624	2,605
Medium- and long-term	209,846	221,409	236,617	256,766	285,874	316,785	340,434
– securities	168,336	178,600	192,712	211,516	242,802	244,312	236,880
– loans	41,510	42,809	43,905	45,250	43,072	72,473	103,554
Coin and deposits	1,235	988	693	728	1,477	1,005	820
Total	**212,418**	**224,876**	**239,490**	**263,284**	**299,685**	**329,535**	**355,617**
% of GDP	*110.0*	*107.7*	*107.5*	*113.0*	*129.4*	*145.0*	*165.3*
– euro-denominated debt	209,671	222,820	237,574	261,652	298,425	323,522	347,466
of which:							
to the Bank of Greece	*(7,988)*	*(7,991)*	*(7,521)*	*(7,051)*	*(6,581)*	*(6,154)*	*(5,684)*
to the IMF/EU/ECB						*(27,121)*	*(65,379)*
– non-euro denominated debt	2,747	2,056	1,916	1,632	1,260	6,013	8,151[2]
of which: to the IMF/EU/ECB						*(4,704)*	*(7,831)*

Source: State General Accounting Office.
* Provisional data.
1 According to the definition in the Maastricht Treaty.
2 Valuation using exchange rates as at 31.12.2011.

Table IX.6 Decomposition of changes in the general government debt-to-GDP ratio[1]

(percentages of GDP)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011*
General government debt-to-GDP ratio	103.7	101.7	97.4	98.9	110.0	107.7	107.5	113.0	129.4	145.0	165.3
Changes in the general government debt-to-GDP ratio	0.3	-2.1	-4.2	1.4	11.2	-2.4	-0.1	5.5	16.3	15.6	20.4
– Primary balance	-2.0	-0.7	0.7	2.6	1.0	1.3	2.0	4.8	10.6	5.0	2.3
– Change in GDP and change in interest rates	-0.9	-1.4	-4.5	-2.0	0.2	-4.1	-2.4	0.1	5.5	7.9	14.9
– Deficit-debt adjustment[2]	3.2	0.1	-0.4	0.9	10.0	0.3	0.2	0.7	0.2	2.8	3.1

Sources: Ministry of Finance, General Directorate of Economic Policy, "Hellas: Macroeconomic Aggregates" and ELSTAT.
* Provisional data.
1 Changes in the debt ratio have been decomposed using the following formula:

$$\left(\frac{D_t}{Y_t} - \frac{D_{t-1}}{Y_{t-1}}\right) = \frac{PB_t}{Y_t} + \left(\frac{D_{t-1}}{Y_{t-1}} * \frac{i_t - g_t}{1 + g}\right) + \frac{SF_t}{Y_t}$$

where D_t = general government debt
PB_t = primary balance (deficit or surplus)
Y_t = GDP at current prices
g_t = nominal GDP growth rate
i_t = average nominal rates on government debt
SF_t = deficit-debt adjustment

2 The deficit-debt adjustment includes expenditure or liabilities assumed by the general government that do not affect the deficit but increase debt, as well as proceeds (e.g. from privatisation) that do not affect the deficit but reduce debt.

holders, and concerns Greek government bonds of €177 billion, which are subject to Greek law, Greek government bonds to the amount of €8 billion, which are subject to foreign law, and state-guaranteed loans to public enterprises to the amount of €9.5 billion.[16] Bond-holders were called upon to exchange old bonds for new ones (which include Collective Action Clauses (CAC) and are subject to British law) with a nominal value of 31.5% of old bonds, and for EFSF securities (with a maturity of two years) with a nominal value of 15% of the old bonds. The new bonds have a 10-year grace period and fall due between 2023 and 2042. The coupon was set at 2% for 2013-2015, 3% for 2016-2020, 3.65% for 2021 and 4.3% from 2022 on.[17]

Moreover, the Eurogroup decision of 21 February for further Official Sector Involvement should also contribute to a decline in debt. In particular, it was decided that the interest rate spread on the original loan granted to Greece should fall to 150 basis points, and that national central banks should disclaim in favour of Greece future income flows or revenue from the Greek bonds they hold. It is estimated that the former should decrease debt by 2.8% of GDP and the latter by 1.8% of GDP up until 2020.

Thus, the successful completion of the private sector involvement, the positive contribution from the official sector, the ongoing fiscal adjustment and the achievement of primary surpluses starting from 2013, together with the acceleration of structural changes, effective utilisation of Community funds under the National Strategic Reference Framework (NSRF) with the assistance of the EU Action Group, as well as realistic and efficient design and implementation of the privatisation and real estate development programme, could reverse the negative climate and boost the medium- to long-term outlook for the Greek economy.

According to current estimates, the public debt-to-GDP ratio (165% of GDP in 2011) should reach 163.2% in 2012 (supported by the bond exchange), 167.3% in 2013 (due to falling nominal GDP and the modest targeted primary surplus of 1.8% of GDP), but it should start falling fast from 2014 on. Based on existing data, it is estimated to fall to 153.1% in 2015 and to around 116.5% of GDP in 2020.[18]

The acceleration of reforms could lead to higher GDP, which would further improve debt sustainability. For instance, a 1% per annum increase in nominal growth rates would contribute to a further decline in public debt to around 105.5% of GDP in 2020, while the reverse scenario (a decline in nominal growth rates by 1% per annum) would push debt to 129% of GDP in 2020.

However, as regards the future target for the public debt-to-GDP ratio, there are risks and uncertainties associated with delays or non-implementation of the privatisation and real estate development programme, failures in fiscal adjustment and lower growth rates. For instance, (a) if privatisation revenue was to decline to a mere €10 billion until 2020, the public debt would reach 130% of GDP in 2020; (b) if the primary surplus after 2014 does not exceed 2.5% of GDP, the targeted 120% will not be achieved before 2030.[19]

To limit risks, it is necessary to uphold reform efforts and accelerate attempts to achieve the maximum possible synergies between fiscal

16 According to IMF estimates, losses in terms of net present value for private bond-holders are close to 70-75%.

17 In the context of the exchange, private bond-holders will be able to receive a higher yield from 2015 on if the real GDP turns out better than expected on the basis of the programme. In addition, on 12 March 2012 private bond-holders received short-term EFSF securities (with a maturity of six months) for accrued interest up to 24 February 2012.

18 The adjustment programme accompanying the new loan agreement includes a more realistic and reliable pace of implementation for the privatisation and real estate development programme. In particular, revenue to the amount of €19 billion up until 2015 is sought, as well as cumulative revenue of €45-€46 billion up to 2020 (and €50 billion up to 2022).

19 According to the basic scenario of the economic adjustment programme included in IMF and EU analyses, the effect from changes in interest rates is low due to the fact that Greece is off the markets, while recourse to the markets as of 2015 will concern small amounts. Moreover, it is assumed that any success of the programme until then will have restored confidence, which should be reflected in interest rate spreads.

adjustment, privatisations and structural changes. This should enhance confidence, support credibility of the policies pursued and ultimately increase the medium- to long-term growth potential. Restoring confidence in the prospects of the Greek economy should help materialise the basic scenario of the Economic Adjustment Programme, which provides for a return to markets for medium- to long-term borrowing as of 2015.

3 FISCAL DEVELOPMENTS IN 2011 BASED ON CASH DATA

In 2011 the cash deficit (borrowing requirement) of the state budget[20] moderated at €23,144 million, against a deficit of €23,396 million in 2010. However, owing to the deep recession, the deficit as a percentage of GDP rose to 10.8%, from 10.3% in 2010 (see Table IX.7 and Chart IX.1). The state budget primary cash deficit improved significantly, declining to €6,900 million (or 3.2% of GDP), from €10,200 million (or 4.5% of GDP) in 2010.

The deficit stems mainly from the ordinary budget (2011: €20,082 million, 2010: €18,333 million) and is attributable both to the substantial shortfall in revenue and the increase in interest payments.

20 Not including movements in OPEKEPE's account.

Table IX.7 State budget deficit on a cash basis[1,2]

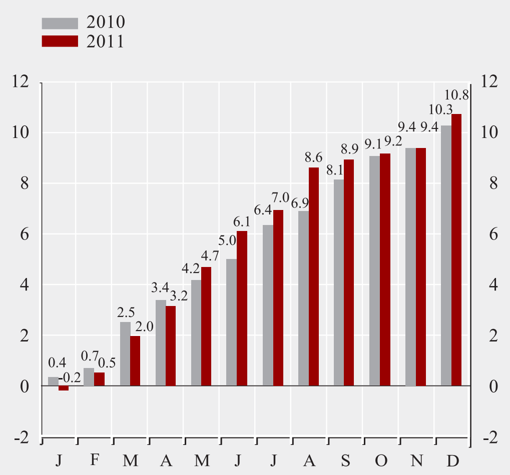
(million euro)

	Annual data			
	2008	2009	2010	2011*
State budget	**17,361**	**32,622**	**23,396**	**23,144**
% of GDP	7.5	14.1	10.3	10.8
– Ordinary budget[3]	12,585[4]	25,318[5]	18,333[6]	20,082[7]
– Public investment budget	4,776	7,304	5,063	3,062

Source: Bank of Greece.
* Provisional data.
1 As shown by the respective accounts with the Bank of Greece and other credit institutions.
2 Excluding movements in the OPEKEPE (Payment and Control Agency for Guidance and Guarantee Community Aids) account.
3 Including movements in public debt management accounts.
4 Including proceeds of €430.8 million from the sale of Hellenic Telecommunications Organisation (OTE) shares and expenditure of €570.8 million for a grant to Agricultural Insurance Organisation (OGA), but excluding the payment of Greek government debt to the Social Insurance Institute (IKA) by the issuance of bonds of €1,172 million. It should be noted that during the strike of the Bank of Greece personnel in March 2008, public debt service payments of €1,537 million were effected through commercial banks, of which €359 million in interest payments were not reflected in the cash data of the Bank of Greece. If this latter amount is included in interest payments, then the state budget deficit rises from 7.5% of GDP to 7.6% of GDP.
5 Excluding expenditure of €3,769 million for the acquisition of preference shares of Greek banks under Law 3723/2008 and of €1,500 million for the issuance of bonds to cover the capital increase of the Credit Guarantee Fund for Small and Very Small Enterprises (TEMPME SA), but including proceeds of €673.6 million from the sale of OTE shares and €72.3 million from the privatisation of Olympic Airlines, as well as the payment of Greek government debt to OGA by the issuance of bonds of €531 million.
6 Including expenditure of: (i) €297.9 million (bond issue reopening) for the payment of past government debt to the Social Insurance Institute (IKA); and (ii) €714.7 million (bond issuance) for the payment of past government debt to the Hellenic Petroleum SA (ELPE), EGNATIA MOTORWAY SA and the Agricultural Bank of Greece, but excluding expenditure of: (i) €849.2 million (bond issue reopening) for the repayment of public hospitals' arrears pursuant to Article 27 of Law 3867/2010, which burdens the 2010 debt; and (ii) €424.3 million (bond issuance) for the settlement of financial obligations of the Hellenic Agricultural Insurance Organisation (ELGA), a replacement of previous loan with the same terms. Also excluding expenditure of €1,500 million for the paying-up of the capital of the Financial Stability Fund.
7 Not including revenue of: (i) €675 million from the sale of preference shares of the Agricultural Bank of Greece by the Greek State; and (ii) €250 million from the Deposits & Loans Fund due to the reduction of its reserves. By contrast, including privatisation proceeds of €1,548.3 million, but excluding expenditure of: (i) €4,011 million (bond issue reopening) for the repayment of public hospitals' arrears pursuant to Article 27 of Law 3867/2010, which burdens the 2011 debt; (ii) €350 million (bond issuance) for the settlement of financial obligations of the Hellenic Agricultural Insurance Organisation (ELGA), a replacement of previous loan with the same terms; and (iii) €140.2 million (bond issuance) for covering the State's debt to the former employees of Olympic Airlines that were laid off. Also, not including expenditure of €1,551.8 million for the participation of the Greek State in capital increases, of which €1,434.5 million relate to the capital increase of the Agricultural Bank of Greece as well as to the proceeds from a bond issue reopening (€1,380 million) paid for the purchase by the Greek State of preference shares of the National Bank of Greece and Piraeus Bank.

Chart IX.1 Net borrowing requirement of central government on a cash basis (January 2010 - December 2011)

(percentages of GDP)



Source: Bank of Greece.
Notes:"Monthly" data refer to the cumulative sum for the period from the beginning of the year up to the reference month. The balance in the OPEKEPE (Payment and Control Agency for Guidance and Guarantee Community Aids) account is excluded.

In particular, cash revenue, although positively affected by the increase in the low VAT rate, the higher VAT rate on catering and non-alcoholic beverages, the rise in the excise duty on heating oil, the new revenue-enhancing measures, such as the solidarity contribution, the levy on real estate and privatisations, they still record a 1.5% drop against 2010, due to intense tax evasion and the negative economic conjuncture. Expenditure rose by 4.0%, owing to increased interest rate payments (2011: €16,258 million, 2010: €13,223 million). By contrast, primary expenditure fell by 0.5%. The decline in primary expenditure is mostly attributable to the containment of the public sector wage bill and operating costs, while grants to social security funds overshot their target.

The public investment budget deficit fell drastically in 2011 to €3,062 million, against a deficit of €5,063 million in 2010. This is attributable to a decline of 17.1% in investment

Table IX.8 Financing of the state budget deficit

(million euro)

	2008		2009		2010		2011*	
	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total
Greek Treasury bills and government bonds[1]	17,283[4]	99.6	39,953[5]	122.5	1,155[6]	4.9	-19,763[7]	-85.4
Change in the balances of central government accounts with the banking system[2]	-3,596	-20.7	-4,612[5]	-14.1	-8,148	-34.8	3,086	13.3
External borrowing[3]	3,674	21.2	-2,719	-8.3	-1,314	-5.6	-1,650	-7.1
Borrowing from the IMF/EU/ECB					31,703	135.5	41,471	179.2
– from the EU					21,000		31,900	
– from the IMF					10,703		9,571	
Total	**17,361**	**100.0**	**32,622**	**100.0**	**23,396**	**100.0**	**23,144**	**100.0**

Source: Bank of Greece.
* Provisional data.
1 Comprising Treasury bills, short-term securities and government bonds issued in Greece, as well as bonds convertible into shares.
2 Comprising changes in the central government accounts held with the Bank of Greece and other credit institutions. Excluding changes in the OPEKEPE account.
3 Comprising borrowing abroad and securities issuance abroad (all currencies). Excluding non-residents' holdings of bonds issued in Greece.
4 Excluding bonds issued by the Greek government for payment of arrears to the Social Insurance Institute – IKA. See also footnote 4 in Table IX.7.
5 Including the issuance of bonds of €3,769 million for the acquisition of preference shares of Greek banks to help strengthen their liquidity position, as well as the issuance of bonds of €1,500 million for covering the capital increase of the Credit Guarantee Fund for Small and Very Small Enterprises (TEMPME SA).
6 Excluding bonds issued by the Greek government for the payment of arrears of public hospitals and of the Hellenic Agricultural Insurance Organisation (ELGA). See also footnote 6 in Table IX.7.
7 Excluding bonds issued by the Greek government for the payment of arrears of public hospitals, ELGA and Olympic Airlines. See also footnote 7 in Table IX.7.

expenditure and the accelerated absorption of funds through the EU structural funds (an increase of 18%).

The state budget borrowing requirement and amortization payments were primarily financed by loans from the Support Mechanism (€41.5 billion) and to a small extent through the issuance of three-month and six-month Treasury bills (net issue of €5.6 billion – see Table IX.8).

4 THE BUDGET FOR 2012: KEY FISCAL ADJUSTMENT MEASURES AND INSTITUTIONAL FISCAL REFORMS

4.1 THE STATE BUDGET FOR 2012

A prerequisite for the approval of the new loan agreement in February 2012 (Memorandum of Economic and Financial Policies-MOFP), which was associated with the completion of the private sector involvement in the bond exchange (PSI), was the compilation of a supplementary budget for 2012, that would include additional interventions to offset divergences from the budget execution in 2011. The supplementary budget (Article 2 of Law 4051/2011, amending the 2012 state budget approval Law 4032/2011), forecast a general government primary deficit (on a ESA95 basis) for 2012 of 6.7% of GDP (€13,732 million), against 5.4% of GDP (€11,427 million) in the original 2012 budget. The ESA95 general government primary deficit in 2012 is estimated at 0.2% of GDP (€488 million), against a surplus of 1.1% of GDP (€2,423 million) in the original 2012 budget. It should be noted that the target for the general government primary deficit set in the supplementary budget for 2012 is more ambitious than that required by the MOFP (a primary deficit of 1.0% of GDP).

The state budget deficit for 2012 is forecast at 6.9% of GDP (€14,139 million) and the primary deficit at 0.5% of GDP (€1,089 million – see Table IX.9).

The main changes in relation to the original 2012 budget are the following:

- the integration of the new measures involving expenditure cuts of 1.5% of GDP;

- the reduction in accrued interest in ESA95 adjustments by €1.0 billion;

- the reduction in savings from the labour reserve scheme by €200 million;

- the deterioration in the results of the social security funds by almost €1.4 billion;

- the decline in the guarantees of classified corporations of the general government by €450 million;

- the reassessment of ordinary budget revenue (lower by €3 billion).

According to the supplementary budget for 2012, a significant part of fiscal adjustment will stem from improving the state budget result by €8,743 million relative to 2011. This reflects lower interest payments due to the PSI (from €16,348 million in 2011 to €13,050 million in 2012), but also the further decline in the state budget primary deficit from €6,534 million in 2011 to €1,089 million in 2012.

The decrease in the state budget primary deficit (by €5,445 million) will stem from the improvement of the ordinary budget primary balance by €5,157 million and the fall in the public investment budget deficit by €288 million (to €2,550 million). In particular, the ordinary budget primary balance is estimated to show a surplus of €1,461 million (or 0.7% of GDP), from a deficit of €3,696 million (or 1.7% of GDP) in 2011.

Moreover, according to the supplementary budget for 2012, the fall in the state budget deficit will be supported by the 4.3% increase in the state budget revenue, which is expected to stem from the 2.6% rise in ordinary budget

Table IX.9 State budget balance

(million euro)

	Annual data						Percentage changes			
	2009	2010	2011			2012	2010/09	2011/2010		2012/11
			Medium-term Programme	Estimates	Execution*	Suppl. Budget after the PSI		Estimates	Execution*	Suppl. Budget/ Exec.*
	(1)	(2)	(3)	(4)	(5)	(6)	(7=2:1)	(8=4:2)	(9=5:2)	(10=6:5)
I. Revenue	**50,586**	**53,929**	**57,967**	**54,673**	**53,861**	**56,159**	**6.6**	**1.4**	**-0.1**	**4.3**
1. Ordinary budget	48,546	50,857	54,042	51,308	50,091	51,409	4.8	0.9	-1.5	2.6
Revenue before tax refunds	53,443	56,155	57,012	55,212	54,191	54,889	5.1	-1.7	-3.5	1.3
Revenue from NATO	55	24	40	40	26	60				
Special revenue from licensing and public rights	0	0	790	1,056	1,157	270				
Tax refunds	4,952	5,322	3,800	5,000	5,283	3,810	7.5	-6.1	-0.7	-27.9
2. Public investment budget	2,040	3,072	3,925	3,365	3,770	4,750	50.6	9.5	22.7	26.0
– Own revenue	183	271	203	190	146	200	48.1	-29.9	-46.1	37.0
– Receipts from the EU	1,857	2,801	3,722	3,175	3,623	4,550	50.8	13.4	29.3	25.6
II. Expenditure	**84,213**	**76,212**	**79,020**	**77,631**	**76,743**	**70,298**	**-9.5**	**1.9**	**0.7**	**-8.4**
(State budget primary expenditure)	71,888	62,989	63,018	61,251	60,395	57,248	-12.4	-2.8	-4.1	-5.2
1. Ordinary budget	74,625	67,758	71,470	70,741	70,135	62,998	-9.2	4.4	3.5	-10.2
– Interest payments	12,325	13,223	16,002	16,380	16,348	13,050	7.3	23.9	23.6	-20.2
– Ordinary budget primary expenditure	57,992	52,146	52,009	51,790	51,532	47,625	-10.1	-0.7	-1.2	-7.6
– Grants to hospitals for past debt settlement	1,498	367	450	450	435	400				
– Expenditure for NATO	51	33	40	40	16	60				
– Procurement of defence equipment	2,175	1,017	1,500	600	359	700				
– Call-in of guarantees from entities within and outside the general government	584	972	1,469	1,481	1,445	1,163				
2. Public investment budget	9,588	8,454	7,550	6,890	6,608	7,300	-11.8	-18.5	-21.8	10.5
III. State budget balance	**-33,627**	**-22,284**	**-21,053**	**-22,958**	**-22,882**	**-14,139**	**-33.7**	**3.0**	**2.7**	**-38.2**
% of GDP	**-14.5**	**-9.8**	**-9.3**	**-10.5**	**-10.6**	**-6.9**				
1. Ordinary budget	-26,079	-16,901	-17,428	-19,433	-20,044	-11,589				
2. Public investment budget	-7,548	-5,382	-3,625	-3,525	-2,838	-2,550				
IV. State budget primary balance	**-21,302**	**-9,061**	**-5,051**	**-6,578**	**-6,534**	**-1,089**				
% of GDP	**-9.2**	**-4.0**	**-2.2**	**-3.0**	**-3.0**	**-0.5**				
V. General government balance										
% of GDP (on a national accounts basis)	**-15.8**	**-10.6**	**-7.3**	**-9.0**	**-9.2**	**-6.7**				
Amortisation payments	29,135	19,549	28,950	28,851	28,843	41,900	-32.9	47.6	47.5	45.3
GDP (at current prices)	231,642	227,318	225,400	217,771	215,088	206,319	-1.9	-4.2	-5.4	-4.1

Source: State General Accounting Office.
* Provisional data.

net revenue and the 26% increase in the public investment budget revenue relative to 2011. The state budget expenditure is estimated to decline by 8.4%, despite the projected 10.5% increase in public investment. The improvement will stem from the 10.2% fall in state ordinary budget expenditure, due to the 20.2% decrease in interest payments and the further 7.6% decline in the state budget primary expenditure.

As regards general government entities, it is expected that other public law legal entities and public enterprises and organisations will contribute to the fiscal adjustment in 2012, but less than in 2011, while the balances of social security funds and local government bodies are expected to worsen in 2011.

It should be noted that the successful execution of the 2012 budget is a prerequisite in order to continue fiscal adjustment, as it sets the foundations for the creation of primary surpluses after 2013. This should support the control of public debt and its gradual decline as of 2013-2014.

4.2 FINANCIAL FLOWS WITH THE EUROPEAN UNION

As regards Greece's financial flows with the EU, receipts increased further by 28.0% in 2011, after a rise of 54.6% in 2010, reaching €3,984 million (see Table IX.10). This is mostly attributable to the increase in receipts (12.0%) and, to a lesser degree, the decrease in payments to the EU (-9.0%). The increase in receipts is mostly due to receipts from the European Social Fund (73.8%) and the European Regional Development Fund (27.9%).

As regards 2012, a further increase in net receipts is projected (15.5%), which is estimated to stand at €4,602 million. This development is expected to come exclusively from the 12.9% increase in receipts, given that payments to the EU should rise by 8.1% (see Table IX.10).

4.3 BUDGETS OF SOCIAL SECURITY ORGANISATIONS AND PUBLIC ENTERPRISES

Social security organisations

According to the Introductory Report on the Budget, revenue of social security organisations in 2012 should be supported by a series of measures in the context of intensified efforts to battle contribution evasion, reduce uninsured labour and collect overdue liabilities. On the expenditure side, favourable effects on the wage bill are expected from the introduction of a unified wage grid and ranking system and the labour reserve scheme (Law 4024/2011).

With the implementation of Law 4024/2011, a decline is expected in pension expenditure, which should also be supported by the re-evaluation of disability pensions through the Disability Control Center and the introduction of new criteria to grant these pensions. In addition, a decline in pharmaceutical expenditure is projected, which should stem from the full implementation of the electronic prescribing, monitoring of the Social Insurance Institute prescriptions through an electronic system and the introduction of a "list" of prescription drugs for all social security organisations. It should be noted that the supplementary budget for 2012 includes additional measures for social security organisations to a total amount of €962 million, which concern reductions in main and auxiliary pensions, as well as measures for further cost-saving in pharmaceutical expenditure.

Public enterprises

In 2012 the Greek government is scheduled to take over liabilities of the Hellenic Railways Organisation and OASA-TRAM of €7,200 million and €2,501 million, respectively. This is evidenced in the larger "total balance" of the operating and capital accounts to the amount of €8,799 million (see Table IX.4). Excluding the above amounts, the consolidated deficit of the operating and capital accounts stands at €903 million (or 0.4% of GDP), against a deficit of €1,207 million in 2011.

Table IX.10 Greece's financial account with the European Union

(million euro)

	2008	2009	2010	2011*	Budget 2012	Percentage changes			
						2009/2008	2010/2009	2011*/2010	Budget 2012/2011*
A. Receipts from the EU budget	**7,481**	**4,498**	**5,476**	**6,135**	**6,928**	**-39.9**	**21.7**	**12.0**	**12.9**
1. 10% refund on own resources collection costs	77	64	64	47	48	-16.9	0.0	-26.7	2.3
2. European Social Fund	992	118	295	513	819	-88.1	150.0	73.8	59.7
3. EAFRD – Agricultural Fund	504	261	408	447	354	-48.2	56.3	9.6	-20.9
4. ERDF – Regional Fund	2,858	1,338	1,735	2,220	2,373	-53.2	29.7	27.9	6.9
5. EAGF – Agricultural Guarantee Fund	2,718	2,398	2,351	2,234	2,210	-11.8	-2.0	-5.0	-1.1
6. Framework programme on solidarity and management of migration flows	-	6	37	25	36	-	516.7	-31.4	41.7
7. Other receipts	102	13	16	18	13	-87.3	23.1	13.8	-28.6
8. Cohesion Fund	200	274	570	591	1,045	37.0	108.0	3.7	76.8
9. EFF – Fisheries Fund	30	26	0	40	30	-13.3	-100.0	-	-24.1
B. Payments to the EU budget	**2,649**	**2,484**	**2,363**	**2,151**	**2,326**	**-6.2**	**-4.9**	**-9.0**	**8.1**
1. Agricultural levies and duties – Sugar levies	9	6	2	2	1	-33.3	-66.7	0.0	-50.0
2. Customs duties under the Common External Tariffs and anti-dumping duties	298	248	277	182	190	-16.8	11.7	34.4	4.5
3. Contribution according to the VAT base	577	512	462	372	408	-11.3	-9.8	-19.5	9.8
4. Contribution on the basis of GDP	1,415	1,522	1,561	1,408	1,648	7.6	2.6	-9.8	17.0
5. Additional extraordinary contributions	136	150	12	137	10	-	-92.0	1043.3	-92.7
6. Contribution to the European Development Fund	40	43	47	47	63	7.5	9.3	-0.9	35.2
7. Payments owing to unrealised projects	174	3	2	4	6	-98.3	-33.3	90.0	57.9
Net receipts from the EU budget (A-B)	**4,832**	**2,014**	**3,113**	**3,984**	**4,602**	**-58.3**	**54.6**	**28.0**	**15.5**

Source: State General Accounting Office.
* Provisional data.

The above decline of €301 million in the deficit stems from the moderation of operating expenditure by €525 million, as well as the increase in current revenue by €434 million. Furthermore, investment expenditure (capital account) is also projected to fall by €186 million against 2011. Lastly, "special resources" are expected to decline by €840 million against 2011 (excluding liabilities taken over by the government as mentioned above).

The expected cost-saving stems mainly from the wage bill (€207 million) and the operating costs of enterprises, part of which might be funded by the NSRF programme. According to the Introductory Report on the Budget, the reduction in personnel outlays should stem from both the decline in the number of employed persons, and the rationalisation of remuneration.

As regards the projections for increased revenue, they are based on the effectiveness of the measures already implemented since 2011 (such as the increases in ticket prices in transport as of 1 February 2011), as well as the strengthening of auditing mechanisms.

Positive effects are also expected on the financial results of DEKOs in 2012 from the completion and implementation of the restructuring plan of transport services (Hellenic Railways Organisation, TrainOSE and the Athens Urban Transport Organisation (OASA)) which started in 2011, as well as from eliminations and mergers of entities (Law 4002/2011) expected to materialise within 2012.[21]

4.4 KEY FISCAL ADJUSTMENT MEASURES AND INSTITUTIONAL FISCAL REFORMS

Fiscal adjustment measures

Despite deviations and delays, in 2011 the foundations were laid for the medium-term planning of fiscal policy. The Medium-Term Fiscal Strategy (MTFS)[22] 2012-2015 passed in June 2011 and included measures for 2011 (which started being implemented in the second half of the year), as well as a detailed outline and quantification of measures for the period 2012-2015.

The MTSF for the years 2012-2015 includes 13 priority interventions concerning: (1) rationalisation of the compensation of employees; (2) reductions in operating expenses; (3) eliminating/merging entities and reducing state subsidies; (4) restructuring public enterprises and organisations; (5) moderating defence expenditure; (6) improved outcomes and increased savings in healthcare; (7) rationalisation of expenditure in medical care; (8) expenditure cuts in social security funds and rationalisation of social spending; (9) improved revenue for social security funds and combating social security-contribution evasion; (10) enhancing tax compliance;[23] (11) reduced tax exemptions and other revenue-enhancing

21 It should be noted that Law 4051/2012 (Provisions regarding pensions and other urgent provisions for the application of the Memorandum of Understanding of Law 4046/2012), which was passed on 28 February 2012, provides for mergers beyond those included in the estimates of the 2012 budget. Specifically, 56 research institutes will be merged into 31.

22 Law 3985/1 July 2011, "*Medium-Term Fiscal Strategy 2012-2015*". A series of secondary legislation was passed for the implementation of the MTFS. Specifically, Law 3986/2011 ("*Emergency measures for the implementation of the Medium-Term Fiscal Strategy (MTFS) 2012-2015*") includes a series of provisions and regulations concerning state asset management (creation of the state asset management fund – TAIPED, city planning provisions, public property classification and other regulations), tax and customs regulations, fiscal arrangements, labour market and social security regulations and other provisions. Law 4002/2011 ("*Amendments to the pension legislation of the public sector - Regulations for the development and fiscal restructuring – Issues within the competence of the Ministries of Finance, Culture and Tourism and Labour and Social Security*") sets the regulatory framework for investment in tourism, with specific provisions on mixed use resorts and simplifying licensing procedures. In addition, it rationalises pension spending and allows taxpayers to be audited by private auditing companies, while providing for a new "settlement of pending tax cases", submission of overdue tax statements without penalty and extends the deadline for the settlement of tax lapses. Law 3996/2011 ("*Reform of the Labour Inspectorate, social security regulations and other provisions*") also includes provisions on combating social security contribution evasion. Moreover, Law 4014/2011 on environmental licensing regulates the issue of fines imposed for the settlement of building code violations. Significant interventions are under way in healthcare, e.g. establishment of the National Organisation of Health Care (EOPYY).

23 The measures to enhance tax compliance are expected to start yielding results in 2013. However, already since May 2011 the government put into effect the "*National operational programme to combat tax evasion 2011-2013*", as provided by Law 3943/2011 (Art. 1); under the Law, this programme is compiled on a three-year basis. It includes: (a) an action plan against tax evasion; (b) recommendations on institutional changes; and (c) measures for the effective and coordinated operation of tax, judicial and prosecuting authorities.

measures; (12) improved fiscal outcomes in local governments; (13) expenditure cuts in public investment.

According to the 2012 Draft Budget, the MFSF measures for the period 2011-2015 were expected to yield a total of €26,225 million, of which €12,784 million through expenditure cuts and €13,442 million through revenue increases. The expected yield of measures to be implemented within 2011 was €5,931 million, of which €3,082 million on the expenditure side and €2,849 million on the revenue side.

However, in the light of deteriorating economic conditions and slippages in the execution of the 2011 budget, it was decided that supplementary measures were needed in order to meet the revised targets for 2011 and 2012. Specifically, the 2012 budget (November 2011) included additional measures for 2011 amounting to €2.1 billion (4/5 on the revenue side) and a further €5 billion for 2012 (around 3/5 on the revenue side, of which €800 million from the increase in the community contribution).

The 2011 measures included a new special levy on electricity-supplied buildings, the introduction of the unified wage grid in the public sector and reductions in pensions, while the measures for 2012 included the abolition of tax exemptions, deferral of the payment of the special benefit to judges, activation of the labour reserve scheme, increased EU contribution to co-financed projects and adjustments in excise duties on heating and diesel oil.

To address the slippages observed in 2011 and meet the revised fiscal targets for 2012, it is estimated that additional measures of 1.5% of GDP are required. According to the 2012 supplementary budget (February 2012), the new measures involve targeted spending cuts – specifically cuts in the so called "special wage grids", reductions in operating expenses, including reduced costs of holding elections, cuts in military expenditure, further decline in pharmaceutical expenditure and improved outcomes in healthcare, reductions in state aid, transfers, social spending and local government expenditure, further reductions in the main and auxiliary pensions and reduced national contribution in the public investment programme.

According to IMF and the EU reports of March 2012, in order to achieve a primary surplus of 1.8% of GDP in 2013 and 4.5% of GDP in 2014, additional measures of 7% of GDP are required. Of these, 5.5% of GDP concern expenditure cuts, while the remaining 1.5% concerns the reform of the tax system and the improvement in the tax collection mechanism, and is expected to materialise towards the end of the adjustment programme, when economic activity starts to improve and liquidity in the economy starts to increase.

The expenditure review, which should be completed by June 2012, is expected to focus on the following sectors: (a) social expenditure review (estimated to yield 1%-2% of GDP, of which 0.5%-1% of GDP should be re-invested on better-targeted basic social programmes, such as unemployment benefits); (b) review of government operations in central and local administration, closing down public enterprises and organisations, etc. (with an estimated yield of 1% of GDP);[24] (c) review of pension expenditure (with an estimated yield of 1-2% of GDP).

Institutional fiscal reforms

Apart from the above-mentioned policy measures, institutional fiscal reforms are of particular importance in improving the efficiency of the services provided (e.g. education, healthcare, social expenditure), allowing for improved allocation of scarce public resources in order to facilitate economic growth. This includes improvements in the public administration apparatus that will facilitate change and enhance the reform capacity of the public sec-

24 As mentioned in the IMF report, in similar cases (United Kingdom, Canada, Sweden, and France) the fiscal benefit was 1% to 3% of GDP.

tor. Lastly, as has been pointed out repeatedly in previous reports by the Bank of Greece and is underlined in the recent IMF report (March 2012), such improvements, along with the enhanced authority of fiscal institutions, are a prerequisite in order to achieve sustainable progress in revenue collection and expenditure reduction. Institutional fiscal reforms improve fiscal prospects and contribute indirectly to economic growth.

As regards implementation, in 2011 there was progress in the field of healthcare, with the gradual implementation of electronic prescription, introduction of a "negative list", preparation of a positive list of pharmaceuticals, higher participation of patients in the cost of visiting outpatient units, reduced profit margins of pharmacies and pharmacy liberalisation, reform of the procurement system, creation of the National Organisation of Health Care (EOPYY) and establishment of unified healthcare contributions and doctors' remuneration, while efforts are made towards the provision of uniform healthcare services.

Progress was also observed in containing the public sector wage bill, with the introduction of the unified wage grid. However, employment reduction was not in line with the original planning. As mentioned in the European Commission report (March 2012), the greater than expected number of retirements/dismissals in 2011 were offset by the larger than expected inflows, due to lack of effective central coordination of employment decisions in the public sector. However, management of public enterprises improved, as wage earnings were reduced, the remuneration system was brought in line with the unified wage grid and the entities providing transport services in Athens were streamlined.

In 2011 efforts were made to improve the institutional fiscal framework through the MTFS 2012-2015, which includes specific targets and measures for the reform of the tax system (settlement of tax dispute processes, centralisation and improvement of auditing mechanisms, simplification of the tax arrears collection system, enhancing internal audit mechanisms, adoption of a medium-term tax reform plan with emphasis on the reform of tax offices and targeted audits in areas with high tax-evasion risk, etc.). As a whole, the March 2012 European Commission report concludes that progress in the key areas of tax administration, tax evasion, expenditure control and settlement of arrears to public sector contractors has been inadequate.

Therefore, the main objectives for 2012 remain to improve tax administration, combating tax evasion and reforming the tax system, as well as the effective control of expenditure and the settlement and non-accumulation of arrears. Furthermore, in order to continue fiscal adjustment, it is crucial to reform public administration (central, regional, local administration and the judicial system), ensure better targeting of social programmes and facilitate effective operation of the single public procurement system.

As pointed out in the recent OECD report for the euro area,[25] Greece should inter alia reform the structure of taxation and reduce the implicit taxes on continued work at older ages,[26] as well as the average tax wedge on labour income.[27] These observations should be taken under consideration in designing the imminent tax reform.

Furthermore, according to recent EU and IMF reports, management of public expenditure should improve through actions involving: (a) further improvements in budgeting and in monitoring budget execution (e.g. regarding preparation of medium-term programmes and supplementary budgets, as well as better control and monitoring of the social budget; (b) enhancement of the expenditure control mechanism (in order to reduce and settle in full

25 OECD (2012), *Survey of the Euro Area*, March.
26 Total income loss due to reduced pensions and other social provisions, continued payment of social security contributions and tax burden.
27 The "tax wedge" is the sum of employees' and employers' social security contributions and personal income tax (less transfer payments) as a percentage of gross labour costs to the employer.

accumulated arrears); and (c) better and more detailed collection of statistical data on revenue and expenditure from all general government entities (so as to achieve 90% coverage of total expenditure up to mid-2012). It is worth noting that the EU and IMF Task Force continue to provide technical assistance in order to support the State General Accounting Office in improving the management of public finances.[28]

As noted in the aforementioned OECD report for the euro area,[29] higher growth rates could be achieved in Greece, if measures are taken to improve human capital, e.g. enhancing primary, secondary and tertiary education. This has been a long-standing recommendation of the OECD, as well as a part of the structural reforms aiming to improve fiscal management and enhance the growth potential of the economy.

Moreover, as pointed out in the European Commission report, further progress is required in 2012 in the field of privatisation. Privatisation revenue in 2011 amounted to only €1.6 billion, due to the negative sentiment. Following the successful completion of the PSI and the improved economic sentiment, better preparation of assets and the adoption of a more realistic plan, it is estimated that revenue of €19 billion could materialise up to 2015, of which €5.2 billion by end-2012. Efforts must concentrate on implementing the necessary legal and regulatory actions to prepare the assets to be privatised. The EU Task Force is expected to play some role in this task by providing technical assistance, particularly on real estate issues, including the completion of the national cadastre.

However, the more effective and efficient use of scarce public resources should be supported by the more efficient functioning of public administration at central, regional and local level. Many actions have already been taken in this direction. According to the White Paper on Governance,[30] the OECD report "Greece: Review of the Central Administration" (December, 2011) and the second report of the EU Task Force, the key objectives of the administration reform in Greece should be: (a) to improve the effectiveness, accountability and integrity of the administration and to simplify the administration's decision-making processes; (b) to have a strong centre of decision-making with real inter-Ministerial coordination; (c) to create the necessary services in each Ministry for effective monitoring of procedures including expenditure, internal control and audit, human resource management (HRM) and information and communication technologies (ICT).

To support these actions, it was decided to establish a High Level steering group under the Prime Minister. Furthermore, the second report of the EU Task Force finds it particularly positive that Greece has passed a law providing for the assessment before end-2012 of all public sector structures, including the 15 Greek ministries, with a view to improving efficiency, strengthening prioritisation and clarifying decision-making processes. This effort is also supported by the Task Force (with experts from France). Germany has also started providing technical assistance for administrative reform at decentralised, local and regional levels.

In addition, the second report of the EU Task Force notes that the Greek authorities have initiated projects in several major e-government fields, namely Enterprise Resoucre Planning (Finance and HRM), Citizen Relationship Management and e-Procurement. The Greek authorities intend to deploy these projects at least in the priority sectors of finance, administrative reform and health.

28 Specific structural benchmarks have been set for tax administration (fines monitoring and collection), as well as for management of public expenditure (improved collection of statistical data on revenue, expenditure and arrears) up to end-June and end-December 2012. For instance, it is estimated that up to end-December 2012, €2,000 million will have been collected through the settlement of arrears.
29 OECD (2012), op. cit.
30 Ministry of Administrative Reform and e-Governance, January 2012.

ANNEX TO CHAPTER IX
TAX POLICY MEASURES

A series of interventions were made in 2011 in order to reduce fiscal deficit and address the fiscal crisis by boosting tax revenue. The main interventions are included in the tax law introduced in April,[1] the Medium-Term Fiscal Strategy Framework 2012-2015 and the two main omnibus laws that were passed in August and October. These laws introduced a large number of measures with an aim to increase tax revenue, including the introduction of a new income tax scale for personal income, changes in real estate taxation, enhanced criteria for the presumptive determination of income, introduction of a special solidarity contribution on personal income and an "occupational" tax on the self-employed, the special property tax via electricity bills (EETIDE), the inclusion of a number of products in the standard VAT rate, changes in fuel and tobacco taxation etc. A set of measures was also adopted in order to facilitate taxpayer compliance (tax amnesty, arrangement for a penalty-free delayed filing of tax returns, extension of the erasure deadline for pending tax cases, as well as more favourable arrangements for the collection of tax arrears). Lastly, a set of measures was adopted with the aim to intensify the effort to combat tax evasion.

* * *

The **"National Operational Programme on Combating Tax Evasion 2011-2013"**, introduced in May 2011, sets out specific actions to combat tax evasion. On the basis of Law 3942/2011,[2] the programme will be updated every three years and includes an action plan, proposals for institutional changes and measures for the effective and coordinated operation of tax, judicial and prosecuting authorities. Emphasis is placed on tax audits and electronic cross-checks, the more timely administration of justice and the rationalisation of fines so as to become collectible.

The **Medium-term Fiscal Strategy Framework 2012-2015 (Law 3985/2011)** of July 2011 comprises a series of fiscal interventions for the period 2012-2015 with specific quantitative targets. **Law 3986/2011**[3] supplements and specifies this framework and introduces a number of provisions for the use of public property, tax and custom matters, as well as fiscal, labour and social security issues.

The tax arrangements of the implementing law introduce a new tax scale for all incomes, with retroactive effect from 1 January 2011. The tax-free threshold is reduced to €8,000[4] and the rate remains at 45% for incomes higher than €100,000. Based on the same law a limit is set on tax reliefs for housing loan interest,[5] medical expenses, social security contributions etc. In more detail, 20% of these expenses is considered as tax credit for incomes up to €40,000. For higher incomes, the expenditure is allocated progressively and for the amount of expenditure corresponding to incomes up to €40,000 20% is deducted, while for the remaining amount of this type of expenditures, the tax credit is confined to 10% (of the expenditure). It should be clear that this measure does not apply to expenditure for upgrading the energy efficiency of real property. This arrangement refers to 2011 incomes that are to be declared in 2012 and expenses incurred from 1 January 2011 on. The above arrangements were modified a few months later by Law 4024/2011.

The same law reinforces the role of the presumptive determination of income and stipulates that the new indicators will be 30% higher, on average, for house ownership and 60% for vehicles, and will apply for incomes earned from 1 January 2011 on.

1 The measures adopted until end-April 2011 are described in the *Annual Report 2010.*
2 The law on "Combating tax evasion, staffing of tax audit services, and other provisions within the field of responsibility of the Ministry of Finance" introduced a series of arrangements described in detail in the *Annual Report 2010.* These arrangements include widening of the tax base, strengthening tax compliance, accelerating the collection of overdue debts, developing techniques and methodology for improving the performance of tax audits and strengthening tax administration by combating corruption.
3 "Urgent measures to implement the Medium-term Fiscal Strategy Framework 2012-2015".
4 The tax-free amount is raised by €2,000 for one child, €4,000 for two children and €12,500 for three children.
5 It relates to accrued interest on housing loans for the purchase of the principal residence, payable from 1 January 2011 on, irrespective of the time that the loan was concluded and the time when the advance payment was made.

Although the presumptive determination of income was reinforced, the requirement to disclose the origin of funds for the purchase of real estate (principal residence, secondary residence, country house, shop etc.), the construction of buildings, property time-sharing or leasing and the construction of swimming pools is suspended until 31 December of 2013.[6]

According to the same law a special solidarity contribution is imposed on all individuals. This contribution refers to fiscal years 2011-2015 (reporting periods 2010-2014) and is imposed on incomes over €12,000 at a 1% rate on incomes between €12,000 and €20,000, 2% on incomes between €20,001 and €50,000, 3% on incomes over €50,000 and up to €100,000 and 4% on incomes exceeding €100,000. The contribution will be imposed on the total personal income and not progressively. It will be payable in 6 equal monthly instalments of no less than €300 each. A 5% discount will be granted for the payment of the entire amount due. The solidarity contribution imposed on the 2011 incomes of wage earners and pensioners will be assessed in the same income taxation returns as the personal income tax and will be paid in the same way as previously mentioned.[7] Again for taxpayers that pay special contribution in one go the discount will be 1.5%. For 2012 incomes, the special contribution will be withheld and allocated monthly. It should be noted that the special contribution imposed on political staff will be 5% of their incomes. Exemptions from the special contribution apply to the totally blind, persons with special needs and severe mobility disabilities, pensioners of any age with children with special needs, the long-term unemployed registered with OAED and persons who receive unemployment benefits from this organisation, provided that they have no real income at the time of tax clearance.

Moreover, a special lump sum occupational levy of €300-€500 is imposed on the self-employed. The levy will be €300 in 2011 and €400 as from 2012 for enterprises or self-employed based in tourist areas and towns/villages with less than 200,000 people. In Athens, Thessaloniki and cities with over 200,000 residents the lump sum levy will be €500. Exemptions refer to the self-employed and sole proprietor enterprises during their first 5 years of operation, to those being up to 3 years away from retirement[8] and over 62 years of age, and to commercial businesses and self-employed based in villages of up to 500 residents and islands of less than 3,100 residents, unless they are tourist areas. The occupational tax on 2011 incomes will be assessed and paid together with the income tax and the special solidarity contribution (in the tax returns).[9]

Another provision of the same law imposes extraordinary contributions on vehicles with high-displacement engines, vessels and swimming pools, amounting to 5% of the objectively determined annual expenditure. The basis for determining the annual objectively determined expenditure will be the income tax return of fiscal year 2011 (income earned in 2010).

The law also provides for the withdrawal of bank privacy for all taxpayers. Tax authorities will be entitled to inspect all bank transactions and assets, without informing or obtaining the consent of the owner of the account or the authorisation of the Hellenic Data Protection Authority. According to this provision, individuals and legal entities will be required to submit electronic files to the Ministry of Finance referring to any requested economic and tax-related data and information about their income and financial transactions.

Significant changes are also introduced to real estate taxation, since the tax-free amount for the Real Estate Tax is reduced to €200,000 for 2011, from €400,000 that was applicable in the past.[10] The first bracket now ranges from

6 On the basis of a provision of Law 3899/2010.
7 Law 4024/2011, Law 4051/2012.
8 It concerns only professionals and not the self-employed.
9 Law 4051/2012, "Pension-related and other urgent arrangements for the implementation of the Memorandum of Understanding under Law 4046/2012".
10 It is recalled that Law 3842/2010 had abolished the Single Tax on Real Estate and had imposed a Real Estate Tax to natural persons, at a progressive rate and with a tax-free amount of €400,000 per owner.

€200,000 to €300,000 and the corresponding rate is 2‰. It should be noted that, especially for 2011, real estate tax for property owned by individuals, irrespective of the time of assessment, will be paid in three equal instalments.

The same law stipulates that, as from 1 September 2011, all refreshments, fruit and vegetable juices, sparkling water, ready-made beverages (coffee, tea, chocolate) and restaurant services will be subject to the standard VAT rate (23%). A 10% increase in road duties is also provided for vehicles first registered in Greece before 31 October 2010 and for two and three-wheel motorcycles, irrespective of the date of first registration in Greece, on the basis of their displacement capacity. For passenger cars first registered in Greece as from 1 November 2010, road fees will be determined on the basis of carbon dioxide emissions (green tax).

In addition, the special consumption tax on mazut oil and liquid gas will be raised as from 27 June 2011.[11] At the same time, the consumption tax on heating oil for households increases as of 15 October 2011 from €21 (charged during the winter period) to €60 per 1,000 lt. For enterprises, consumption tax on heating oil is equated with diesel oil. As regards general purpose natural gas, a €1.5 tax is imposed per gigajoule as from 1 September 2011 and will be charged in users bills. Finally, the level of the special consumption tax on heating oil will be gradually raised to 80% of the special consumption tax on diesel by 15 October 2012.[12]

Changes also concern the structure of tobacco taxation. Specifically, the total amount of the special consumption tax cannot be lower than the total special consumption tax imposed on cigarettes sold at the weighted average retail price. At the same time, the deadline for companies to pay the special consumption tax to the State is reduced from 56 to 28 days as from 27 June 2011.

Finally, an annual fee is imposed on the operation of smoking areas within casinos and live-music nightclubs with an area of over 300 m^2, amounting to €200/m^2. According to the relevant circular, smoking areas cannot take up more than half of the total area of the store; in the first year of implementation of the measure, the fee must be paid by 30 November and, for every annual renewal, the special fee will be paid by 31 May of the relevant year.

Law 4002/2011,[13] passed in August, comprises a series of arrangements to address the fiscal crisis and reduce the labour costs of the State.

The most important tax arrangements of the omnibus law enable taxpayers to settle their pending obligations under favourable terms. In more detail, individuals and legal entities that either did not file or filed inaccurate tax statements may, by 30 September 2011, file initial or supplementary returns for income earned up to end-2009 without having to pay any additional tax or penalty. Moreover, statements whose deadline expired before the submission of the law to the Parliament may be filed under favourable terms by 30 September 2011, when referring to cases of VAT taxation, turnover tax, tax on insurance premiums, mobile telephony subscription fees and card telephony fees, stamp duties and taxes withheld or prepaid on any type of remuneration, pay and compensation.

The law extends the erasure deadline for tax cases expiring on 31 December 2011. It also abrogates provisions on the voluntary compliance of taxpayers who, although selected for inspection or audit, could have filed initial or supplementary tax returns on income, VAT and other forms of taxes, duties and contributions with a 50% on fines imposed on late

11 The tax on mazut oil increases from €19 to €38/ton. For liquid gas used as car fuel, the tax increases from €125 to €200/ton; for gas and methane intended for heating fuel and other uses, the tax increases from €13 to €60/ton; and for gas and methane intended for industrial, small industrial and commercial use in engines (except car engines), the tax increases from €41 to €120/ton.
12 As determined subsequently by Law 4024/2011.
13 "Amendment to the State legislation on pensions – Arrangements for growth and fiscal consolidation – Matters within the field of responsibility of the Ministry of Finance, the Ministry of Culture and Tourism and the Ministry of Labour and Social Security".

statement. From now on, all persons selected to be audited shall be audited immediately.

The law also enables more professionals to come under the tax amnesty arrangement for financial years 2000-2009,[14] provided that the tax audit does not reveal any incriminating data. According to decision POL. 1198/2011 of the Ministry of Finance, tax amnesty will be applied to enterprises with a turnover between €20 and €40 million, listed companies, self-employed with real estates worth over €400,000 and companies and professionals that came under the initial arrangement and refused to settle unaudited years.

The law comprises arrangements for the State to commission private audit firms to audit taxpayers with debts to the State. Specifically, private firms (audit firms or law offices or joint ventures thereof) may carry out inquiries to locate assets held by liable or jointly liable persons.

Finally, the law gives incentives to owners of vessels to reverse the professional use of vessels that are effectively used for private purposes. However, individuals who produce false documents implying "commercial use" shall not come under this arrangement.

In October, a provision of **Law 4021/2011**[15] imposed a special levy via electricity bills on properties intended for housing or commercial use. The tax is imposed on properties that have a power supply and were entered in the lists of DEH or other electricity providers by 17 September 2011.[16] The tax rate per square meter is determined by the location and the age of the property. Low income groups will pay reduced property charges.[17] Moreover, the special charge will not be imposed on the long-term unemployed and the unemployed who received benefits during at least six of the twelve months prior to the date the electricity bill was issued, provided that the family income in the year before the charge was imposed is higher than €12,000.[18] This special charge is collected through electricity bills and alternative electricity providers for 2011 in two equal instalments payable through their bills from October 2011 to January 2012. In case of non-payment, power will be cut within 80 days of the issuance of the bill.[19]

The "omnibus" **law 4024/2011**[20] passed in October adopted a new series of tax measures under the pressure of fiscal needs, in order to boost tax revenue and reduce budget deficit.

More specifically, as regards income taxation, the law provides for a new tax scale with fewer tax brackets and a further reduction of the tax-free threshold from €8,000[21] to €5,000, which increases the tax burden for all income brackets.[22] The new income tax scale is applicable retroactively to income earned (and expenses made) from 1 January 2011 onwards. It should be noted that the tax-free threshold is €9,000 for tax payers aged up to 30 years, pensioners over 65 years, pensioners of any age with children with special needs and persons with special needs, provided that the declared income

14 It is noted that the last tax amnesty was granted in early 2010. Specifically, Law 3888/2010 enabled once again the settlement of some 2,000,000 pending (unaudited) tax cases under favourable terms for taxpayers. The arrangement concerned the settlement of unaudited tax cases and overdue debts to the State for all reporting periods closed by 31 December 2009, while revenue of €2 billion was confirmed.

15 "Reinforced measures for the supervision and consolidation of credit institutions – Resolution of financial matters – Sanctioning of the convention – Framework of the European Financial Stability Fund and amendments thereto and other provisions".

16 The special levy is not imposed to real estate belonging to the Greek State, public legal entities, local authorities and municipal corporations, real estate used for worshiping/religious, educational and charitable purposes and sports centres belonging to clubs and used solely as playing fields or sports facilities, as well as real estate belonging to foreign states, when used for the establishment of embassies and consulates, subject to reciprocity. Moreover, the special levy is not imposed to the communal areas of apartment buildings, listed properties and sites of historical or archaeological monuments and buildings within settlements or rural areas used as barns for few domestic animals for the household needs of taxpayers. Finally, the special charge on real estates is not imposed to 17% of the total area of rent rooms and furnished apartments, provided that the companies exploit more than 7 rooms.

17 Including persons with many children and a family income up to €30,000 in the year before the adoption of the charge and disabled persons.

18 Plus €4,000 for each dependent child.

19 Decision POL.1244/2011.

20 "Retirement regulations, unified wage grid and rank scale, employment reserve and other provisions for the implementation of the medium-term fiscal strategy framework 2012-2025".

21 Applicable under Law 3986/2011.

22 The tax-free threshold is raised by €2,000 for each of the first two children who depend on the taxpayer and by €3,000 for each child after that.

(actual or imputed income) does not exceed €9,000. If the total income of these persons exceeds €9,000, the amount of tax resulting on the basis of the previously mentioned tax scale is reduced so that their total net after-tax income does not fall below €9,000. In any event, the net after-tax amount cannot be less than €9,000. It should be noted that taxpayers are eligible for tax-free amount if they can produce receipts for expenses made for the purchase of goods and services corresponding to 25% of their personal income and for incomes up to €60,000 (while the additional relief applied to receipts over the tax-free amount was abrogated). If the amount of expenditure receipts produced by the taxpayer falls short of the above amount, a 10% tax shall be imposed on the difference. The receipts that must be produced pursuant to the above provisions can be registered on the internet or using a magnetic card that is anonymous and optional for the taxpayer.

The following types of expenditure are eligible for a 10%[23] tax credit on the basis of the new scale: medical and hospital care, rent paid annually for the principal residence of taxpayers and their families, private tuition fees, accrued interest on loans for the purchase of principal residence,[24] insurance premiums paid for the taxpayers, their spouses and children etc. In any event, the level of the tax credit cannot exceed a specific amount by expenditure category. Gross income from real estate is also subject to 1.5% surtax. The rate is increased to 3% if the rented house is larger than 300 m2 or in case of professional or commercial lease.

An arrangement of the same law abolishes the favourable taxation status[25] on the basis of which young professionals up to 35 years of age with profits of €30,000 are exempt from income taxation for the first three years of operation of their business. The abrogation is retroactive for incomes earned as of 1 January 2011.

Legislative Act No. 268/2011 suspends for three months the 45% capital gains tax shares, scheduled to come into force on 1 January 2012.[26] At the same time, it suspends for one year the 20% tax on advertising income, scheduled to come into force on 1 January 2012.[27] Finally, it extends the deadline for the settlement of Building Code violations ("arbitrary buildings") from 29 February 2012 to 30 June 2012.[28]

23 Under Law 3986/2011 adopted in July, the tax deduction from tax exemptions amounted to 20% and this percentage dropped to 10% only for incomes over €40,000.
24 The level of reduction is calculated on interest corresponding to the part of the loan up to €200,000 and applies to accrued interest paid from 1 January 2011 on, irrespective of the date of the loan and the date of the advance payment.
25 This provision was adopted by Law 3842/2010 but was never put into force.
26 This provision was included in tax law 3842/2010 and its implementation has been repeatedly postponed.
27 This provision was included in Law 3845/2010 and its implementation has been repeatedly postponed.
28 Law 4051/2012.

Individual tax scale for incomes earned as from 1 January 2011

Income bracket	Tax rate	Tax per bracket	Total income	Aggregate tax
First €5,000	0	0	5,000	0
Next €7,000	10	700	12,000	700
Next €4,000	18	720	16,000	1,420
Next €10,000	25	2,500	26,000	3,920
Next €14,000	35	4,900	40,000	8,820
Next €20,000	38	7,600	60,000	16,420
Next €40,000	40	16,000	100,000	32,420
Exceeding €100,000	45			

With an aim to facilitate taxpayers to meet their obligations, **Law 4038/2012**[29] of January 2012 enables them to pay overdue debts to the State in 24 instalments, each of which cannot be less than €100. In case of payment of the entire amount, 100% of the surcharges shall be written off. If the debts are settled to be paid in 2-12 instalments, 90% of the surcharges shall be written off and, in case of 13-24 instalments, 75% of the surcharges shall be written off. Any taxpayers wishing to apply for more than 24 instalments in order to pay the minimum monthly amount of €100 must prove their financial inability. The arrangement concerns debts to the State up to €10,000 for natural persons and €75,000 for legal persons.[30] The deadline for applying to come under this arrangement was 29 February; it was initially extended to 30 March[31] and then to 30 April 2012.[32]

The same law enables central and general government entities and organisations to commission collection firms or joint ventures thereof to inform their debtors of their debts and any programmes for debt settlement or repayment. Moreover, the obligation to obtain an audit certificate is extended to all companies that are mandatorily or optionally audited by certified auditors. Municipal corporations merged under the provisions of Law 3852/2010 may carry over their tax-recognisable losses to the next financial years.

Other provisions of the same law bring changes to the tax treatment of dividends and profits distributed by domestic sociétés anonymes and limited liability companies. In more detail, a 25% tax is imposed on distributed profits, in addition to the 20% paid by the legal person on total profits. Thus, shareholders pay a 45% tax on dividends, irrespective of their total income.[33] Finally, indirect audit techniques are introduced for the determination of the gross income of the self-employed. Specifically, it is stipulated that, during the tax audit of the self-employed, the amount of their taxable income may be determined on the basis of the analysis of their liquidity, their net position and the level of their bank deposits and cash expenses. This calculation will determine the corresponding Value Added Tax, while hearings with taxpayers shall be held before assessing the additional tax. The Bank of Greece Governor's Act 2652/29 February 2012 significantly expands the role of credit institutions in combating tax evasion (in parallel with existing arrangements on money-laundering). Banks will be obliged to scrutinise the bank transactions of certain categories of persons with increased chances of tax evasion. Specific elements shall be taken into account to this end (e.g. line of work, amount of deposits etc.) in order to identify "high risk" customers. At the same time, it provides examples of unusual transactions or activities that may conceal instances of tax evasion. Finally, banks are obliged to prepare reports on "high risk" customers.

The joint Ministerial Decision No. 513.2/12/15 February 2012 imposed a €10-€100 immobilisation tax on pleasure boats depending on their length, for persons wishing to avoid paying extraordinary contributions and taxes.

29 "Urgent arrangements for the implementation of the Medium-term Fiscal Strategy Framework 2012-2015".
30 POL. 1047/24 February 2012.
31 POL. 1047/24 February 2012.
32 POL. 1088/30 March 2012
33 Dividend income is currently added to all other income and, if the beneficiary is a natural person, dividends are taxed by 45%.

X MONEY, CREDIT AND CAPITAL MARKETS

1.1 MONETARY AGGREGATES: DEVELOPMENTS IN DEPOSITS

In 2011 the monetary aggregate M3[1] recorded a faster annual rate of decrease than in 2010 (December 2011: -16.5%, December 2010: -12.5%). The downward trend of the monetary aggregate became stronger in the first two months of 2012, resulting in an annual rate of decline of 19.0% in February 2012 (see Table X.1).

The almost continuous fall in the main components of M3 in Greece in 2011 and in January-February 2012 is primarily due to the deep economic recession. Another important factor explaining the decline in M3 is the uncertainty that still prevailed in 2011 and in early 2012 which was, at times, intense. Thus, the aforementioned period saw, among other things, an extended substitution of domestic deposit holdings[2] by holdings in deposits or debt securities abroad and a hoarding of high face value euro banknotes, etc.

It is estimated that the impact of uncertainty was mitigated after the interim coalition government was formed on 11 November 2011, a development that led to a slight increase in deposits in December, as opposed to early 2012, when there emerged doubts as to whether the new loan agreement would be approved and, subsequently, as to whether Greece would continue to receive financial support from the other euro area countries and the IMF. The decrease in deposits by the domestic private non-financial sector is also related to the increased tax obligations of non-financial corporations and households, and to the fall in the value of their other assets. The decline in deposits increased the pressures on the liquidity of domestic credit institutions and contributed to the observed credit squeeze.[3]

The components of M3 declined in 2011 and in the first two months of 2012, albeit at a different pace, according to the evolution of deposit rates. More specifically, the overnight deposit[4] rate recorded a minor increase in the period under review, while the time deposit rate rose markedly, resulting in a considerable increase in the opportunity cost of holding overnight deposits. Thus, overnight deposits, which are more strongly correlated with economic activity, declined at an increasing rate and, as a result, their annual rate of *decrease* stood at 21.0% in February 2012 (December 2011: -18.0%, December 2010: -11.9%). The annual rate of *decrease* of time deposits moderated over the first eight months of 2011, before picking up and reaching 17.5% in February 2012 (December 2011: -15.3%, December 2010: -12.8%).[5] The rate of *decrease* of total M3 deposits remained a two-digit figure almost throughout the January 2011-February 2012 period under review (February 2012: -18.9%, December 2011: -16.4%, December 2010: -12.4%). Deposits by non-financial corporations declined faster (February 2012: -30.5%, December 2011: -24.1%) than household deposits (February 2012: -17.9%, December 2011: -15.9%). As regards the other components of M3, holdings of both repos and money market fund shares/units, as well as bank securities with a maturity of up to two years continued to decline (see Table X.1 and Chart X.1) and, as a result, their share in M3 came close to zero (0.04%, 0.38% and 0.00%, respectively) in February 2012.

1.2 THE OUTLOOK FOR DEPOSITS IN 2012 AND OVER THE MEDIUM TERM

The expected further decline in economic activity (as well as developments in GDP in the recent past) is estimated to affect deposits negatively in 2012. On the other hand, the overall improvement of confidence, thanks to

1 This aggregate constitutes the Greek contribution to the euro area M3, excluding currency in circulation. It comprises overnight deposits, deposits with an agreed maturity of up to 2 years and deposits redeemable at notice of up to 3 months, repurchase agreements, money market fund units/shares and debt securities with a maturity of up to 2 years.
2 In 2011, M3 deposits accounted on average for 99.5% of the monetary aggregate M3.
3 See Section 4 of this chapter.
4 This category includes current account deposits, sight deposits and savings deposits.
5 Thus, the share of time deposits in M3 rose to 56.8% in February 2012 (December 2010: 55.4%), as opposed to the share of overnight deposits (February 2012: 41.2%, December 2010: 42.7%).

Table X.1 Greek contribution to the main monetary aggregates of the euro area

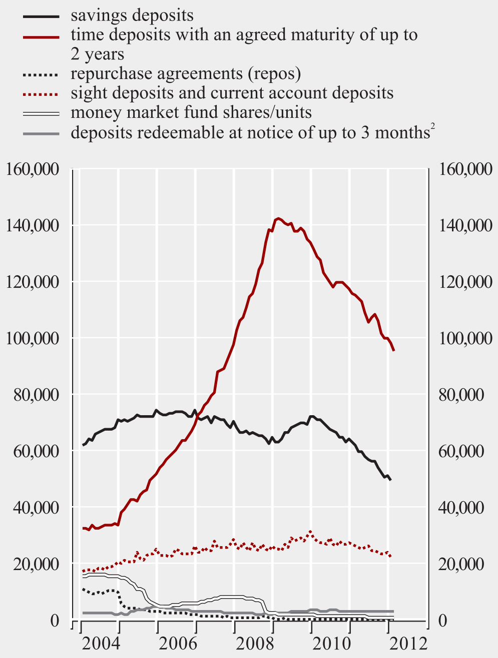
(non-seasonally adjusted data)

	Outstanding balances on 29.02.12 (million euro)	Annual percentage changes[1]										
		2006	2007	2008	2009	2010	2011					2012
		Q4[2]	Q4[2]	Q4[2]	Q4[2]	Q4[2]	Q1[2]	Q2[2]	Q3[2]	Q4[2]	Dec.[3]	Feb.[3]
1. Overnight deposits	69,288	0.7	-0.9	-7.0	11.4	-8.0	-11.6	-12.6	-13.7	-17.3	-18.0	-21.0
1.1 Sight deposits and current account deposits	21,133	1.8	10.3	-3.6	15.7	-7.6	-8.4	-7.1	-9.1	-12.8	-12.2	-18.0
1.2 Savings deposits	48,155	0.2	-4.6	-7.9	9.5	-8.1	-13.1	-15.3	-16.0	-19.3	-20.3	-22.1
2. Time deposits with an agreed maturity of up to 2 years	95,491	37.5	42.2	39.1	2.7	-13.8	-11.2	-8.6	-9.0	-14.6	-15.3	-17.5
3. Deposits redeemable at notice of up to 3 months[4]	2,591	-24.4	-20.3	-24.1	64.2	-7.0	-8.1	0.1	-15.0	-14.9	-13.6	-12.5
4. Total deposits (1+2+3)	**167,370**	**12.1**	**15.9**	**15.3**	**6.6**	**-11.3**	**-11.3**	**-10.3**	**-11.1**	**-15.7**	**-16.4**	**-18.9**
5. Repurchase agreements	73	-35.7	-54.3	-11.4	-67.1	-48.9	-43.9	-27.5	-36.0	1.4	2.4	-28.4
6. Money market fund shares/units	635	-2.5	40.5	-58.8	-44.8	-45.8	-29.3	-7.0	-11.8	-22.7	-31.6	-36.2
7. Debt securities issued with a maturity of up to 2 years[5]	-1	24.2	-	-	-	-	-	-	-	-	-	-
8. M3 excluding currency in circulation (4+5+6+7)	**168,077**	**10.6**	**14.7**	**14.4**	**4.8**	**-11.8**	**-11.4**	**-10.2**	**-11.2**	**-15.8**	**-16.5**	**-19.0**

Sources: Bank of Greece and ECB.
1 Annual rates of change in the corresponding index, which is compiled on the basis of outstanding stocks for December 2001 and cumulative monthly flows, adjusted for exchange rate variations, reclassifications, etc.
2 The quarterly average is derived from monthly averages (which are calculated as the arithmetic means of two successive end-of-month figures) and is not the three-month average of end-of-month annual growth rates (see the Technical notes in the "Euro area statistics" section of the ECB *Monthly Bulletin*).
3 Based on end-of-month levels.
4 Including savings deposits in currencies other than the euro.
5 This aggregate is calculated on a consolidated basis with the other euro area countries and thus does not include domestic MFIs' holdings of debt securities with a maturity of up to two years issued by euro area MFIs.

Chart X.1 Deposits, repurchase agreements and money market fund units in Greece[1] (January 2004 - February 2012)

(end-of-period balances; million euro)



Source: Bank of Greece.
1 These aggregates are included in M3 according to the ECB definition and therefore constitute the Greek contribution to the corresponding euro area aggregates.
2 Including savings deposits in currencies other than the euro.

the approval of the second financial support programme for Greece (which includes funds for the recapitalisation of banks), the increased transparency as a result of the determination of credit institutions' capital needs and, finally, the launch of the banking sector's restructuring and resolution, is expected to contribute to the restoration of deposits with Greek banks over the medium-term.

However, since demand for deposits is affected by developments in economic activity, the reversal of the downward trend that M3 has been following in Greece over the last two years presupposes – in order for it to stabilise – an economic upturn as well, meaning that it will eventually rely on the success of policies for restoring the economy's competitiveness.

2 BANK DEPOSIT RATES

In 2011 and in January-February 2012, interest rates on most types of new deposits in Greece continued the upward trend they have been registering since end-2009. The rise in interest rates in 2011 was higher for time deposits (up to 126 basis points depending on the beneficiary – non-financial corporations, households – and the maturity) than for overnight deposits (up to 12 basis points depending on the beneficiary, see Table X.2A and Chart X.2). Over January-February 2012, the deposit rate recorded a marginal decline in the case of the time deposit type that is concidered major in Greece, i.e. deposits by households with an agreed maturity of up to one year (by 2 basis points), and in the case of overnight deposits it declined slightly (up to 6 basis points).

The increase in interest rates on new bank deposits in Greece over the period under review reflects the strong pressures on the liquidity of Greek banks. While addressing these pressures, banks sought to curb the withdrawal of deposits on the part of non-financial corporations and households by offering high nominal returns on time deposits.[6] Despite the cuts in Eurosystem key interest rates and the Euribor rates after October 2011,[7] the average rate on new bank deposits in Greece increased by 19 basis points in the two months that followed (December 2011: 2.81%), while increasing only marginally in the first two months of 2012 (February 2012: 2.83%). The total increase since December 2010 (2.15%) amounted to 68 basis points.

In line with developments in nominal interest rates, in 2011, real deposit rates[8] increased by

6 For example, deposits by households with an agreed maturity of up to one year have been recording in Greece, since May 2011, the highest nominal interest rate among all euro area countries (see Table X.2B).
7 It should be reminded that in the period October 2011-February 2012, the Eurosystem's key interest rates and the representative 3-month Euribor declined by 50 and by 53 basis points, respectively.
8 The real interest rate for a given month is calculated as the nominal rate in this particular month (on average or at the end of the month, depending on the type of deposit) less the year-on-year inflation of that same month.

Table X.2A Bank interest rates on new deposits by households in the euro area and Greece

(percentages per annum)

	December 2010	December 2011	Change Dec. 2011/ Dec. 2010 (percentage points)	February 2012	Change Feb. 2012/ Dec. 2010 (percentage points)
Overnight[1]					
Weighted average interest rate in the euro area	0.43	0.54	0.11	0.52	0.09
Maximum interest rate	1.10	1.10	0.00	1.12	0.02
Minimum interest rate	0.07	0.09	0.02	0.09	0.02
Interest rate in Greece	0.44	0.48	0.04	0.47	0.03
Interest rate differential between Greece and the euro area	0.01	-0.06	-0.07	-0.05	-0.06
With an agreed maturity of up to one year[2]					
Weighted average interest rate in the euro area	2.27	2.78	0.51	2.90	0.63
Maximum interest rate	3.98	4.88	0.90	4.86	0.88
Minimum interest rate	0.75	1.03	0.28	0.55	-0.20
Interest rate in Greece	3.68	4.88	1.20	4.86	1.18
Interest rate differential between Greece and the euro area	1.41	2.10	0.69	1.96	0.55

Sources: ECB and euro area NCBs.
1 End-of-month rates.
2 Monthly averages.

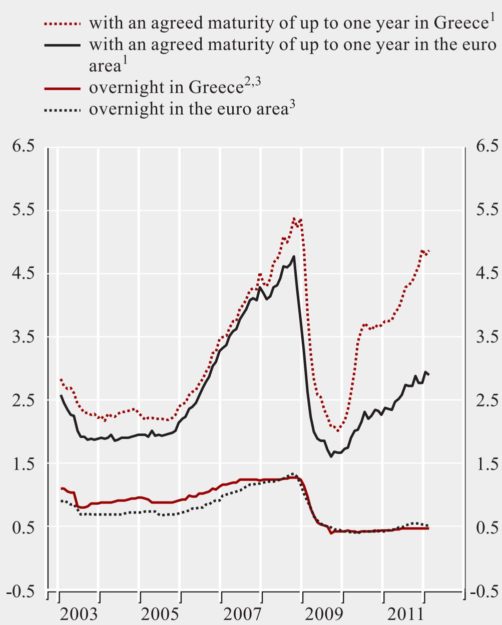
Table X.2B Bank interest rates on new deposits by households in euro area countries[1]

	Overnight[2]		With an agreed maturity of up to 1 year[3]	
	December 2010	February 2012	December 2010	February 2012
Austria	0.57	0.79	1.22	1.76
Belgium	0.34	0.32	0.75	0.55
Cyprus	1.10	1.12	3.98	4.29
Estonia	0.12	0.12	1.19	1.12
Finland	0.42	0.44	1.67	1.78
France	0.08	0.09	1.87	2.18
Germany	0.71	0.88	1.06	1.42
Greece	**0.44**	**0.47**	**3.68**	**4.86**
Ireland	0.62	0.53	1.84[4]	2.47[4]
Italy	0.28	0.37	1.40	3.21
Luxembourg	0.71	0.78	0.80	0.68
Malta	0.28	0.31	1.96	1.89
Netherlands	0.43	0.55	2.49	3.03
Portugal	0.07	0.11	2.56	3.52
Slovakia	0.37	0.42	1.97	2.29
Slovenia	0.20	0.24	1.94	2.35
Spain	0.27	0.26	2.68	2.64

Sources: ECB and euro area NCBs.
1 Despite the efforts to harmonise statistical methodologies across the euro area, considerable heterogeneity remains in the classification of banking products, which is partly due to differences in national conventions and practices as well as in regulatory and fiscal arrangements.
2 End-of-month rates.
3 Monthly averages.
4 The interest rate applies to all time deposits irrespective of maturity. The latest available data refer to January 2012.

Chart X.2 Bank interest rates on new deposits by households in Greece and the euro area (January 2003 - February 2012)

(percentages per annum)



Sources: Bank of Greece and ECB.
1 Monthly average rate.
2 Represented by the interest rate on savings deposits, which make up the bulk of overnight deposits.
3 End-of-month rate.

274-401 basis points in the case of time deposits (depending on the beneficiary —non-financial corporations, households— and the maturity) and by 278-288 basis points in the case of overnight deposits (depending on the beneficiary). This also reflects the significant decline in inflation between 2010 and 2011. Had the prevailing expectations for a larger decline in inflation materialised, the rise in real interest rates would have been even greater.

In the January-February 2012 period, real deposit rates increased by 5-146 basis points for time deposits and by 25-33 basis points for overnight deposits. So, for time deposits with an agreed maturity of up to one year and for overnight deposits by households, the real interest rate is estimated at 2.47% and -1.94%, respectively, in December 2011 (February 2012: 2.77% and -1.63%, December 2010: -1.49% and -4.73%).

Interest rates increased in most types of new deposits in the euro area over the January 2011-October 2011 period (i.e. before the cuts in Eurosystem key interest rates in early November and early December 2011), but this increase was definitely smaller than the increase in Greek deposit rates. Thus, the differential between euro area and Greek interest rates widened in 2011 and in the first two months of 2012, for most types of new deposits, reflecting a gradual increase in the pressures exerted on the liquidity of Greek banks.

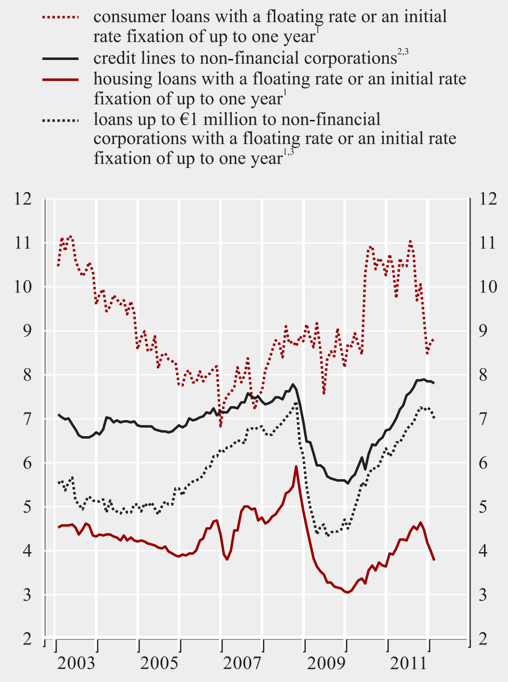
3 BANK LENDING RATES AND THE INTEREST RATE SPREAD

The upward trend that the interest rates in most new loan types in Greece have been following since the end of 2009 was reversed in mid-2011 for consumer loans and in the end of the same year for business and housing loans (see Chart X.3). As far as consumer loans are concerned, interest rate cuts in 2011 were significant and, as a result, in December 2011 the average rate on these loans was by 76 basis points lower than in December 2010. Nevertheless, in the January-February 2012 period, this rate increased by 17 basis points and came to 9.09%. By contrast, the average rates on housing and business loans reached higher levels in December 2011 —by 35 basis points and 128 basis points, respectively— compared with December 2010. In the January-February 2012 period, these rates declined by 39 and 50 basis points and stood at 3.75% and 6.53%, respectively.

Declines in interest rates, mainly on housing loans, are directly connected to the cuts in Eurosystem key interest rates and the subsequent fall in Euribor rates, since the latter are used as reference rates in most housing loan agreements in Greece. The evolution of interest rates, especially as regards consumer loans, was moreover influenced by the restructuring of loans (i.e. the renegotiation of existing loan terms between borrowers and banks), because of the significant deterioration in the balance

Chart X.3 Bank interest rates on new loans in Greece (January 2003- February 2012)

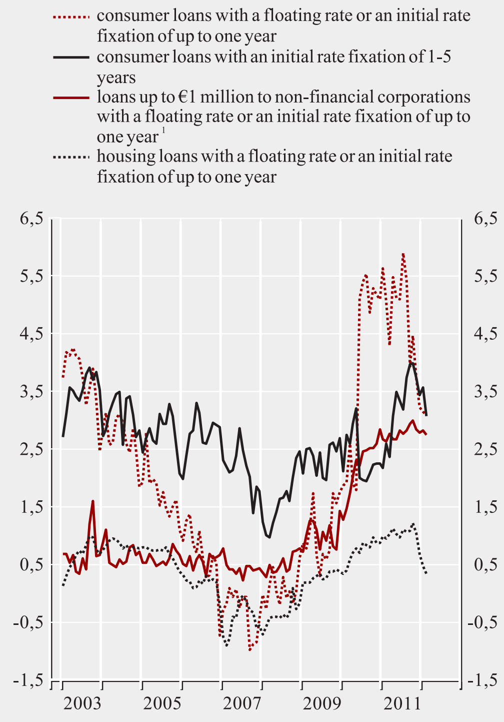
(percentages per annum)



Source: Bank of Greece.
1 Monthly average rate.
2 End-of-month rate.
3 See footnote 2 in Table X.3A.

Chart X.4 Bank interest rates on new loans: differential between Greece and the euro area (January 2003 - February 2012)

(percentage points)



Sources: Bank of Greece and ECB.
1 See footnote 2 in Table X.3.A.

sheets of a number of households. As far as business loans are concerned, the cuts in the lending rates were much smaller; this is in line with the smaller (in comparison with housing and consumer loans) ratio of non-performing loans, the respectively smaller percentage of business loans under restructuring (in relation to loans to households), as well as with the fact that the decline in demand for business loans is likely to be more limited and at the same time more recent than the decline in household demand for loans.

In more detail, as regards loans to non-financial corporations, the average rate on new loans reached 7.03% in December 2011 (February 2012: 6.53%, December 2010: 5.75%). As regards new loans to households, the average rate on housing loans in Greece stood at 4.14% in December 2011 (February 2012: 3.75%, i.e. by 81 basis points lower than in October 2011), compared with 3.79% in December 2010. The average rate on consumer loans with an agreed maturity reached 8.92%, i.e. it was by 163 basis points lower than its August 2011 peak (December 2010: 9.68%). In February 2012, the average rate on consumer loans with an agreed maturity rose to 9.09%.

Real interest rates on new loans rose markedly in 2011, by 97-504 basis points for the most important types of new loans to non-financial corporations and households. This increase mostly reflects the significant deceleration of inflation between 2010 and 2011. In the January-February 2012 period, real interest rates continued to increase for most types as far as consumer loans are concerned, by contrast to housing and business loans. So, the real interest rate on business loans is estimated at 4.62%

Table X.3A Bank interest rates on new loans in the euro area and Greece

(percentages per annum)

	December 2010	December 2011	Change Dec. 2011/ Dec. 2010 (percentage points)	February 2012	Change Feb. 2012/ Dec. 2010 (percentage points)
A. Loans with a floating rate or an initial rate fixation of up to one year[1]					
A.1. Loans up to €1 million to non-financial corporations					
Weighted average interest rate in the euro area	3.50	4.47	0.97	4.28	0.78
Maximum interest rate	6.64	7.53	0.89	7.54	0.90
Minimum interest rate	2.55	2.87	0.32	2.38	-0.17
Interest rate in Greece[2]	6.34	7.26	0.92	7.02	0.68
Interest rate differential between Greece and the euro area	2.84	2.79	-0.05	2.74	-0.10
A.2. Loans of more than €1 million to non-financial corporations					
Weighted average interest rate in the euro area	2.59	3.15	0.56	2.65	0.06
Maximum interest rate	6.18	7.55	1.37	6.47	0.29
Minimum interest rate	1.95	2.24	0.29	1.82	-0.13
Interest rate in Greece	4.98	6.64	1.66	5.81	0.83
Interest rate differential between Greece and the euro area	2.39	3.49	1.10	3.16	0.77
A.3. Housing loans					
Weighted average interest rate in the euro area	2.78	3.49	0.71	3.44	0.66
Maximum interest rate	5.16	5.73	0.57	5.23	0.07
Minimum interest rate	1.88	2.52	0.64	2.12	0.24
Interest rate in Greece	3.65	4.18	0.53	3.77	0.12
Interest rate differential between Greece and the euro area	0.87	0.69	-0.18	0.33	-0.54
A.4. Consumer loans					
Weighted average interest rate in the euro area	5.15	5.26	0.11	5.70	0.55
Maximum interest rate	18.99	21.33	2.34	22.49	3.50
Minimum interest rate	3.16	3.08	-0.08	3.20	0.04
Interest rate in Greece	10.27	8.49	-1.78	8.80	-1.47
Interest rate differential between Greece and the euro area	5.12	3.23	-1.89	3.10	-2.02
B. Loans with an initial rate fixation of over one and up to 5 years[1]					
B.1. Housing loans					
Weighted average interest rate in the euro area	3.52	3.74	0.22	3.64	0.12
Maximum interest rate	5.46	5.31	-0.15	5.55	0.09
Minimum interest rate	2.38	2.57	0.19	2.54	0.16
Interest rate in Greece	3.95	3.29	-0.66	2.80	-1.15
Interest rate differential between Greece and the euro area	0.43	-0.45	-0.88	-0.84	-1.27
B.2. Consumer loans					
Weighted average interest rate in the euro area	5.95	6.44	0.49	6.58	0.63
Maximum interest rate	29.23	23.06	-6.17	17.88	-11.35
Minimum interest rate	4.56	4.76	0.20	3.23	-1.33
Interest rate in Greece	8.21	9.87	1.66	9.66	1.45
Interest rate differential between Greece and the euro area	2.26	3.43	1.17	3.08	0.82

Sources: ECB and euro area NCBs.
1 Monthly average rates.
2 As of June 2010, loans to sole proprietors are presented separately and are no longer included in "credit to enterprises".

Table X.3B Bank interest rates on new loans in euro area countries[1]

(percentages per annum)

	New loans with a floating rate or an initial rate fixation of up to one year[2]								New loans with an initial rate fixation of over one and up to five years[2]	
	To non-financial corporations									
	Loans up to €1 million		Loans over €1 million		Housing loans		Consumer loans		Consumer loans	
	Dec. 2010	Feb. 2012	Dec. 2010	Feb. 2012	Dec. 2010	Feb. 2012	Dec. 2010	Feb. 2012	Dec. 2010	Feb. 2012
Austria	2.55	2.67	2.20	2.18	2.75	3.06	4.95	5.12	4.88	5.17
Belgium	2.63	2.38	1.95	1.82	3.12	3.86	5.27	6.28	5.90	6.26
Cyprus	6.64	7.12	6.18	6.47	5.16	5.23	6.79	6.98	[3]	[3]
Estonia	5.01	4.62	4.12	4.02	3.23	3.11	18.99	22.49	29.23	17.88
Finland	2.86	3.21	2.47	2.41	2.08	2.27	3.38	3.97	4.67	5.90
France	2.65	3.04	2.19	2.58	3.06	3.71	6.40	6.44	5.68	6.55
Germany	3.77	3.56	2.78	2.58	3.38	3.55	3.16	3.20	5.27	5.58
Greece	**6.34**	**7.02**	**4.98**	**5.81**	**3.65**	**3.77**	**10.27**	**8.80**	**8.21**	**9.66**
Ireland	3.87	4.72	3.12	2.40	3.01	3.09	4.76	7.94	[3]	[3]
Italy	3.18	4.92	2.56	3.09	2.52	3.99	6.63	9.09	6.65	7.99
Luxembourg	2.69	2.55	2.52	2.24	1.88	2.12	[3]	[3]	4.56	3.23
Malta	4.81	5.03	4.32	3.94	3.42	3.29	5.81	5.69	[3]	[3]
Netherlands	3.47	3.30	2.29	2.38	3.58	4.01	[3]	[3]	[3]	[3]
Portugal	5.92	7.54	4.44	5.90	2.96	4.38	6.67	8.36	10.13	12.46
Slovakia	4.02	4.39	3.30	2.30	4.74	5.02	7.56	14.10	15.13	16.11
Slovenia	5.60	6.04	5.06	4.35	3.35	3.72	4.73	5.25	6.74	7.26
Spain	3.78	4.96	2.57	2.90	2.52	3.54	5.06	7.73	8.07	10.29

Sources: ECB and euro area NCBs.
1 Despite the efforts to harmonise statistical methodologies across the euro area, considerable heterogeneity remains in the classification of banking products, which is partly due to differences in national conventions and practices as well as in regulatory and fiscal arrangements.
2 Monthly average rates.
3 These countries do not publish data on the respective interest rates.

Table X.4 Interest rate spread in Greece and the euro area

(percentage points)

	Average interest rate on new loans in Greece[1] (percentages per annum)	Average interest rate on new deposits in Greece[1] (percentages per annum)	Interest rate spread in Greece	Interest rate spread in Greece with euro area weighting	Interest rate spread in the euro area
December 1998	16.21	8.12	8.09	...	...
December 1999	14.02	6.98	7.04	...	...
December 2000	9.68	4.00	5.68	...	...
December 2001	7.26	1.96	5.30	...	...
December 2002	6.29	1.67	4.62	...	...
December 2003	5.92	1.2	4.72	4.47	2.78
December 2004	5.94	1.22	4.72	4.2	2.54
December 2005	5.79	1.27	4.52	3.60	2.57
December 2006	6.38	1.87	4.51	3.66	2.91
December 2007	6.67	2.53	4.14	3.50	3.11
December 2008	6.72	3.27	3.45	3.26	2.63
December 2009	5.09	1.32	3.77	3.39	2.29
December 2010	6.08	2.15	3.93	4.02	2.25
December 2011	6.81	2.81	4.00	4.52	2.44
February 2012	6.45	2.83	3.62	4.06	2.28

Sources: Bank of Greece and ECB.
1 The average interest rate depends on the level of interest rates of individual categories of deposits/loans as well as on the weight of each type of deposit/loan in the corresponding total. Therefore, changes in the average interest rate reflect changes in the actual interest rates and/or changes in the weights of the instrument categories concerned. In order to smooth out the impact of abrupt changes in weights, the calculation of the average interest rate is based on the average of the weights over the past twelve months.

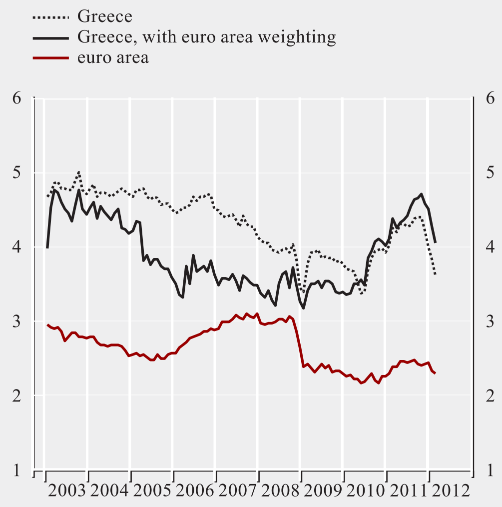
in December 2011 (February 2012: 4.43%, December 2010: 0.58%), while for housing and consumer loans at 1.72% and 6.50% respectively (February 2012: 1.65% and 7.00%, December 2010: -1.38% and 4.51%).

The interest rate differential between Greece and the euro area narrowed over the last months of 2011 and in the January-February 2012 period for the most important types of new loans to non-financial corporations and households; in the case of consumer loans with a floating rate or an initial rate fixation of up to one year, the narrowing of the differential had been already observed since mid-2011 (see Tables X.3A and X.3B and Chart X.4). This narrowing of the lending rate differential mainly reflects changes in Greek interest rates and implies a limitation of the extent to which financial conditions in Greece are more adverse than the average conditions in the euro area, possibly because of the spreading of the debt crisis.

Over January-October 2011, the interest rate spread in Greece maintained its upward course observed since mid-2010, a development consistent with the gradual reduction in the size of the Greek credit system's balance sheet since May 2010. Nevertheless, the spread narrowed in the November 2011-February 2012 period, standing at 4.00% in December 2011 (December 2010: 3.93%) and at 3.62% in February 2012 (see Table X.4 and Chart X.5). The interest rate spread differential between Greece and the euro area also widened over the January-October 2011 period, before falling in the four months that followed. Had the composition of loans and deposits in Greece been the same as in the euro area, the interest rate spread in Greece would have stood at 4.52% in December 2011 (i.e. by 52 basis points lower) and its

Chart X.5 Average interest rate spread between new loans and new deposits in Greece and the euro area (January 2003 - February 2012)

(percentage points)



Sources: Bank of Greece and ECB.

differential over the corresponding spread in the euro area would have increased to 208 basis points (February 2012: spread: 4.06%, spread differential: 178 basis points).

4.1 CREDIT AGGREGATES

The annual rate of change of total credit to the economy by domestic MFIs became increasingly negative in the course of 2011 (December 2011: -1.9%, December 2010: 5.7%) (see Table X.5 and Chart X.6). This development reflects, on the one hand, the marked slowdown of credit expansion to the general government (December 2011: 2.3%, December 2010: 28.3%) —since the bulk of its borrowing requirement is now financed by the support mechanism— and, on the other hand, the gradual pick-up of the negative rate of change of credit to the domestic private sector (December 2011: -3.1%, December 2010: 0.0%, see Table X.6 and Chart X.7), the reasons for which are discussed below. In the first two months of 2012, the annual rate of change of credit to the private sector turned more negative and stood at -3.8% in February 2012. By contrast, the rate of credit expansion to the general government gathered pace again and reached 6.6% in February 2012, albeit on account of technical reasons; as a result, the annual rate of decrease of total credit to the economy was just 1.4%.[9]

Turning to the private sector, the rate of change of credit to non-financial corporations has turned increasingly negative since September 2011 (February 2012: -3.3%, December 2011: -1.8%, December 2010: 0.8% – see Table X.6 and Chart X.7). The rate of change of loans to individuals and private non-profit institutions (essentially households) also turned progressively more negative in 2011 and the first two months of 2012, reaching -4.3% in February 2012 (December 2011: -3.9%, December 2010: -1.2%). This reflects a pick-up in the negative rate of change of both housing and consumer loans (February 2012: -3.2% and -6.8% respectively, December 2011: -2.9% and -6.4%, December 2010: -0.3% and -4.2%).

In 2011, the cumulative flow of MFI credit to the economy as a whole was negative (-€6.3 billion, compared with a positive net flow of €17.9 billion in 2010), due to the negative net flow of credit to the private sector (-€8.1 billion compared with a positive net flow of €50 million in 2010), while the net flow of credit to general government was positive albeit significantly decreased (€1.8 billion compared with €17.8 billion in 2010). The net flow of loans to individuals and private non-profit institutions, households essentially (2011: -€4.6 billion, 2010: -€1.4 billion) had the greatest contribution to the negative flow of credit to the private sector in 2011. The cumulative net flow of credit to non-financial corporations was also negative in 2011, standing at -€2.1 billion, when in 2010 a positive flow (€1.0 billion) was recorded. In February 2012, the net flow of MFI credit to the total economy stood at €1.9 billion (January 2012: -€1.8 billion), as the high positive flow of credit to general government offset the sum of the negative monthly flows of

9 In other words, it was not the result of additional flows of credit to the general government from other sectors.

Table X.5 Credit[1] to the economy by domestic MFIs

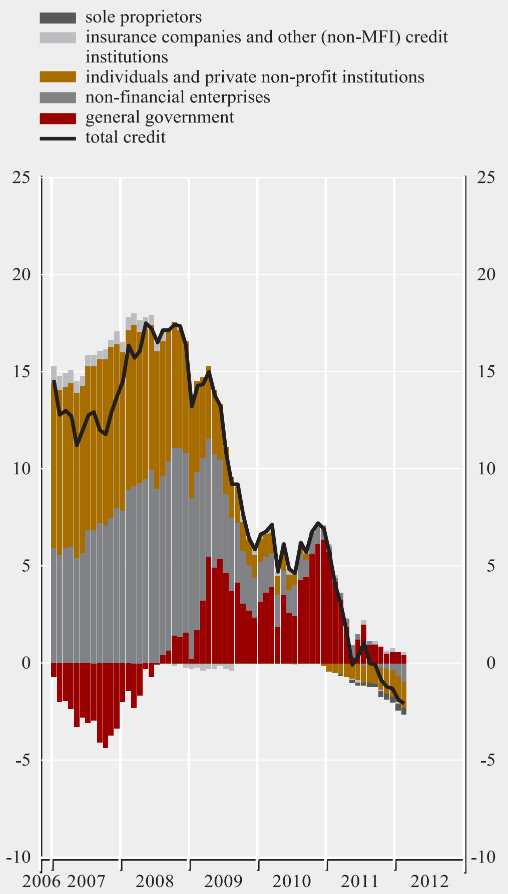
(annual percentage changes; non-seasonally adjusted data)

	2008	2009	2010		2011					2012	
	Q4[2]	Q4[2]	Q4[2]	Dec.[3]	Q1[2]	Q2[2]	Q3[2]	Q4[2]	Dec.[3]	Jan.[3]	Feb.[3]
1. Total MFI credit	16.3	6.5	6.8	5.7	3.6	0.5	0.0	-1.3	-1.9	-2.1	-1.4
2. Credit to general government	7.3	17.2	32.7	28.3	17.9	5.2	4.9	2.5	2.3	1.9	6.6
3. Credit to the private sector	18.3	4.5	0.9	0.0	-0.2	-0.8	-1.4	-2.4	-3.1	-3.3	-3.8
3.1 Enterprises[4]	21.8	5.5	2.0	1.1	1.0	0.7	0.3	-0.8	-2.0	-1.9	-2.7
of which:											
3.1.1 Credit to non-financial corporations	23.8	5.4	1.9	0.8	0.8	0.9	0.1	-1.0	-1.8	-2.6	-3.3
3.1.2 Credit to insurance companies and other financial institutions (non-MFI)	-2.4	7.4	4.2	8.2	4.0	-2.1	3.1	4.2	-5.2	10.5	7.1
3.2 Sole proprietors[4]	-	-	1.4	0.3	0.1	-2.2	-4.1	-6.0	-6.6	-7.3	-7.8
3.3 Individuals and private non-profit institutions	14.6	3.3	-0.3	-1.2	-1.5	-2.2	-2.8	-3.6	-3.9	-4.1	-4.3
of which:											
3.3.1 Lending for house purchase	13.1	3.9	0.5	-0.3	-0.8	-1.5	-2.0	-2.5	-2.9	-3.1	-3.2
3.3.2 Consumer credit	18.4	2.4	-2.8	-4.2	-4.2	-5.0	-6.2	-6.6	-6.4	-6.6	-6.8

Source: Bank of Greece.
1 Including MFI loans and holdings of corporate bonds and government securities, as well as the outstanding amounts of securitised loans and securitised corporate bonds. The rates of change are adjusted for loan write-offs, reclassifications and exchange rate variations in respect of loans denominated in foreign currency. The rate of change in credit to enterprises is also adjusted for loans and corporate bonds transferred by MFIs to subsidiaries abroad and to a domestic finance company. Since these transactions lead to an increase or decrease, accordingly, in the outstanding stock of credit in the financial statements of domestic MFIs but do not affect credit to domestic enterprises and households, the calculation of net flows and rates of change has been correspondingly adjusted.
2 The quarterly average is derived from monthly averages (which are calculated as the arithmetic means of two successive end-of-month figures) and is not the three-month average of end-of-month annual growth rates (see the Technical notes in the "Euro area statistics" section of the ECB *Monthly Bulletin*).
3 Based on end-of-month levels.
4 As of June 2010, loans to sole proprietors are presented separately and are no longer included in "credit to enterprises".

Chart X.6 Sectoral contributions to total domestic MFI credit (December 2006 - February 2012)

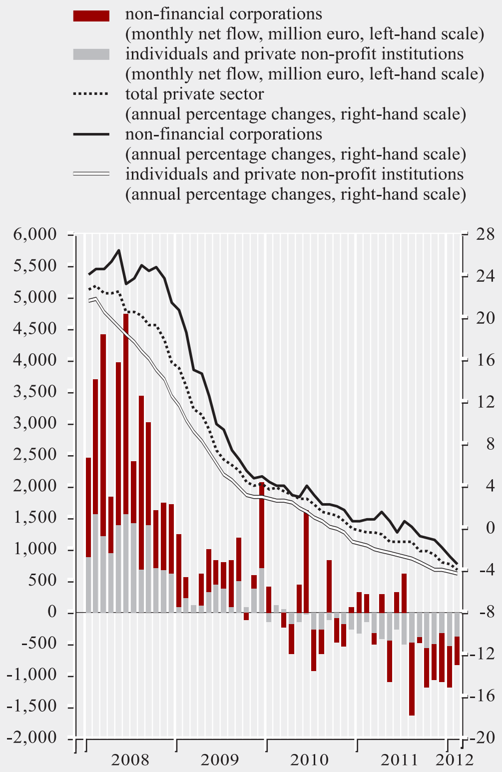
(annual percentage changes; contributions in percentage points)



Source: Bank of Greece.
Note: Total MFI credit comprises MFI credit (stock) to the domestic private sector and the general government, as well as MFI holdings of government debt securities, corporate bonds, securitised loans and securitised corporate bonds. The rates of change are adjusted for exchange rate variations and loan write-offs carried out by banks during the reference period.

Chart X.7 Credit[1] to the domestic private sector by domestic MFIs (January 2008- February 2012)

(monthly net flow[2]; annual percentage changes)



Source: Bank of Greece.
1 Including MFI loans and holdings of corporate bonds, as well as the outstanding amounts of securitised loans and securitised corporate bonds. The annual rates of change are adjusted for loan write-offs and reclassifications and foreign exchange valuation differences on loans denominated in foreign currency.
2 The monthly net flow of credit is calculated as the difference between the outstanding stock of credit at the beginning and the end of a given month, adjusted for foreign exchange valuation differences in respect of loans denominated in foreign currency, loan write-offs and reclassifications during that month.

credit to non-financial corporations, households, insurance corporations and other non-financial institutions.

According to financial accounts data, the ratio of the non-financial private sector's outstanding loans to nominal GDP *rose* in September 2011, compared with December 2010, despite the decline in outstanding loans, owing to the decrease in nominal GDP. In particular, outstanding loans to individuals, private non-profit institutions and sole proprietors amounted to 61.2% of GDP in September 2011, compared with 60.7% in December 2010. Accordingly, outstanding loans to non-financial corporations amounted to 65.6% of GDP in September 2011, compared to 63.9% in December 2010 (see Chart X.8).

According to the results of the Bank Lending Survey,[10] between the beginning and the end of

10 The Bank Lending Survey is conducted by the Bank of Greece, on a quarterly basis, as part of a Eurosystem-wide survey.

Table X.6 Credit[1] to the domestic private sector by domestic MFIs

(annual percentage changes; non-seasonally adjusted data)

	Outstanding balances on 29.02.12 (million euro)	2008	2009	2010		2011					2012	
		Q4[2]	December[3]	Q4[2]	December[3]	Q1[2]	Q2[2]	Q3[2]	Q4[2]	Dec.[3]	Jan.[3]	Feb.[3]
A. Enterprises[4]	**119,455**	**21.8**	**5.5**	**2.0**	**1.1**	**1.0**	**0.7**	**0.3**	**-0.8**	**-2.0**	**-1.9**	**-2.7**
A.1 Non-financial corporations[5]	**110,418**	**23.8**	**5.4**	**1.9**	**0.8**	**0.8**	**0.9**	**0.1**	**-1.0**	**-1.8**	**-2.6**	**-3.3**
1. Trade	24,146	22.2	5.0	-2.1	-3.5	-3.4	-3.1	-5.0	-5.7	-6.0	-6.6	-7.4
2. Industry[6]	23,138	17.4	-2.8	-1.3	-2.0	-1.2	-0.7	1.0	0.4	0.1	-1.9	-2.6
3. Shipping	16,182	24.6	3.9	6.9	4.2	6.5	4.6	0.3	1.1	2.4	0.1	-0.4
4. Construction	10,614	37.4	2.2	2.3	1.9	0.2	-0.3	0.0	-3.6	-7.4	-7.6	-6.4
5. Tourism	7,435	24.4	6.4	4.0	2.9	1.1	-0.2	0.1	-1.0	-2.3	-1.9	-1.1
6. Electricity - gas - water supply	5,924	36.5	14.8	23.1	21.6	19.0	18.3	18.8	13.9	12.3	12.0	8.7
7. Agriculture	1,938	20.5	3.7	0.6	1.1	-0.7	-0.2	-2.9	-5.0	-5.6	-8.4	-8.9
8. Transport (excluding shipping)	1,839	35.7	19.5	-3.8	-9.2	-10.2	-10.8	-12.9	-7.9	-3.7	-4.8	-6.0
9. Other sectors	19,202	23.8	12.3	5.0	4.1	4.5	5.0	2.8	0.1	-2.1	-1.5	-2.8
A.2 Insurance companies and other financial institutions (non-MFI)	**9,037**	**-2.4**	**7.4**	**4.2**	**8.2**	**4.0**	**-2.1**	**3.1**	**4.2**	**-5.2**	**10.5**	**7.1**
B. Sole proprietors[4]	**15,149**	**-**	**-**	**1.4**	**0.3**	**0.1**	**-2.2**	**-4.1**	**-6.0**	**-6.6**	**-7.3**	**-7.8**
C. Individuals and private non-profit institutions	**112,237**	**14.6**	**3.3**	**-0.3**	**-1.2**	**-1.5**	**-2.2**	**-2.8**	**-3.6**	**-3.9**	**-4.1**	**-4.3**
1. Housing loans	77,857	13.1	3.9	0.5	-0.3	-0.8	-1.5	-2.0	-2.5	-2.9	-3.1	-3.2
2. Consumer loans	32,568	18.4	2.4	-2.8	-4.2	-4.2	-5.0	-6.2	-6.6	-6.4	-6.6	-6.8
– Credit cards	7,187	12.4	-0.4	-4.6	-5.4	-5.8	-7.0	-9.4	-9.9	-9.9	-10.0	-10.4
– Other consumer loans[7]	25,382	20.9	3.5	-2.2	-3.7	-3.6	-4.4	-5.2	-5.6	-5.3	-5.6	-5.7
3. Other loans	1,811	7.5	-2.3	9.6	10.7	12.1	14.7	23.7	3.8	-2.2	-0.4	-3.3
TOTAL	**246,841**	**18.3**	**4.5**	**0.9**	**0.0**	**-0.2**	**-0.8**	**-1.4**	**-2.4**	**-3.1**	**-3.3**	**-3.8**

Source: Bank of Greece.

1 Including MFI loans and holdings of corporate bonds, as well as the outstanding amounts of securitised loans and securitised corporate bonds. The rates of change are adjusted for loan write-offs, reclassifications and exchange rate variations in respect of loans denominated in foreign currency. The rate of change in credit to enterprises is also adjusted for loans and corporate bonds transferred by domestic MFIs to subsidiaries abroad and to a domestic finance company. Since these transactions lead to an increase or decrease, accordingly, in the outstanding stock of credit in the financial statements of domestic MFIs but do not affect credit to domestic enterprises and households, the calculation of net flows and rates of change has been correspondingly adjusted.

2 The quarterly average is derived from monthly averages (which are calculated as the arithmetic means of two successive end-of-month figures) and is not the three-month average of end-of-month annual growth rates (see the Technical notes in the “Euro area statistics” section of the ECB *Monthly Bulletin*).

3 Based on end-of-month levels.

4 As of June 2010, loans to sole proprietors are presented separately and are no longer included in “credit to enterprises”.

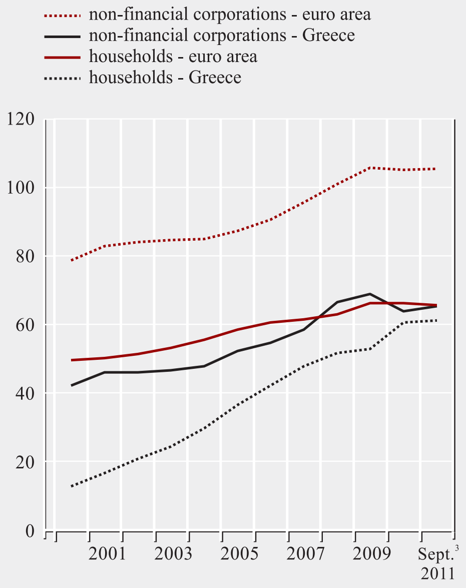
5 Sectors are listed in descending order according to their share in total credit, with the exception of “other sectors”. The rates of change per sector are adjusted for write-offs.

6 Comprising manufacturing and mining/quarrying.

7 Comprising personal loans and loans against supporting documents.

Chart X.8 Debt of non-financial corporations[1] and households[2] in the euro area and Greece (2000-September 2011)

(percentages of GDP)



Sources: Bank of Greece and ECB (outstanding debt), Eurostat and ELSTAT (GDP). GDP figures for 2011 are calculated as the sum of four quarters up to Q3 2011.
1 The debt of non-financial corporations comprises loans, debt securities issued, as well as pension fund reserves.
2 Household debt comprises the overall stock of household loans and securitised loans. Debt data are derived from the financial accounts of the household sector, which record the sector's total financial assets and liabilities.
3 Due to a reclassification (from June 2010 onwards), loans to sole proprietors, previously included in "credit to enterprises", are now classified as "credit to households". This change increases the debt stock of households (compared with December 2009) and decreases it for non-financial corporations.

2011 banks tightened their credit standards for the major types of loans, while, according to banks' estimates, the demand for loans dropped over the same period.

4.2 THE OUTLOOK FOR CREDIT EXPANSION

The fact that banks, due to the debt crisis, have lost almost every access to international money and capital markets, while at the same time there is an extensive withdrawal of deposits on the part of non-financial corporations and households (as well as of other money-holding sectors) since the end of 2009, reasonably explains their largely limited ability to finance the real economy – even assuming that there exist a lot of opportunities for lending without high risk.

The funding that the Bank of Greece provides to credit institutions, both as part of the Eurosystem and on its own responsibility (exceptional funding), averted the sharp contraction of bank loans to the non-financial private sector. However, credit institutions' currently extensive reliance on the Bank of Greece for obtaining liquidity cannot be perpetuated; on the contrary, it should be gradually reduced.

Since the end of 2009, as the yield spread between Greek and German 10-year government bonds was starting to widen significantly, bank deposit and lending rates gradually increased as well, reflecting the banks' effort to stop the withdrawal of deposits and to discourage the demand for loans. As already mentioned, declines in the interest rates of many loan types were recorded recently, especially after the declines in Eurosystem key interest rates; nevertheless, in most loan types, rates remain higher than *in late 2009.*[11] In real terms, it is estimated that bank rates have been following a continuous upward course since mid-2010, underpinned by the decline in inflation recorded in the fourth quarter of 2010.[12]

Over the two years 2010-2011, domestic banks continued to apply increasingly tighter credit standards. Thus, their collateral requirements increased, while the maturity and the amount of the loans they grant dropped and, in the case of housing credit, so did the percentage of the value of residential collateral that the loans granted are allowed to cover.

Moreover, according to the ECB survey (December 2011) on the access to finance of

11 By contrast, in February 2012, rates on consumer loans had declined to levels close to the ones prevailing in late 2009.
12 Thus, real rates on business loans and, to a smaller extent, on housing loans, stood in early 2012 at levels higher than in late 2009.

small and medium-sized enterprises, the approval rate of firms' applications for bank loans is considerably lower in Greece than in other euro area countries.[13] Other business surveys have had similar findings.[14] As a consequence, the implementation of investment plans or even the current production of some enterprises seem to be restrained by the lack of adequate financing. Accordingly, the purchase of a house and of consumer durables by households very likely has been hampered because of the limited availability of bank financing.

The economic downturn of the last years was —already before lending rates started to rise— another factor contributing to the fall in the demand for loans and, consequently, to the deceleration of the annual rate of change of credit aggregates, which has been observed as regards business loans, for instance, since mid-2008 already.[15]

Besides, the generalised increase in credit risk in the Greek economy, on account of the protracted economic recession, combined with the fiscal crisis,[16] naturally discourages bank lending.

The improvement of the economic outlook in Greece with the launch of the second financial support programme, the enhancement of transparency in the credit system by determining banks' capital needs, as well as the initiation —in the context of the above programme— of the recapitalisation of credit institutions and the restructuring and resolution of the banking sector must be achieved in order for banks to regain their capacity to regularly tap the international money and capital markets. Furthermore, these factors are expected to contribute to stopping the withdrawal of deposits, with the medium-term perspective of having savings flow back into the Greek banking system.

The improved economic outlook in Greece will lead banks to reassess their credit risk, will encourage them to increase the supply of bank loans, given also their recapitalisation (after the PSI), while at the same time boosting the private sector's demand for credit, as production will recover and investment opportunities will increase.

Finally, it should not be overlooked that the flow of liquidity to Greek enterprises depends directly on the progress of the NSRF – consequently, a better absorption of the relevant funds would offset to some extent the currently limited supply of bank loans. An important development in this respect is the recent signing[17] of the funding agreement for the creation of a Guarantee Fund for Small and Medium-Sized Enterprises, which will allow the provision of loans —totalling €1.44 billion minimum until the end of 2015, an amount which could be increased depending on the evolution of Greece's credit rating— by the European Investment Bank (EIB) to these enterprises via Greek banks. Greek banks will finance working capital needs and investment expenditure of small and medium-sized enterprises, with funds from (or the guarantees of) the EIB. Part of the funds[18] that the EIB will provide to Greek banks will be secured by Greek government guarantees which, if called in, will be financed by NSRF funds that have been allocated to Greece, but are still unabsorbed.

13 With the exception of Ireland.
14 See, for example, the survey published on IOBE's website in December 2011: "Results of the field research: Changes in regional productive systems and local labor markets", assigned by SEV to IOBE and NTUA's Industrial and Energy Economy Laboratory. According to this survey, firms are quite exposed to the lack of liquidity under the current conditions of economic crisis, mainly because their customers or suppliers face the same problem, and because banks do not approve new loans. Reduced bank lending is decisive for the construction industry.
15 Nonetheless, deceleration in the annual rate of change of housing loans had started quite earlier, in February 2006.
16 Out of the many channels through which the fiscal crisis increases credit risk, the accumulation of government arrears to the private sector is a direct such channel.
17 On 21 March 2012.
18 *Only part*, in the sense that the EIB leverages NSFR funds; the higher the credit rating attributed to Greece by rating agencies, the bigger the leverage will be. It should also be noted that of the total amount of €1,440 million to be provided until 2015, €440 million will be guaranteed by the Greek government.

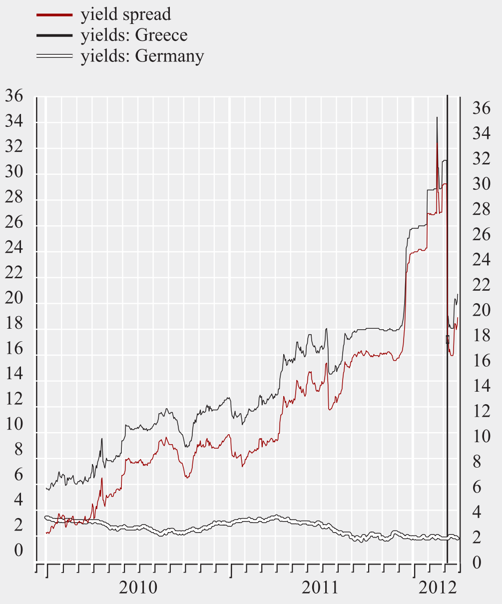
5 THE MARKET FOR GREEK GOVERNMENT BONDS AND THE SUCCESSFUL COMPLETION OF THE PSI

In 2011, the market for Greek government bonds was dominated by increased uncertainty about the prospects of the Greek economy. This uncertainty was reflected in a sharp decline in transactions on the secondary market and a considerable increase in government bond yields. In the first months of 2012, progress in negotiations and the conclusion of a deal between Greece and its private sector creditors (in Greece and abroad) on the restructuring of public debt[19] on 21 February 2012 decisively helped to reduce uncertainty and restore confidence in the prospects of the Greek economy. During this period, the upward trend in Greek government bond yields gradually weakened, while after the bond swap under the PSI+ the yields of the new bonds were considerably lower than those of the old bonds with a similar maturity.

In more detail, between the end of 2010 and the end of 2011, ten-year Greek government bond yields on the Electronic Secondary Securities Market (HDAT) doubled to 25.68%, from 12.55%, and then peaked at 31.02% on 9 March 2012, the last day before the new bonds started to trade (see Chart X.9).

Chart X.9 10-year Greek and German government bond yields[1] (January 2010-March 2012)

(daily data; percentages per annum; spread in percentage points)

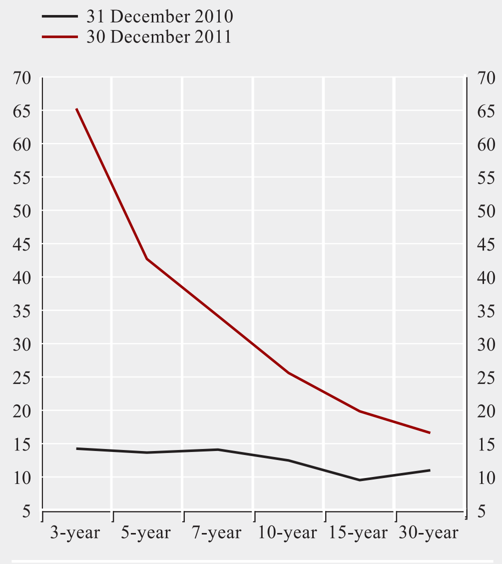


Source: Greek government bond yields from HDAT, BoG; German government bond yields from Thomson Datastream.

1 As trading in Greek government bonds takes place in many organised markets (e.g. HDAT, BrokerTec, MTS, ICAP etc.), as well as in electronic over-the-counter trading platforms (e.g. Reuters, Bloomberg), deviations in prices (and relevant yields) are often observed across data providers. These deviations became more apparent in Q4 2011 due to considerably lower transactions in Greek bonds.
The vertical line represents the date on which the new Greek bonds started being traded (12 March 2012), after the completion of PSI+.

Chart X.10 Greek government paper yield curves

(yields in percentages per annum)



Source: Bank of Greece.

19 The decision of the heads of state and government of the euro area summit of 26 October 2011 laid down the main objectives of the private sector involvement in the restructuring of Greek debt (PSI+). The haircut on bonds held by the private sector would have to be at least 50%, while the contribution of euro area countries to the PSI+ would reach €30 billion. Greece's public debt should fall to 120% of GDP by 2020. According to the decision of the Euro Group of 21 February 2012, successful completion of the PSI+ was a condition for providing further financial support to Greece, while the haircut on bonds held by the private sector was raised to 53.5%.

In the same vein, the spread between the ten-year Greek and German government bonds widened considerably over 2011 (see Chart X.9). This is attributable, on the one hand, to investors' assessments that Greek government bonds involve increased credit risk and, on the other hand, to the international perception of German government bonds as a safe haven; thus, German government bond yields fell during most of 2011, on account of strong demand.

The slope of the yield curve of Greek government bonds turned more negative in 2011, as three-year bonds were affected more heavily by the rise in yields than longer-term bonds did (see Chart X.10), a trend that continued into the first months of 2012 and until the bond swap.

The completion of the PSI and the characteristics of the new government bonds that replaced the old ones

The successful completion[20] of the Greek bond swap following the Hellenic Republic's public invitation on 24 February 2012,[21] resulted in the replacement of old Greek government bonds[22] with (a) new bonds that the Hellenic Republic issued under English law, which had a face value equal to 31.5% of the face value of eligible securities tendered for exchange by bondholders and will mature between 2023 and 2042; and (b) notes of the EFSF maturing within 24 months and having a face value equal to 15% of the face value of eligible securities tendered for exchange by bondholders. Finally, any accrued and unpaid interest on the existing Greek bonds until 24 February 2012 was paid by the Hellenic Republic with six-month securities issued by the EFSF.

The coupon[23] structure of the new bonds that were issued by the Hellenic Republic is as follows: 2.0% per annum to payment date in 2015; 3.0% per annum to payment date in 2020; 3.65% per annum in 2021; and 4.3% per annum thereafter. Each participating holder also received detachable GDP-linked securities of the Hellenic Republic.[24] Amortisation will commence on the eleventh anniversary (2023) of the issue date.

The participation of private bondholders, as recorded on 8 March 2012, date of completion of the first part of the swap procedure, which involved Greek-law government bonds (the majority of eligible bonds), was very high. The total value of eligible bonds was €206 billion, while the value of Greek-law government bonds was €177 billion – the rest was foreign-law Greek government bonds and Greek government-guaranteed bonds of public enterprises.[25] Holders of 86% of the face value of all Greek-law government bonds responded positively. Finally, by virtue of collective action clauses (CACs),[26] all Greek-law government bonds were exchanged for new bonds. According to the International Swaps and Derivatives Association (ISDA), the activation of CACs constituted a credit

20 On 13 March 2012, i.e. after the announcement of the high participation in the Greek bond swap, Fitch Ratings upgraded Greece by six notches to B-, with stable outlook.

21 It should be noted that this invitation was addressed to all private bondholders (i.e. banks, social security funds, mutual funds, other investment funds, natural persons etc.). Pursuant to the decisions of 21 February 2012, Greek government bonds held within the Eurosystem, i.e. by the ECB and the NCBs, were excluded from the PSI+. This is so because it was recognised that the ECB had bought Greek government bonds for monetary policy purposes. NCBs committed themselves to pass the profits from these bonds to Greece in some way.

22 It should be noted that Treasury bills were not included in eligible securities.

23 In other words, the interest payable on the bonds as a percentage of their face value. Interest is payable on 24 February each year.

24 The GDP-linked securities provide for annual payments (beginning in 2015) of an amount of up to 1% of their notional amount in the event that Greece's nominal GDP exceeds a defined threshold and the country has positive GDP growth in real terms, in excess of specified targets.

25 Out of foreign-law Greek government bonds and Greek government-guaranteed bonds of public enterprises (issued mainly under Greek law, but foreign law too, in some cases) with a total value of some €28 billion, bonds of around €20 billion were tendered for exchange, and the relevant procedure was completed on 11 April 2012.

26 CACs were introduced by Law 4050/2012, which was passed on 23 February 2012. Under this law, bondholders were invited in a meeting to decide whether or not to participate in the exchange of Greek-law government bonds. This required participation of at least 1/2 of the total outstanding principal balance of all eligible securities and a supermajority of at least 2/3 of the principal participating, in favour of the Greek government's exchange proposal. The bondholders' decision to participate in the exchange was valid *erga omnes* (para. 4 and 9 of Article 1 of the law), i.e. was binding to all bondholders whether they had participated in the meeting (but voted against participation in the exchange) or not.

event, which triggered the credit default swaps (CDSs) on Greek debt[27] and led to the payment of compensation to CDS holders.

The new Greek government bonds, with maturities of 11 to 30 years, started to trade on the secondary market on 12 March 2012. *Indicatively, at end-March 2012 the yields of the new bonds on HDAT were as follows: 20.73% for ten-year bonds[28] and 16.70% for thirty-year bonds,[29] i.e. considerably lower than before the bond swap. Accordingly, the spread between Greek and German ten-year government bonds at end-March 2012 was 18.91 percentage points, compared with 27.07 percentage points at end-February 2012.*

The drop in the yields of the new Greek government bonds points to an improvement in the outlook of the Greek economy, as the fiscal burden was considerably reduced after the substantial decline in the face value of Greek bonds in the context of debt restructuring, the relatively low average interest rate and long average maturity of the new bonds, as well as the retrospective cut in the interest rate on bilateral loans granted by euro area Member States, while the second support programme will be financed through low-interest EFSF loans. Overall, the risk of Greece defaulting on its debt was reduced drastically and public debt became potentially sustainable.

The average daily value of transactions in Greek government bonds fell in 2011 on all markets. The average daily value of transactions, as recorded in the accounts of the Dematerialised Securities System (SAT),[30] dropped in 2011 to €712 million euro, from €3,319 million in 2010, while the average daily value of transactions on HDAT fell to €22 million, from €390 million. The SAT average daily value of transactions rebounded strongly in March 2012, having further declined to €369 million in the first quarter of 2012. After the new Greek government bonds started to trade, the average daily value of transactions on HDAT rose to €5 million, compared with zero transactions in the first two months of 2012.

In 2011, the Greek government continued to issue regularly six-month and three-month Treasury bills, raising €45 billion in total; the average weighted interest rate on these issues rose to 4.67% in 2011, from 3.80% in 2010. In the first quarter of 2012, the Greek government raised €9.6 billion by issuing six-month and three-month Treasury bills, with the average weighted interest rate remaining unchanged over 2011 (4.67%).

6 THE STOCK MARKET

In 2011, second year in a row, the strong decline in stock prices on the Athens Exchange (Athex) continued, while stock prices in the euro area declined much less. Athex trading activity was substantially reduced, same as raising funds from the stock market, due to the adverse investment climate, which was the combined result of the fiscal crisis and heightening recession in Greece, also reflected in the reduced profits of Athex-listed companies.[31,32] This picture improved for most of the first quarter of 2012, during which Athex stock prices, mainly the banking sector's, picked up in parallel with the progress of negotiations for the private sector involvement in the Greek government bond swap. The successful conclusion of the negotiations benefited the stock market considerably, since it led to the approval of Greece's second

27 Bondholders were compensated by CDS sellers for the fact that the present value of their Greek bond holdings was reduced due to the PSI+. CDSs covered Greek government bonds worth €2.4 billion, but as the value of these bonds was only partially reduced as a result of the PSI+, CDS sellers had to pay compensation of €1.8 billion. The amount of this compensation was fixed following an auction that was conducted on 19 March 2012 and was fully and finally settled on 27 March 2012, when compensation was paid.
28 Maturing on 24 February 2023.
29 Maturing on 24 February 2042.
30 The value of transactions recorded at the Bank of Greece's SAT includes, in addition to HDAT transactions, securities transactions and repos on other electronic markets, as well as over-the-counter transactions, since SAT serves as a depository for Greek government securities.
31 For example, according to the January-September 2011 results, these companies posted losses of about €7.5 billion (after tax and minority rights), compared with profits of €480 million in the same period of 2010. See also Chapter VII for the results of listed non-financial enterprises for the entire 2011.
32 According to Athex data, in 2011 there was a (relatively small) outflow of foreign investor funds (€262 million), compared with an outflow of €1.1 billion in 2010. Foreign investors accounted for 51% of total capitalisation in 2011, i.e. roughly the same as in 2010.

Table X.7 Fund-raising through the Athens Exchange

(million euro)

Business sector	Number of firms		Funds raised (million euro)[1]	
	January-December		January-December	
	2010	2011*	2010	2011*
Listed companies	15	12	3,755.2	3,165.2
Newly listed companies	-	-	0.0	0.0
Total	**15**	**12**	**3,755.2**	**3,165.2**
Financial sector–Banks	5	3	3,537.2	2,931.5
Non-financial sector	10	9	218.0	233.7

Sources: Athens Exchange and Bank of Greece.
* Provisional data.
1 Capital increases through public offerings and private placements. Subscriptions to the capital increase are entered on the last day of the public offering period.

support programme and a significant reduction in public debt, which were decisive for the economic outlook of the country and the domestic business climate.

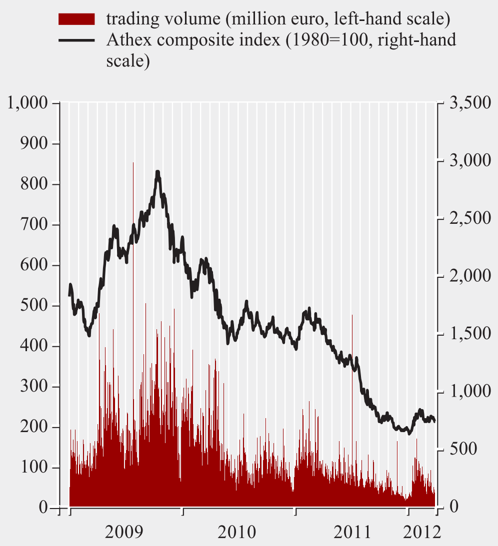
Between end-December 2010 and end-December 2011, the Athex composite index fell by 52%[33] (see Chart X.11), and the Dow Jones EURO STOXX Broad index by 18%. In the first quarter of 2012, the Athex composite index rose by 7%, slightly less than the corresponding euro area index (9%).

Turning to other Athex fundamentals, the daily value of transactions in 2011 came to €83 million, down by about 41% compared with 2010, while in the first three months of 2012 it declined further to €61 million. Total funds obtained from the stock market also declined to €3,165 million in 2011, from €3,755 million in 2010 (see Table X.7). Same as in 2010, most funds in 2011 were obtained by banks.[34]

The decline in the banking sub-index in 2011 (-79%) was stronger than that of the Athex composite index and almost double the corresponding decline of the euro area banking sub-index (-38%). This can be attributed to strong and rising pressures on Greek banks' profitability in 2011,[35] the deterioration of their loan portfolio amid adverse economic

Chart X.11 Athens Exchange: composite share price index and trading volume (January 2009 -March 2012)

(daily data)



Source: Athens Exchange.

33 The decline in the average annual level of the Athex composite index in 2011 was 32% (2010: -22%).
34 Moreover, in December 2011 two banks increased their capital by issuing preference shares in favour of the Greek State, under Law 3723/2008, as currently in force, and the relevant ministerial decisions.
35 In more detail, Athex-listed banks posted losses of €7 billion in January-September 2011 (after tax and minority rights), compared with profits of €205 million in the same period of 2010. Also see Section 8 of this chapter.

conditions, as well as occasional concerns about the impact that the evolution of the value of Greek government bonds, especially after the private sector involvement in public debt restructuring, may have on their capital base. However, in the first quarter of 2012, the increase in banking stock prices (14%) was higher than that of the Athex composite index, as such uncertainties were contained by positive developments associated with the approval of the second support programme for Greece, the recapitalisation of the banking sector and the clarification of important technical details.

7 THE MUTUAL FUNDS MARKET

In 2011, high global uncertainty and negative developments in the euro area money and capital markets had a bearing on mutual funds,[36] which declined further (for seventh year in a row). Between end-2010 and end-2011, total mutual fund assets contracted by 37.1%, to €4 billion, before recovering slightly in the first two months of 2012. Moreover, the number of mutual funds decreased (2011: 224, 2010: 230; see Table X.8).

Among mutual fund types, the largest decline in assets in 2011 was observed, as was expected, in bond funds, because of the significant fall in Greek government bond prices, and was followed by equity funds, due to the drop in stock prices in Greece and the euro area. A significant decline was also observed in the assets of other types of mutual funds (except for specialist funds, which emerged for the first time).[37]

Given these developments, at end-2011 equity funds accounted for 31% of total mutual

36 In this context, those managed by Mutual Fund Management Companies based in Greece.

37 According to a decision of the Hellenic Capital Market Commission (6/587/2 June 2011) within the framework of guidelines of competent European authorities, mutual funds are henceforth classified, according to the type of financial instruments in which they invest, as follows: (i) money market funds, (ii) bond funds, (iii) mixed funds, (iv) equity funds, and (v) specialist funds. Specialist funds seek, based on a mathematic formula, to achieve a predetermined yield to maturity.

Table X.8 Total number and value of mutual funds' assets[1]

Year	Number	Value of mutual funds' assets (million euro)
2000	269	30,978.7
2001	272	26,826.1
2002	263	25,429.2
2003	265	30,384.0
2004	262	31,628.5
2005	258	27,089.9
2006	269	22,971.0
2007	260	20,701.0
2008	269	8,385.0
2009	236	8,070.0
2010	230	6,372.0
2011	224	4,009.0

Source: Bank of Greece.
1 End-of-period levels.

fund assets, bond funds for 25%, money market funds for 19%, mixed-type funds for 13% and specialist funds for 12%. Finally, the investment behaviour of mutual funds in 2011 (according to their investment structure) did not change substantially compared with 2010.

8 SUMMARY OF DEVELOPMENTS IN THE BANKING SECTOR IN 2011

The banking sector came under strong and increasing pressures in the course of 2011. In terms of profitability, based on the economic data released for the period from January to September 2011,[38] banks and banking groups[39] recorded losses (after tax) amounting to €7.4 billion and €7.3 billion, respectively (see Table X.9). This development was mainly driven by:

– losses attributable to the original European Council agreement of 21 July 2011 on the private sector's involvement in the Greek government bond swap (PSI);

38 Owing to the extended deadline for the release of the results for 2011, exceptionally approved by the Ministry of Finance, the latest data on banks' profitability cover the period up to end-September 2011.
39 Banking group results also include subsidiaries'.

Table X.9 Financial results of Greek commercial banks and banking groups (Jan.-Sept. 2010 – Jan.-Sept. 2011)

(million euro)

	Banks			Banking groups		
	Jan.-Sept. 2010	Jan.-Sept. 2011	Change (%)	Jan.-Sept. 2010	Jan.-Sept. 2011	Change (%)
Operating income	**6,465**	**6,545**	**1.2**	**10,160**	**9,890**	**-2.7**
Net interest income	6,094	6,002	-1.5	8,807	8,436	-4.2
– Interest income	12,654	13,595	7.4	16,142	16,765	3.9
– Interest expenses	6,559	7,593	15,8	7,335	8,329	13.5
Net non-interest income	371	543	46.3	1,353	1,454	7.5
– Net fee income	857	617	-28.0	1,402	1,175	-16.2
– Income from financial operations	-617	-372	-	-324	-204	-
– Other income	131	298	127.6	275	483	75.7
Operating costs	**4,134**	**3,839**	**-7.1**	**5,909**	**5,591**	**-5.4**
Staff costs	2,480	2,279	-8.1	3,412	3,184	-6.7
Administrative costs	1,381	1,297	-6.1	2,004	1,891	-5.6
Depreciation	231	254	10.0	439	461	5.1
Other costs	42	9	-78.9	53	56	4.3
Net income (operating income less costs)	**2,331**	**2,707**	**16.1**	**4,251**	**4,299**	**1.1**
Provisions for credit risk	3,874	5,245	35.4	4,678	6,178	32.1
Provisions for the PSI[1]		5,926	-		6,264	-
Share of profit (loss) of associates			-	-12	-53	-
Pre-tax profits	**-1,542**	**-8,465**	**-**	**-439**	**-8,195**	**-**
Taxes	178	-1,052	-	439	-924	-310.5
After tax profits	**-1,720**	**-7,413**	**-**	**-878**	**-7,271**	**-**

Source: Financial statements of Greek commercial banks and banking groups.
1 Under the agreement of 21 July 2011 on the PSI.

– higher credit risk provisions made as a result of the quickly deteriorating macroeconomic environment that impacts negatively on the borrowers' financial situation; and

– weaker operating profits (i.e. net income from interest and commission fees) due to reduced banking business as a result of, among other things, economic recession.

A small positive effect on operating results was attributable to the decline recorded in operating expenses in the first nine months of 2011: 7.1% at bank level and 5.4% at banking group level year-on-year. However, this reduction is not deemed sufficient considering the depth of the Greek economy's recession and the challenges faced by the sector. Therefore, further rationalisation of operating costs, in view of the new conditions, is imperative.

Profitability will deteriorate further when the results for the year 2011 as a whole are finalised; banks will include in their financial statements the impact of the Eurogroup agreement of 21 February 2012 on the private sector's involvement in the restructuring of public debt (PSI+), as well as higher provisions against credit risk, given the increased difficulty of enterprises and households to consistently meet their debt obligations. Indicatively, at end-December 2011 the non-performing loans to total loans ratio rose to 15.9%, from 10.5% at end-December 2010. The quality of loans worsened across all types of loans, with an alarmingly higher ratio observed in housing loans and a relatively more pronounced deterioration in consumer loans. At the same time, the coverage ratio (provisions to non-performing loans) remained at low levels.

2011 saw a further increase in liquidity pressures on Greek credit institutions, which have been practically shut out of international money and bond markets since late 2009. Banks kept experiencing considerable outflows of deposits by non-financial corporations and households (€35 billion in total for the year 2011), while the value of available assets against which credit institutions can obtain funds through the Eurosystem also kept decreasing.

A positive effect was exerted on liquidity by the creation of eligible collateral, as a result of: (i) the increased total amount of guarantees (Law 3965/2011) provided by the Greek government in order to cover bank-issued bonds that will be used as collateral in Eurosystem operations, and (ii) the higher total amount of Greek government guarantees to the Bank of Greece (Legislative Act 203/14.9.2011 and Law 4031/2011) for covering the exceptional funding to credit institutions. These changes facilitated the funding of credit institutions through the regular open market operations and the marginal lending facility of the Eurosystem, on the one hand, and the exceptional funding provided through the Bank of Greece, on the other.

The impact of the credit institutions' involvement in the restructuring of public debt, the enhanced credit risk and the inability of Greek banks to access money and capital markets created the need for sizeable bank recapitalisation. As early as in summer 2011, the Bank of Greece, anticipating the risks that lie ahead, started planning in cooperation with the International Monetary Fund, the European Commission and the European Central Bank a series of actions to safeguard financial stability and secure depositors' full protection. Such actions comprised:

- meeting the credit institutions' short-term liquidity needs with exceptional funding;

- securing sufficient resources from the financial support programme to fund the Greek banking system's recapitalisation and restructuring;

- carrying out a stress test to determine the capital needs of Greek commercial banks for the period 2012-2014;[40]

40 The stress test was carried out according to the timetable and the content specified in the Memorandum of Understanding on Specific Economic Policy Conditionality of February 2012 and the relevant Law 4046/2012.

• formulating in cooperation with the government, a framework for the resolution of credit institutions.

The framework for the resolution of credit institutions

Finally, a positive step towards safeguarding the stability of the banking system is the adoption of provisions on the resolution of credit institutions.[41] The framework now allows for a selection between alternative resolution measures and provides for the financing of these measures through the Hellenic Deposit and Investment Guarantee Fund and the Hellenic Financial Stability Fund. As regards resolution measures, the Bank of Greece is now enabled to select those assets and liabilities of a credit institution that meet the requirements of article 63B of Law 3601/2007, as currently in force, and then, through an informal and confidential tender, to transfer such assets and liabilities to a sponsor credit institution. Alternatively, the Bank of Greece may recommend to the Minister of Finance the establishment of a new, interim credit institution (bridge bank), to which the selected credit institution's assets and liabilities will be transferred. In both cases (assets-liabilities transfer or bridge bank), the credit institution's authorisation shall be withdrawn.

A stake in this new credit institution shall be held by the Hellenic Financial Stability Fund, purposely created in order to restructure the institution and sell it to an interested buyer within a period of two years (extendable to two more). The funds required to implement the measure that will be finally selected shall be provided by the Hellenic Deposit and Investment Guarantee Fund (TEKE) – in which a resolution section has been formed in addition to the guarantees section – and/or by the Hellenic Financial Stability Fund.[42] Thus far and as from October 2011, the legal framework has already been activated for two credit institutions[43] and three credit institutions in the form of credit cooperatives.[44]

41 In particular, articles 9-11 of Law 4051/2012, which amend provisions of (i) Law 3864/2010 on the Hellenic Financial Stability Fund; (ii) Law 3601/2007 on the capital adequacy of credit institutions; and (iii) Law 3746/2009 on the Hellenic Deposit and Investment Guarantee Fund, in conjunction with the provisions of Law 4021/2011 on the enhanced measures for the supervision and resolution of credit institutions.

42 According to article 9 para. 12 of Law 4051/2012, the Hellenic Financial Stability Fund shall pay the amounts payable by the Hellenic Deposit and Investment Guarantee Fund in the first year after the Law's enactment.

43 Proton Bank and TBank.

44 Achaiki Cooperative Bank, Cooperative Bank of Lamia and Cooperative Bank of Lesvos-Lemnos.

Box X.1

THE OPERATION OF CERTIFIED CREDIT RATING AGENCIES IN GREECE

The negative impact of the recession heightens the need for in-depth information on the economic behaviour of borrowers, in a way that allows the best possible assessment of the credit risk that credit institutions (are called to) assume. Accurate credit risk assessment not only contributes to the stability of the banking system, but also benefits borrowers, as credit institutions are better positioned to extend credit when they know the risk involved.

Given the relatively small size of Greek enterprises and the resulting lack of credit ratings by international rating agencies, the operation of independent credit rating agencies is necessary. There are today some companies (ICAP, Hellastat, Systemic) that provide credit assessments; however, only one of them, ICAP, is certified by the competent European authority (ESMA) and authorised to operate as a credit rating agency. Furthermore, as it is also the only company approved by the Eurosystem as a rating tool provider, the credit assessments it provides are used to verify the eligibility of counterparty credit institutions' assets offered as collateral in monetary policy operations.

For a more effective functioning of the Greek market, it would be desirable to have more agencies certified. Equally important would be to enlarge their scope of analysis (e.g. ICAP rates only enterprises, excluding financial organisations and social security funds), so as to take account of natural persons' "behavioural" analysis data as well. Another positive contribution to better credit risk gauging would be to utilise information on bounced cheques, unpaid bills of exchange, terminated consumer, housing or business credit agreements, foreclosures, auction sales, as well as sanctions imposed by the Ministry of Finance for tax legislation breaches. Such data should extend over a sufficient time span, leading to higher reliability of results derived from their assessment based on special behaviour scoring models. A right step in this direction is the pilot model applied by TIRESIAS SA,[1] with encouraging results as regards its predictive power.

The development of independent credit risk assessment systems, particularly by agencies able to provide certified credit scoring, can offer valuable services to the banking system and, by extension, to the Greek economy as well.

1 The models developed by TIRESIAS SA will gradually also incorporate information related to the prevention of transaction fraud (e.g. lost or stolen ID cards and passports, so as to prevent their use in the banking system by impostors), as well as data on infringements by private insurance brokers (making use of such data could significantly contribute to the consolidation of the private insurance sector).

XI INTERNATIONAL POLICY FOR ADDRESSING CLIMATE CHANGE, GREEK PERFORMANCE IN TERMS OF GHG EMISSIONS AND REDUCTION OF AIR POLLUTION, ENVIRONMENTAL POLICY AND THE DEVELOPMENT OF RENEWABLE ENERGY SOURCES IN GREECE

1 POLICY FOR ADDRESSING CLIMATE CHANGE: INTERNATIONAL DEVELOPMENTS

1.1 THE STANCE OF THE INTERNATIONAL COMMUNITY: KEY POINTS IN THE DURBAN AGREEMENT (DECEMBER 2011)

The 17th United Nations Convention on climate change was held in Durban, South Africa from 28 November to 11 December 2011.[1] The key objective of this convention was the agreement among participating countries on how to implement the decisions taken at the previous convention held in Cancun in 2010,[2] mainly as regards the activation of the Green Climate Fund and the progress towards a global binding agreement, to achieve the agreed target of limiting the rise in the global average temperature to no more than 2°C. The importance of this convention lies in the fact that the Kyoto Protocol —the only international binding agreement to date— expires in December 2012, which means that unless countries take up commitments on the implementation of specific measures, there will be no restraint in greenhouse gas emissions. Significant difficulties arose during the convention, creating the risk of an impasse in negotiations. Major developed countries (Japan, Russia, Canada) were not willing to support EU positions, unless developing countries undertook similar commitments. On their part, developing countries pointed out that maintaining the Kyoto Protocol is a prerequisite for further negotiations, however they were not willing (e.g. China and India) to set limits on their emissions, given that developed countries (e.g. the United States) do not implement such limits. Finally, after intensive negotiations, around 190 countries agreed:

- to launch new negotiations in 2012, in order to reach a universal agreement to reduce emissions in developed and developing countries by 2015 and adopt this decision by 2020, after clarifying its exact legal nature. Moreover, the EU and other developed countries have agreed to a second commitment period of the Kyoto Protocol as of 1 January 2013 until the new agreement enters into force in 2020. In addition, the USA and most developing countries have committed to reduce their emissions by 2020 under voluntary agreements,

- to plan a Green Climate Fund that would help poor countries deal with the impact of climate change by providing €100 billion annually until 2020. The funding sources and financing pattern for this fund, however, were not determined.

1.2 OECD ENVIRONMENTAL OUTLOOK TO 2050 – CONSEQUENCES OF INACTION

On 15 March 2012, the OECD issued the "OECD Environmental Outlook to 2050: The Consequences of Inaction". According to the baseline (or "business-as-usual") scenario described in the report, unless more ambitious policies are introduced, greenhouse gas emissions would increase by 50% by 2050 and the concentration of these emissions in the atmosphere could reach 685 parts per million (ppm) CO_2, i.e. a level much higher than the 450 ppm required to prevent a rise in the average temperature of more than 2°C (according to the target set during the 2010 UN Climate Change Conference in Cancun). The projected rise will stem mainly from the 70% growth in energy-related CO_2 emissions. Moreover, gas emissions from transports are expected to double, due to the projected large demand for cars in developing countries. Thus, although most gas emissions currently originate from developed countries, a rise in emissions in the future will come from economic growth in major emerging economies.

Of course, according to the same report, technological advancement and the restructuring of production and economic growth models in emerging economies (e.g. India, Brazil, China, South Africa) will significantly improve the energy intensity of these particular

1 UNFCCC, "Report of the Conference of the Parties on its seventeenth session, held in Durban from 28 November 2011 to 11 December 2011", 15.3.2012.
2 See Bank of Greece, *Monetary Policy 2010-2011*, February 2011.

economies in the near future. However, this particular improvement at regional level shall be neutralized by a rise in global energy demand. At the same time, gas emissions from land use, changes in land use and forestry are expected to decrease over the next 30 years, and gas emissions in most emerging economies are expected to decline, as deforestation slows down.

Finally, the report highlights the need for immediate action in order to stabilise temperature rise at 2°C, as the cost of the required measures will have reached up to 5.5% of global GDP by 2050. Conversely, *delayed action up to 2020 would lead to around 50% higher costs in 2050 compared to timely action*: this is the cost of inaction. This is a crucial policy conclusion that confirms the main finding of the Stern review published in October 2006. Turning to policies required, the OECD report suggests the following:

- reform fossil fuel support policies,
- introduce regulatory instruments (e.g. carbon pricing, energy-efficiency standards in buildings),
- foster innovation, support new clean technology, etc.

1.3 THE HILLS FUEL POVERTY REVIEW FOR THE UK

Also in March 2012, an independent committee under profession John Hills, commissioned by the British Department of Energy and Climate Change to measure and propose ways to tackle fuel poverty in the UK, published its report. The report (*Getting the measure of fuel poverty: Final Report of the Fuel Poverty Review - John Hills, March 2012*) confirmed that fuel poverty is a major problem, which is only expected to get worse. It affects lower income persons/households who have to spend more on energy than the typical cost for people of middle or higher income. According to the report, the "gap" is expected to widen and targeted policy measures for addressing the core of the problem are suggested. Specifically, it highlights that interventions for improving the energy efficiency of buildings in which low-income households reside would be particularly effective.

The "Environmental, economic and social impact of climate change in Greece" report of the Climate Change Impacts Study Committee, published by the Bank of Greece in June 2011 (in Greek), writes:

"When designing strategies to combat poverty and social exclusion, policy-makers will need to take into account that the impacts of climate change will be more acute for lower-income earners (without the means to address the problems induced by climate change and, even less so, to take timely preventive measures). The adoption of adaptation or mitigation measures would require households to make certain capital expenditures today (e.g. to improve the insulation and energy efficiency of their homes, be able to use solar energy, relocate away from vulnerable coastal areas) if they want to face less expenses in the future, as opposed to a scenario where no protective action is taken. This, however, is beyond the means of poor households already facing liquidity constraints, without sufficient savings or access to bank credit. Therefore, poor households, minorities and immigrants already living in deprivation and facing significant environmental and social problems, not to mention inadequate access to social and health services, will see their situation deteriorate further in terms of housing, food, health, education and access to basic services. Equally questionable will be their ability to join energy-saving programmes, purchase advanced technology equipment and pay more for cleaner energy, as would be required under a policy for reducing greenhouse gas emissions. The poorer households thus risk losing out on the benefits from adaptation policies and measures, as well as on developments in terms of a low emissions economy, which will arise from climate change mitigation policy. The risk of a ***vicious cycle*** *of poverty, lack of access to energy and technologies, and limited protection against losses*

induced by climate change is therefore real and is expected to lead to an exacerbation of phenomena commonly referred to in the literature as "energy poverty" and "climate poverty".

It is therefore positive that the Hills report markedly promotes the concerns regarding the methodology used to measure fuel poverty and the most effective way for addressing it.

2 RECENT DATA ON GHG EMISSIONS IN THE EU AND GREECE

In 2009 overall greenhouse gas emissions in EU-27, excluding "land use, change of land use and forestry", as well as emissions from aviation and shipping stood at 4,615 million tonnes CO_2 equivalents, down by 17% compared to 1990. In the same year, greenhouse gas emissions in EU-15 was 3,724 million tonnes (13% less than in 1990), representing 81% of total emissions (against 76% in 1990). Among the older Member Sates, Germany and the UK were responsible for the largest part of greenhouse gas emissions in the EU in 2009 (29% of total EU-27 emissions and 40% of EU-15), followed by Italy and France (11% each). The smallest gas emission contributors are Luxembourg (0.3%), Sweden, Denmark and Ireland (1%), which all had similar shares in total EE-15 emissions (see Table XI.1).

Table XI.1 shows that countries which —due to their size— contribute more to overall greenhouse gas emissions are better-performing in terms of emissions per capita or per unit of GDP.[3] By contrast Luxemburg and Finland —which are small contributors— are among those countries with the highest per capita emissions. Looking at the course of this particular index through time, almost all old Member States (with the exception of Greece, Spain and Portugal) have improved. As concerns GHG emissions per unit of GDP, there was a reduction for all EU-15 countries in 2009 compared to 1990. Sweden is the best scorer (0.02 kg CO_2 equivalents/unit of GDP) and **Greece is the worst (0.61 kg CO_2 equivalents/unit of GDP), though it has to be noted that it has improved significantly since 1990**.

As regards the breakdown of the six greenhouse gases in EU-27 in 2009, carbon dioxide (CO_2) accounts, by far, for the largest share (82%), followed by methane (CH_4) and nitrous oxide (N_2O) with much smaller shares of 9% and 8% respectively. Looking at the emission trends for these greenhouse gases, CO_2 emissions were 14% lower than in 1990 (at 3,765 million tonnes in 2009), while in the same year, methane (CH_4) and nitrous oxide (N_2O) emissions stood at 418 and 358 million tonnes CO_2 equivalents (32% and 33% below 1990 levels respectively). As for the sources of GHG emissions (see Table XI.2), energy related activities were the largest contributors, with 3,660 million tonnes CO_2 equivalents (79% in EU-27 in 2009). The second largest source of greenhouse gas emissions is agriculture, with a share of 10% (476 million tonnes CO_2 equivalents), followed by industrial processes and waste, with shares of 7% and 3% (321 and 147 million tonnes CO_2 equivalents respectively).

As regards the evolution of greenhouse gas emissions vis-à-vis the targets set under the Kyoto Protocol, it is worth noting that most EU-15 Member States have met their country-specific targets (see Table XI.3). Specifically, the United Kingdom, Sweden and Belgium have already exceeded their Kyoto commitments, while Spain and Austria are the countries farthest off-track. As for **Greece, the Kyoto Protocol target is to limit the rise in greenhouse gas emissions to 25% over 2008-2012 compared to base year emissions. Greece's GHG emissions were 18.6% higher in 2008 relative to 1990 (i.e. on track), and further improved to 14.5% in 2009**.

3 This can be due to differences in terms of energy efficiency of power plants and other factories, energy saving of households and enterprises, the deregulation of the energy market etc.

Table XI.1 Greenhouse gas emissions[1] in EU-15 and EU-27

	Greenhouse gas emissions (in million tonnes of CO_2 equivalents)			Shares in EU-15 total (%)			Greenhouse gas emissions per capita (in tonnes of CO_2 equivalents)			Greenhouse gas emissions per unit of GDP (in kg of CO_2 equivalents)		
	1990	**2000**	**2008**	**1990**	**2000**	**2008**	**1990**	**2000**	**2008**	**1990**	**2000**	**2009**
Austria	78	80	80	1.8	1.9	2.1	10.2	10.0	9.6	0.45	0.35	0.31
Belgium	143	145	124	3.4	3.5	3.3	14.4	14.2	11.5	0.64	0.52	0.39
Denmark	68	68	61	1.6	1.6	1.6	13.2	12.8	11.1	0.06	0.05	0.04
Finland	70	69	66	1.7	1.7	1.8	14.2	13.3	12.4	0.62	0.50	0.41
France	563	567	517	13.2	13.7	13.9	10.0	9.4	8.0	0.43	0.36	0.30
Germany	1.248	1.042	920	29.3	25.2	24.7	15.8	12.7	11.2	0.67	0.48	0.40
Greece	*104*	*126*	*123*	*2.4*	*3.0*	*3.3*	*10.3*	*11.6*	*10.9*	*0.83*	*0.80*	*0.61*
Ireland	55	68	62	1.3	1.6	1.7	15.6	18.0	13.9	0.86	0.53	0.38
Italy	519	552	491	12.2	13.3	13.2	9.2	9.7	8.2	0.44	0.40	0.35
Luxembourg	13	10	12	0.3	0.2	0.3	34.3	23.0	24.3	0.84	0.39	0.37
Netherlands	212	213	199	5.0	5.1	5.3	14.2	13.4	12.1	0.60	0.44	0.37
Portugal	59	81	75	1.4	2.0	2.0	5.9	7.9	7.1	0.54	0.55	0.48
Spain	283	380	368	6.6	9.2	9.9	7.3	9.5	8.0	0.48	0.49	0.39
Sweden	72	69	60	1.7	1.7	1.6	8.5	7.8	6.5	0.04	0.03	0.02
United Kingdom	776	670	566	18.2	16.2	15.2	13.6	11.4	9.2	0.92	0.62	0.45
EU-15	**4,265**	**4,140**	**3,724**	**100.0**	**100.0**	**100.0**	**14.4**	**13.5**	**11.5**	**0.68**	**0.43**	**0.35**
EU-27	**5,589**	**5,086**	**4,615**				**11.9**	**10.5**	**9.2**	**0.67**	**0.50**	**0.41**

Source: Source: European Environment Agency, *"Annual European Union greenhouse gas inventory 1990-2009 and inventory report" 2011*, 27 May 2011.
1 Excluding international aviation and maritime transport as well as the "land use, land-use change and forestry" sector.

Table XI.2 Greenhouse gas emissions by source: EU-27, EU-15 and Greece

(in million tonnes of CO_2 equivalents)

	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EU-27												
Energy	4,284	4,044	3,984	4,071	4,043	4,116	4,113	4,085	4,073	4,010	3,934	3,660
Industrial processes	463	441	391	377	372	385	398	403	400	411	387	321
Solvents and other product use	17	14	14	14	13	13	13	13	13	13	12	11
Agriculture	610	528	515	507	503	496	495	490	487	485	487	476
Waste	214	205	182	176	174	168	162	159	157	152	149	147
Total [1]	*5,589*	*5,232*	*5,086*	*5,145*	*5,105*	*5,177*	*5,181*	*5,149*	*5,129*	*5,071*	*4,969*	*4,615*
EU-15												
Energy	3,274	3,200	3,252	3,323	3,313	3,361	3,363	3,342	3,317	3,258	3,196	2,973
Industrial processes	353	351	309	298	295	303	311	309	302	306	290	250
Solvents and other product use	14	12	12	12	11	11	10	11	11	10	10	9
Agriculture	441	419	419	410	404	399	398	393	387	388	387	379
Waste	184	173	148	142	138	132	126	123	121	117	115	112
Total [1]	*4,265*	*4,155*	*4,140*	*4,185*	*4,162*	*4,205*	*4,208*	*4,178*	*4,137*	*4,080*	*3,998*	*3,724*
Greece												
Energy	77	81	97	99	99	103	103	107	105	108	104	100
Industrial processes	10	12	14	13	13	13	14	14	12	12	11	9
Solvents and other product use	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Agriculture	11	10	10	10	10	10	10	10	9	10	9	9
Waste	5	5	5	5	4	4	4	4	4	4	4	4
Total [1]	*104*	*109*	*126*	*127*	*127*	*131*	*131*	*134*	*131*	*133*	*129*	*123*

Sources: European Environment Agency, *Annual European Community greenhouse gas inventory 1990-2009 and inventory report 2011*, 27 May 2011; Ministry of Environment, *Energy and Climate change, Annual inventory submission under the convention and the Kyoto Protocol for greenhouse and other gases for the years 1990-2009*, April 2011.
1 Excluding “land use, land use change and forestry” sector.

Table XI.3 Greenhouse gas emissions[1] and the Kyoto Protocol targets

	1990	Kyoto Protocol (base year)[2]	2009	Change 2009 over 2008	Change 2009 over 1990	Change 2009 over base year	Kyoto targets 2008-2012
	(in million tonnes of CO_2 equivalents)			(percentage changes)			
Austria	78.2	79.0	80.1	-7.9	2.4	1.3	-13.0
Belgium	143.3	145.7	124.4	-7.9	-13.2	-14.6	-7.5
Denmark	68.0	69.3	61.0	-4.2	-10.3	-12.0	-21.0
Finland	70.4	71.0	66.3	-5.8	-5.7	-6.6	0.0
France	562.9	563.9	517.2	-4.1	-8.1	-8.3	0.0
Germany	1,247.9	1,232.4	919.7	-6.3	-26.3	-25.4	-21.0
Greece	*104.4*	*107.0*	*122.5*	*-4.7*	*17.4*	*14.5*	*25.0*
Ireland	54.8	55.6	62.4	-8.0	13.8	12.2	13.0
Italy	519.2	516.9	491.1	-9.3	-5.4	-5.0	-6.5
Luxembourg	12.8	13.2	11.7	-4.7	-8.9	-11.3	-28.0
Netherlands	211.9	213.0	198.9	-2.8	-6.1	-6.6	-6.0
Portugal	59.4	60.1	74.6	-4.3	25.5	24.0	27.0
Spain	283.2	289.8	367.5	-9.2	29.8	26.8	15.0
Sweden	72.5	72.2	60.0	-5.6	-17.2	-16.9	4.0
United Kingdom	776.1	776.3	566.2	-8.7	-27.0	-27.1	-12.5
EU-15	**4,264.9**	**4,265.5**	**3,723.7**	**-6.9**	**-12.7**	**-12.7**	**-8.0**

Source: European Environment Agency, *Annual European Union greenhouse gas inventory 1990-2008 and inventory report 2011*, 27 May 2011.
1 Total emissions excluding the "land use, land use change and forestry" sector.
2 For CO_2, CH_4 and N_2O, all Member States chose 1990 as their base year. For HFC, PFC and SF_6, 12 Member States chose 1995 as their base year, while Austria, France and Italy chose 1990.

3 REPORT OF THE EUROPEAN ENVIRONMENT AGENCY ON AIR POLLUTION: POSITIVE SCORES FOR GREECE

In the context of monitoring the progress towards meeting the 2010 national emission ceilings set in the relevant EU Directive and in addressing air pollution, the European Environment Agency recently published a report on EU-27 gas emissions for 2010.[4] It covers four main air pollutants: sulphur dioxide, nitrogen oxides, non-methane volatile organic compounds and ammonia, which can cause respiratory problems and contribute to the acidification of soil and surface water. Eleven Member States (Austria, Belgium, Denmark, France, Germany, Ireland, Luxembourg, Malta, Netherlands, Spain and Sweden) exceeded their respective national emission ceilings. Most exceedances were registered in nitrogen oxides and the main sector behind it is road transport (contributing approximately 40% of total EU-27 emissions). This is because the road transport sector has grown in the past twenty years to a degree that eliminates the positive effects of improved vehicle efficiency.

Significant progress has been achieved in Greece. 2010 emissions were: 315.5 kilotonnes of nitrogen oxides (against the target of 344 kilotonnes), 183.5 kilotonnes of volatile organic compounds (against the target of 261 kilotonnes), 265.6 kilotonnes of sulphur dioxide (against the target of 523 kilotonnes) and 64.6 kilotonnes of ammonia (against the target of 73 kilotonnes). **However, lower emissions were largely due to the financial recession, which has led to a decrease in industrial production and**

4 European Environment Agency, Press release 22.2.2012.

electricity consumption and to reduced need for heating and transport.

4 RECENT LEGISLATION AND POLICY ON ISSUES RELATED TO THE ENVIRONMENT, ENERGY AND CLIMATE CHANGE

• Law 4042/2012 on the protection of the environment through criminal law —Transposition into domestic law of Directive 2008/99/EC – Framework for the production and the treatment of waste— Transposition into domestic law of Directive 2008/98/EC

Law 4042/2012 *("Protection of the environment through criminal law – Transposition into domestic law of Directive 2008/99/EC – Framework for waste generation and management – Transposition into domestic law of Directive 2008/99/EC – Arrangement of issues related to the Ministry of the Environment, Energy and Climate Change")* enhances the interventionist role of the State in shaping and implementing effective environmental policies and also prevents actions that could prove harmful for the environment.

More specifically, the provisions included in section A (transposition of Directive 2008/99/EC)[5] introduce dissuasive, proportionate and effective penalties through criminal law for environmentally harmful activities which typically cause or are likely to cause environmental pollution or deterioration. More specifically, the relevant provisions include:

• adopting specific measures to enhance the role of *environmental inspectors* with investigating powers, in order to prevent and avert the creation (and the extent) of environmental offences,

• broadening the scope of other criminal laws to include crimes against the environment and more particularly —as regards environmental offences committed by criminal groups— the deprivation of income deriving from activities against the environment and the waiving of privacy protection in communications and

• tightening of existing regulations as regards the criminalisation of environmental offences (Article 28 Law 1650/1986).[6]

The provisions included in section B (transposition of Directive 2008/98/EC)[7] introduce measures for the overall regulation of waste management in order to effectively protect the environment and human health, and also save natural resources by re-using and recycling waste and by recovering materials and energy from waste. More specifically:

• new concepts are introduced to domestic legislation and the definitions of waste, re-use, recycling, recovery and disposal are clarified,

• waste prevention strategies are put on track and waste management tasks are prioritised, while waste recovery and the re-use of recovered material is encouraged, all with the view to sustaining natural resources and protecting human health and the environment,

• the *European List of Waste* is fully adopted, in order to avoid misinterpretations,

• the *extended responsibility of the producer is introduced* (Article 25), meaning that the producer is responsible to handle all waste resulting from the production process. This responsibility is divided among all actors involved (waste producers, holders, brokers and dealers), while administrative and criminal sanctions are provided for in cases of infringement,

5 Directive 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law provides for a minimum common framework of penal rules against environmental offences across the European Union, by introducing at the same time common principles and approaches for all Member States.

6 It should be noted that, apart from Directive 2008/99/EC, many other EU Directives on the environment have been transposed into domestic legislation by virtue of Law 1650/1986.

7 Framework Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste provides setting up common rules for the management of all types of waste for EU Member States as a whole (including hazardous waste).

- the National Waste Management Plan (drawn up by the Ministry of the Environment, Energy and Climate Change) is adopted, defining the strategy, policies and objectives of waste management at national level; Regional Management Plans are also adopted, regarding the management of waste generated at regional level,

- continuous inspections and audits are introduced, through fully distinguished roles among central and regional administration,

- documenting and monitoring the generation of waste are introduced, while the electronic registering of businesses, licenses and controls is established, in order to ensure transparency and accessibility to all interested parties.

Finally, sections C and D of the Law include amending provisions primarily related to issues within the competences of the Ministry of the Environment, Energy and Climate Change. These provisions regard land use, urban planning and urban renovation, the remediation of existing illegal landfills and the regulation of energy issues, i.e. the introduction of a single tax (two euro per MWh of produced electricity) on lignite-fired electricity plants.

- **Law 4062/2012 including the "HELIOS" project, promotion of the use of energy from renewable energy sources (transposition of Directive 2009/28/EC) and sustainability criteria for biofuels and bioliquids (transposition of Directive 2009/30/EC)**

Greece aspires to become the first EU Member State to implement large-scale interstate transfer of energy produced from RES.[8] This can be achieved through the HELIOS project in the context of Law 4062 enacted at end-March. The project envisages the development, generation and export of electricity produced from solar power across the Greek territory and includes, among other things, the establishment of the body that will undertake the full implementation of the project. Article 12 of the law provides for the free transfer of state property to the aforementioned body or the direct letting of property owned by legal entities in public law or by local authorities. In this context, almost 0,1% of the territory is expected to be reserved for the installation of reflectors, while interested investors will be informed through geospatial information systems. The implementation of the project is supported by a prioritisation system for the relevant tenders in order to ensure a clear, transparent and rapid licensing process.

The HELIOS project unfolds into energy, environmental and economic aspects: low carbon economy, the single European market for electric energy and the exploitation of the country's comparative advantages,[9] dynamic entry of private investors in domestic electricity production, creation of new jobs and fiscal relief. It should however be noted that since this is a large-scale project involving ambitious and heterogeneous targets, it is possible —under certain negative conditions— that its massive potential is compromised. Some of the crucial factors are the technical capacity of the existing energy gird for the transfer of such massive amount of electric energy[10] and the price in which the European counterparties will be buying the energy transferred.[11] Moreover, it is expected that other factors shall also play an important role, such as the degree of mobilisation of domestic and foreign private capital amid the crisis and the credit crunch, as well as the response of the competent authorities to the need for rapid and transparent realisation of investment requests. Finally, other developmental and environmental issues have to be taken into consideration, e.g. the possibility to

8 Directive 2009/28/EC, which was transposed into Greek legislation by virtue of the same law.
9 According to a speech delivered by the Prime Minsiter at a conference by the Ministry of the Environment, Energy and Climate Change (3.4.2012), the exact same investment in a Central European country would incur an additional cost of €6 billion, given that our country has 50% higher solar potential.
10 According to the competent Minister, the initial export capacity of the existing grids reaches 2,000-3,000 MW compared to the suggested amount of 10,000 MW, which is expected to be serviced with the integration of Greece in the European smart grids.
11 According to statements of the German Deputy Minister of Energy, the price of electricity from photovoltaic systems currently applying in Greece would be disproportionately high for German consumers.

domestically produce the capital equipment required for the project and the prevention of an excessive burden on those areas where the plants will be installed.

- **Greek Energy Roadmap to 2050**

The National Energy Strategy Committee of the Ministry of the Environment, Energy and Climate Change designed and presented in March 2012 the Greek Energy Roadmap to 2050. According to it, the energy landscape of the country will unfold around a significant reduction in the use of oil products, a sharp increase in the production of electricity from renewable energy sources (RES) and the use of biofuels in transport to a share of 31%-34% by 2050. The Energy Roadmap examines three alternative scenarios:

(i) the *Existing Policies* scenario, according to which there is a moderate improvement in RES penetration and energy savings, but not enough to meet national and European targets,

(ii) the *Maximisation of RES Measures* scenario, according to which RES penetration reaches 100% in electricity generation and

(iii) the *Minimum Cost of Environmental Measures* scenario, according to which RES penetration in electricity generation is linked with the minimum investment cost.

In any case, high leveraged investment funds in RES are needed, together with a timely technological planning of the Greek energy system.

ANNEX

ANNUAL ACCOUNTS FOR THE YEAR 2011

AUDITOR'S REPORT
REPORT OF THE GENERAL COUNCIL

CONTENTS

BALANCE SHEET AS AT 31 DECEMBER 2011

EIGHTY FOURTH YEAR

(in euro)

ASSETS	31.12.2011	31.12.2010
1. Gold and gold receivables	**5,770,281,682**	**5,005,114,533**
2. Claims on non-euro area residents denominated in foreign currency	**982,306,649**	**1,009,983,571**
2.1 Receivables from the International Monetary Fund (IMF)	942,163,589	908,925,790
2.2 Balances with banks and security investments, external loans and other external assets	40,143,060	101,057,781
3. Claims on euro area residents denominated in foreign currency	**1,018,555,147**	**283,797,006**
3.1 General government	290,508,741	200,915,553
3.2 Other claims	728,046,406	82,881,453
4. Claims on non-euro area residents denominated in euro	**113,867**	**165,813**
4.1 Balances with banks, security investments and loans	113,867	165,813
4.2 Claims arising from the credit facility under ERM II	0	0
5. Lending to euro area credit institutions related to monetary policy operations denominated in euro	**76,159,500,000**	**97,668,800,000**
5.1 Main refinancing operations	15,177,500,000	18,023,000,000
5.2 Longer-term refinancing operations	60,942,000,000	78,382,800,000
5.3 Fine-tuning reverse operations	0	1,263,000,000
5.4 Structural reverse operations	0	0
5.5 Marginal lending facility	40,000,000	0
5.6 Credits related to margin calls	0	0
6. Other claims on euro area credit institutions denominated in euro	**71,745,340**	**71,609,150**
7. Securities of euro area residents denominated in euro	**21,149,321,189**	**23,860,877,515**
7.1 Securities held for monetary policy purposes	7,766,490,399	4,898,275,295
7.2 Other securities of euro area residents denominated in euro	13,382,830,790	18,962,602,220
8. General government long-term debt denominated in euro	**6,659,874,462**	**6,867,002,312**
9. Intra-Eurosystem claims	**1,632,798,971**	**1,600,050,638**
9.1 Participating interest in the ECB	500,888,380	468,140,047
9.2 Claims equivalent to the transfer of foreign reserves to the ECB	1,131,910,591	1,131,910,591
9.3 Claims related to the allocation of euro banknotes within the Eurosystem (net)	0	0
9.4 Net claims related to transactions with the ESCB (TARGET2)	0	0
9.5 Other claims within the Eurosystem (net)	0	0
10. Items in course of settlement	**317,653**	**415,701**
11. Other assets	**54,991,468,016**	**2,272,489,005**
11.1 Coins	72,132,824	69,322,438
11.2 Tangible and intangible fixed assets	827,039,091	755,550,905
11.3 Other financial assets	29,104,193	29,172,193
11.4 Off-balance-sheet instruments revaluation differences	7,256,329	1,653,134
11.5 Accruals and prepaid expenses	1,203,167,522	988,458,366
11.6 Sundry	52,852,768,057	428,331,969
TOTAL ASSETS	**168,436,282,976**	**138,640,305,244**

OFF-BALANCE-SHEET ITEMS	31,12,2011	31,12,2010
1. Greek government securities relating to the management of the "Common capital of legal entities in public law and social security funds" according to Law 2469/97	23,415,359,594	22,599,433,438
2. Greek government securities and other securities relating to the management and custody of funds of public entities, social security funds and private agents	6,745,993,739	9,408,108,799
3. Assets eligible as collateral for Eurosystem monetary policy operations and intra-day credit	142,876,476,764	162,000,732,695
4. Other off-balance-sheet items	106,545,923,428	10,870,038,657
TOTAL OFF-BALANCE-SHEET ITEMS	**279,583,753,525**	**204,878,313,589**

Notes:

1 Under Article 54A of the Bank's Statute, the financial statements of the Bank of Greece are drawn up in accordance with the accounting principles and rules established by the European Central Bank (ECB) and applying to all members of the European System of Central Banks (ESCB).

2 The Bank's key for subscription to the ECB's capital fully paid up by all 17 National Central Banks of the Eurosystem is 2,80818%.

3 Claims/liabilities denominated in euro or foreign currency are broken down into claims on/liabilities to euro area residents and non-euro area residents.

(in euro)

LIABILITIES	31.12.2011	31.12.2010
1. Banknotes in circulation	**22,957,704,380**	**21,748,281,800**
2. Liabilities to euro area credit institutions related to monetary policy operations denominated in euro	**4,703,006,264**	**10,528,376,123**
2.1 Current accounts (covering the minimum reserve system)	2,506,356,264	3,303,376,123
2.2 Deposit facility	1,179,500,000	7,165,000,000
2.3 Fixed-term deposits	0	60,000,000
2.4 Fine-tuning reverse operations	0	0
2.5 Deposits related to margin calls	1,017,150,000	0
3. Other liabilities to euro area credit institutions denominated in euro	**0**	**0**
4. Liabilities to other euro area residents denominated in euro	**5,553,155,243**	**2,339,465,608**
4.1 General government	3,838,270,484	781,941,428
4.2 Other liabilities	1,714,884,759	1,557,524,180
5. Liabilities to non-euro area residents denominated in euro	**1,041,850,236**	**766,281,837**
6. Liabilities to euro area residents denominated in foreign currency	**16,178,298**	**22,321,537**
7. Liabilities to non-euro area residents denominated in foreign currency	**2,268**	**56,827**
7.1 Deposits and other liabilities	2,268	56,827
7.2 Liabilities arising from the credit facility under ERM II	0	0
8, Counterpart of special drawing rights allocated by the IMF	**928,426,952**	**905,349,233**
9. Intra-Eurosystem liabilities	**123,244,992,854**	**95,054,832,880**
9.1 Liabilities related to promissory notes backing the issuance of ECB debt certificates	0	0
9.2 Net liabilities related to the allocation of euro banknotes within the Eurosystem	18,437,110,570	7,921,552,125
9.3 Net liabilities arising from balances of TARGET2 accounts	104,750,000,738	87,088,090,137
9.4 Other liabilities within the Eurosystem (net)	57,881,546	45,190,618
10. Items in course of settlement	**15,074,984**	**23,305,724**
11. Other liabilities	**1,159,632,924**	**787,477,099**
11.1 Off-balance-sheet instruments revaluation differences	2,889	1,719
11.2 Accruals and income collected in advance	181,090,409	114,941,633
11.3 Sundry	978,539,626	672,533,747
12. Provisions	**3,951,100,114**	**2,385,419,686**
13. Revaluation accounts	**4,049,716,285**	**3,263,692,564**
14. Capital and reserves	**815,442,174**	**815,444,326**
14.1 Capital	111,243,362	111,243,362
14.2 Ordinary reserve	111,243,362	111,243,362
14.3 Extraordinary reserve	84,500,000	84,500,000
14.4 Special reserve from the revaluation of land and buildings	507,247,856	507,247,856
14.5 Other special reserves	1,207,594	1,209,746
TOTAL LIABILITIES	**168,436,282,976**	**138,640,305,244**

4 Account balances related to monetary policy operations are disclosed under distinct items.

5 Gold has been valued at the price provided by the ECB as at 30 December 2011: 1,216.864 per fine oz, compared with 1,055.418 as at 31 December 2010.

6 Claims/liabilities denominated in foreign currency have been converted into euro using the euro foreign exchange reference rates of the ECB as at 30 December 2011.

7 Marketable securities (other than held-to-maturity) are valued at the mid-market prices of 30 December 2011. Marketable securities classified as held-to-maturity and non-marketable securities are valued at amortised cost subject to impairment. In financial year 2011 no impairment losses incurred.

8 Fixed assets are valued at cost, with the exception of land and buildings which are valued at market prices determined by independent appraisers, less depreciation.

9 From 2005 onwards, depreciation of buildings is calculated at a rate of 2.5% over their expected life (40 years).

10 "Other off-balance-sheet items" include a promissory note of €20.8 billion (SDR 17.5 billion) issued by the Greek government for the total amount of the loan received from the IMF until 31 December 2011.

11 In 2011 the assets and liabilities of the former main and supplementary pension funds, were included in the Bank's financial statements (Law 3863/2010 Article 64).

12 Certain items of the profit and loss account for the year 2010 have been reclassified to ensure comparability with the respective items of the year 2011.

PROFIT AND LOSS ACCOUNT FOR THE YEAR 2011

(in euro)

	2011	2010
1. Net interest income	**1,468,721,829**	**825,890,005**
1.1 Interest income	2,930,940,084	1,741,334,930
1.2 Interest expense	-1,462,218,255	-915,444,925
2. Net result of financial operations, write-downs and risk provisions	**33,468,983**	**50,321,799**
2.1 Realised gains arising from financial operations	33,468,983	50,321,799
2.2 Write-downs on financial assets and positions	-299,303	-21,326,568
2.3 Transfer from provisions for foreign exchange rate, interest rate, credit and gold price risks	299,303	21,326,568
3. Net income from fees and commissions	**98,293,953**	**141,548,446**
3.1 Fees and commissions income	100,360,667	143,186,356
3.2 Fees and commissions expense	-2,066,714	-1,637,910
4. Income from equity shares and participating interests	**23,770,587**	**12,288,700**
5. Net result of pooling of monetary income	**-43,398,113**	**1,834,971**
6. Other income	**13,938,443**	**12,538,894**
Total net income	**1,594,795,682**	**1,044,422,815**
7. Staff costs and pensions	**-286,055,899**	**-319,516,458**
8. Administrative and other expenses	**-47,018,524**	**-48,106,674**
9. Depreciation of tangible and intangible fixed assets	**-13,642,905**	**-13,481,729**
10. Provisions	**-1,151,441,512**	**-472,865,662**
Total expenses	**-1,498,158,840**	**-853,970,523**
PROFIT FOR THE YEAR	**96,636,842**	**190,452,292**

Note: *Item 5 "Net result of pooling of monetary income", includes amounts regarding the partial release of the provision of €149,522,606 against counterparty risks related to the monetary policy operations of the Eurosystem, first established in 2008 (2011: €32,792,789, 2010: €47,025,589).*

DISTRIBUTION OF NET PROFIT

(Article 71 of the Statute)

(in euro)

	2011	2010**
Dividend €0.67 per share (number of shares 19,864,886)*	13,309,473	13,309,473
Extraordinary reserve	0	12,000,000
Additional dividend	0	25,943,542
Tax payment on dividends (tax rate 20%, article 14, paragraphs 9 and 10, Law 3943/2011)	3,327,369	12,395,689
To the Government	80,000,000	126,803,588
	96,636,842	**190,452,292**

* *The total gross dividend for financial year 2011 amounts to €0.8375 per share compared to €2.60 in the previous year. Dividends are subject to withholding tax of 25% in accordance with article 14 of Law 3943/2011 (paragraphs 1 and 2).*

** *The distribution of profit for 2010 is disclosed as conducted according to Law 3943, which was published in 31.3.2011, after the publication of the relevant financial statements (14.3.2011).*

Athens, 19 March 2012

THE GOVERNOR

GEORGE A. PROVOPOULOS

THE DIRECTOR OF THE ACCOUNTS DEPARTMENT

CHRISTOS K. PAPAKONSTANTINOU

To the Shareholders of the BANK OF GREECE S.A.

Report on the Financial Statements

We have audited the accompanying financial statements of the BANK OF GREECE S.A. ('the Bank'), which comprise the Balance Sheet as at December 31, 2011, the income statement, the statement of profit distribution for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with the accounting principles prescribed by the European Central Bank (ECB) as adopted by the Bank in article 54A of its Statute, and note 12 in the financial statements concerning the method used to provide for interest rate, foreign exchange rate, credit, gold price and operating risk, and the Accounting Standards prescribed by Greek legislation, and for such internal control as Management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements, and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Basis for Qualified Opinion

From our audit it results that the balance sheet item "Provisions" amounting to €1,939 million includes provisions for pensions and other personnel benefits amounting to €1,465 million (31 December 2010: €1,465 million) and provisions treated as reserves amounting to €474 million arising from the incorporation in the Bank, in the current year, of the former pension funds in relation to the main and auxiliary pensions, for its personnel, for which we were unable to obtain audit evidence concerning their calculation and consequently we are unable to evaluate the adequacy of such provision.

Qualified Opinion

In our opinion, except for the possible effects of the matter described in the Basis for Qualified Opinion paragraph, the financial statements present fairly, in all material respects, the financial position of the BANK OF GREECE S.A. as at December 31, 2011, and of its financial performance for the year then ended in accordance with the accounting principles prescribed by the European Central Bank as adopted by the Bank in article 54A of its Statute and note 12 in the financial statements concerning the method used to provide for interest rate, foreign exchange rate, credit, gold price and operating risk, and the Accounting Standards prescribed by Greek legislation.

Emphasis of Matter

Without any further prejudice in our opinion, we refer to note 7 of the financial statements of the Bank and we note the fact that for all of the Greek Government Bonds held by the Bank in its securities portfolio that have been classified as held to maturity, from the yearly impairment test carried out by the ECB and the Bank it showed that there is no need for the provision of impairment losses.

Report on Other Legal and Regulatory Requirements

We confirm the reconciliation and correspondence of the information given in the Report of the Governor with regard to the income statement for the year ended 2011 with the attached financial statements, according to articles 43a and 37 of the Law 2190/1920.

Athens, 19 March 2012

The Certified Auditors - Accountants

Christodoulos Seferis
(Registration no 23 431)

Sofia Kalomenides
(Registration no 13 301)

11th klm National Road Athens Lamia
144 51 Metamorphosi Attiki

Ernst & Young (Hellas) S,A.
Certified Auditors Accountants
(Registration no 107)
ERNST & YOUNG

NOTES ON THE ANNUAL ACCOUNTS

ACCOUNTING POLICIES

General principles regarding the preparation of the Bank's accounts

The annual accounts of the Bank of Greece, under Article 54A of its Statute, are prepared in accordance with the accounting rules and principles applicable to the European System of Central Banks, as set out by the European Central Bank (ECB) in its Guideline ECB/2010/20 of 11 November 2010, as amended by Guideline ECB/2011/27 of 21 December 2011.

These rules and principles are based on generally accepted international accounting standards and have been designed to best reflect the needs arising from the specific status of the national central banks (NCBs) of the Eurosystem.

Any issues that are not covered by the aforementioned rules or ECB guidelines or are governed by non-mandatory provisions are to be treated either in accordance with ECB recommendations or in accordance with the Bank's Statute and Law 2190/1920 on sociétés anonymes.

Main accounting principles

The main accounting principles that apply to the Eurosystem (i.e. the ECB and the euro area NCBs, including the Bank of Greece) are the following:

- ***Transparency:*** accounting and financial reporting must reflect the Bank's real financial situation.

- ***Prudence:*** Unrealised valuation gains on gold, financial instruments in foreign currency and securities are not recognised as income in the Profit and Loss Account, but are transferred directly to revaluation accounts. By contrast, unrealised valuation losses at the year-end in excess of previous unrealised valuation gains registered in revaluation accounts, are recognised as expenses and are taken to the Profit and Loss account.

- ***Post-balance-sheet events:*** Assets and liabilities are adjusted for events that occurred between the annual balance sheet date and the date on which the financial statements were approved, if such events materially affect the condition of assets and liabilities on the balance sheet date.

- ***Materiality and non-deviation from accounting rules.***

- ***Going concern basis:*** Accounts are prepared on a going concern basis.

- ***The accruals principle:*** Income and expenses are recognised in the accounting period in which they were earned or incurred and not in the period in which they were received or paid.

- ***Consistency and comparability:*** The criteria for balance sheet valuation and income recognition are applied consistently to ensure comparability of data in financial statements.

Accounting approaches

- Financial transactions denominated in euro are recorded on value date in accordance with the cash approach.

- Foreign exchange transactions, financial instruments denominated in foreign currency and related accruals are recorded using the economic approach, according to which:

– Transactions are recorded as off-balance sheet (memo) items on the trade/transaction date.

– On settlement/value date, the off-balance sheet booking entries are reversed and the transactions are booked on balance sheet accounts.

– In line with the economic approach, foreign currency positions, realised gains and losses arising from net sales and the calculation of average cost are affected by the trade date.

– Interest, premium or discount accrued in relation to financial instruments denominated in foreign currency is calculated and booked on a daily basis and the foreign currency position is affected commensurately.

Balance sheet valuation rules

- Assets and liabilities in foreign currency and gold are converted into euro at the exchange rate prevailing on the balance sheet date, as derived from the ECB's daily quotation of reference exchange rates.

- Income and expenses are converted into euro at the exchange rate prevailing on the trade date.

- No distinction is made between the price and currency revaluation differences for gold. Instead, a single gold valuation is accounted for on the basis of the price in euro per fine ounce of gold, which is derived from the exchange rate of the euro against the US dollar on the balance sheet date.

- The revaluation of foreign exchange assets and liabilities, including on-balance-sheet and off-balance-sheet instruments, is performed on a currency-by-currency basis.

- Marketable debt securities, other than those held to maturity, are valued at the average market prices prevailing on the balance sheet date according to their ISIN code. For the financial year ending 31 December 2011, the average market prices of 30 December 2011 were used.

- Marketable debt securities held to maturity and various holdings are valued at amortised cost and are subject to impairment tests.

- Debt securities held to maturity for monetary policy purposes are valued at amortised cost and are subject to impairment tests, which are harmonised across the Eurosystem.

Income recognition

- Realised gains and losses arising from the sale of foreign exchange, gold and securities are taken to the Profit and Loss Account. Such gains and losses are calculated using the average cost of the respective asset on the date they are realised.

- Unrealised gains (revaluation gains) are not recognised as income, but are transferred directly to revaluation accounts.

- Unrealised losses (revaluation losses), when in excess of previous revaluation gains registered in the corresponding revaluation account, are taken at year-end to the Profit and Loss Account and are not netted against new revaluation gains in subsequent years. Unrealised losses in any one security, in any one currency or in gold holdings are not netted against unrealised gains in other securities, currencies or gold. The average cost of a financial asset giving rise to unrealised loss at year-end shall be valuated at the end-of-year foreign exchange rate or market price.

- Premiums or discounts arising on purchased securities are calculated and presented as part of interest income and are amortised over the remaining life of the assets.

- Impairment losses are taken to the Profit and Loss Account and are not netted in subsequent years, unless impairment is reduced and this change can be related to an observable event that occurred after the impairment was first registered.

Off-balance sheet instruments

Foreign exchange forward transactions, the forward legs of currency swaps and other currency transactions that involve exchanging a currency for another on a future date are included in the net foreign currency positions for the purpose of calculating average purchase cost and foreign exchange gains and losses.

Banknotes in circulation

The ECB and the 17 euro area NCBs, which together comprise the Eurosystem, issue euro banknotes.[1] The total value of euro banknotes in circulation is allocated to the Eurosystem central banks on the last working day of each month according to their banknote allocation keys.[2]

The ECB has been allocated a share of 8% in the total value of euro banknotes in circulation, while the remaining 92% is allocated to the NCBs in proportion to their shares in the ECB's capital. The share of banknotes in circulation that has been allocated to the Bank of Greece is disclosed under the Balance Sheet liability item 1 "Banknotes in circulation".

The difference between the value of euro banknotes allocated to each NCB according to its banknote allocation key and the value of euro banknotes that the NCB actually puts into circulation produces "Intra-Eurosystem claims/liabilities". These interest-bearing claims or liabilities are disclosed under the sub-item "Net claims/liabilities related to the allocation of euro banknotes within the Eurosystem".

For financial years 2002 to 2007, "intra-Eurosystem claims" and "intra-Eurosystem liabilities" arising from the allocation of euro banknotes are adjusted in order to avoid sharp fluctuations in the monetary income of the NCBs relative to previous years.

The amounts of these adjustments were calculated taking into account the differences between the average value of banknotes in circulation of each NCB during the period from 1 July 1999 to 30 June 2001 and the average value of banknotes that would have been allocated to them during the same period in accordance with the ECB's capital key.

1 ECB Decision of 13 December 2010 on the issue of euro banknotes (recast) (ECB/2010/29), OJ L35, 9.2.2011, p. 26.
2 "Banknote allocation key" means the percentages that result from taking into account ECB's share (8%) in the total euro banknote issue and applying the subsequent capital key to the NCB's share in this total.
3 ECB Decision of 25 November 2010 on the allocation of monetary income of the national central banks of Member States whose currency is the euro (recast) (ECB/2010/23), OJ L35, 9.2.2011, p. 17.

The small further adjustments of balances since then reflect changes in the balances of NCBs joining the Eurosystem, which affect those of the participating NCBs.

Interest income and interest expenses on these claims/liabilities are netted in the ECB accounts and are disclosed in the Profit and Loss Account of each NCB of the Eurosystem under "Net interest income".

Interim distribution of the income of the European Central Bank on euro banknotes in circulation and arising from securities purchased under the Securities Markets Programme (SMP).

The Governing Council has decided that the income from its share (8%) in the total euro banknote issue and the net income from securities purchased under the Securities Markets Programme (SMP), is due to the NCBs and will be paid to them in full in the financial year it accrues. The ECB will distribute both amounts to the NCBs in January of the following year in the form of an interim distribution.[4] The income on euro banknotes in circulation will be paid in full, unless the Governing Council decides to reduce such income on account of expenses incurred by the ECB in connection with the issue and handling of euro banknotes. The Governing Council shall decide before the end of the financial year whether all or part of the ECB's income arising from SMP securities and, if necessary, all or part of the ECB's income on euro banknotes in circulation should be retained to the extent necessary to ensure that the amount of the distributed income does not exceed the ECB's net profit for that year.

Furthermore, the Governing Council may decide before the end of the financial year to transfer part or all of the ECB's income arising from securities purchased under the SMP and, if necessary, part or all of the ECB's income on euro banknotes in circulation to the provision for foreign exchange rate, interest rate, credit and gold price risks.

In accordance with the Governing Council decision of 21 December 2011, all of the ECB's income in 2011 arising from securities purchased under the SMP (€1,003 million) and part (€163 million) of its income on euro banknotes in circulation will be transferred to the above-mentioned provision.

Post-balance-sheet events

Assets and liabilities are, in principle, adjusted for events that occurred between the annual balance sheet date and the date on which the balance sheet was approved by the General Council of the Bank, if such events materially affect the condition of assets and liabilities on the balance sheet date, and, if necessary, provisions are formed out of the results of the financial year.

Post-balance-sheet events that do not affect the condition of assets and liabilities on the balance sheet date are only disclosed in the notes.

Intra-ESCB balances/intra-Eurosystem balances

Intra-ESCB transactions refer to cross-border payments between two EU central banks. They are mostly effected through the TARGET2 system[5] and give rise to bilateral balances in the TAR-

4 ECB Decision of 25 November 2010 on the interim distribution of the income on euro banknotes in circulation and arising from securities purchased under the securities markets programme (recast) (ECB/2010/24), OJ L6, 11.1.2011, p. 35.
5 TARGET2: Trans-European Automated Real-time Gross settlement Express Transfer system.

GET2 accounts of EU central banks. These bilateral balances are netted out with the ECB on a daily basis, leaving each NCB with a single net bilateral position vis-à-vis the ECB only. This position in the books of the ECB represents the net claim or liability of each NCB against the rest of the ESCB.

Intra-Eurosystem euro-denominated balances of euro area NCBs vis-à-vis the ECB (excluding the ECB capital and the positions arising from the transfer of foreign reserve assets to the ECB) are presented on the Balance Sheet of the ECB as a single net asset or liability position and disclosed under "Other claims within the Eurosystem (net)"or "Other liabilities within the Eurosystem (net)".

Intra-Eurosystem balances arising from the allocation of euro banknotes within the Eurosystem are included as a single net asset (liability) under "Net claims related to the allocation of euro banknotes within the Eurosystem" ("Net liabilities related to the allocation of euro banknotes within the Eurosystem").

Cash flow statement

Taking account of the special role of the central bank in the context of the single monetary policy of the Eurosystem, the Bank of Greece, regards the publication of a cash flow statement unnecessary, on the grounds that it would not provide the readers of financial statements with additional information. This practice is also followed by the rest of the Eurosystem NCBs.

Integration of the main and supplementary pension funds of the Bank's staff into its financial statements

In accordance with Article 64 of Law 3863/2010, as of 1 January 2011 the Bank has taken up the main and supplementary pension funds of its staff.

As of the same date, the Bank's staff is no longer insured for its pension in the Social Insurance Institution (IKA–ETAM) and its supplementary pension fund called MTYTE is abolished.

All assets and liabilities of the former Pension Fund of the Bank of Greece staff (which belonged to IKA–ETAM) and those of the abolished MTYTE fund have been automatically transferred to the Bank of Greece, which is their universal successor.

As a consequence, pensioners of the integrated Funds have become pensioners of the Bank of Greece, which will now act as a provider of a social insurance plan for its staff and will be responsible for paying their pensions.

Accordingly, the assets and liabilities of the integrated Funds have been recognised in the Bank's financial statements for 2011 at their fair value as at the date of integration.

NOTES ON THE BALANCE SHEET

ASSETS

1. Gold and gold receivables

Holdings and receivables in standard gold	31.12.2011	31.12.2010	Change
Volume in fine troy ounces (thousands)	4,742	4,742	0
Volume in tonnes	147.5	147.5	0
Value (€ million)	5,770.3	5,005.1	765.2

The amounts reported above comprise the Bank's gold holdings (3,589 thousand ounces) and gold receivables from the Greek State (986 thousand ounces) corresponding to Greece's participation in the IMF (the gold component of Greece's quota has been paid by the Bank of Greece on behalf of the Greek State), as well as scrap gold and gold coins for melting (167 thousand ounces). A large part of gold holdings is kept with banks abroad.

Gold and gold receivables remained unchanged against the previous financial year, while the significant €765.2 million increase in the value of gold in euro is attributable to its increased price in 2011.

The total amount after the increase in the price of gold (value as at 30 December 2011, compared with the average acquisition cost) came to €4,018.4 million and is disclosed under liability item 13 "Revaluation accounts". This sum refers to unrealised profit and will serve as a buffer against any losses from gold price movements.

Gold has been valued at its euro price per fine troy ounce as at year-end. This price is in line with the ECB reference exchange rates and derived from the USD price of gold quoted on the London market on 30 December 2011 and the euro/USD exchange rate on the same date. On 30 December 2011, the price of gold was €1,216.864 per fine ounce, compared with €1,055.418 on 31 December 2010.

2. Claims on non-euro area residents denominated in foreign currency

This item consists of receivables from the IMF (in SDRs), balances on correspondent accounts, time deposits with banks abroad, securities holdings, and the value of non-euro banknotes held in the Bank's vaults.

2.1 Receivables from the IMF

These arise from Greece's participation in the IMF and include the following:

– The Bank's holdings of special drawing rights (SDRs);

– The SDR component of Greece's quota in the IMF. This has been financed by the Bank, which is entrusted with the management of the relevant assets. The euro component of Greece's quota in the IMF, amounting to €1,021.7 million, is disclosed under liability item 5 "Liabilities to non-euro area residents denominated in euro". Greece's overall quota (SDR component plus euro component) amounts to SDR 1,101.8 million.

Receivables from the IMF	**31.12.2011**		**31.12.2010**		**Change**	
(in millions)	***SDRs***	***€***	***SDRs***	***€***	***SDRs***	***€***
SDR holdings	553.2	656.5	609.1	704.8	-55.9	-48.3
SDR component of Greece's quota in the IMF (quota)	240.6	285.7	170.9	197.8	69.7	87.9
Special non-interest-bearing deposit in SDRs	0	0	5.4	6.3	-5.4	-6.3
Total	**793.8**	**942.2**	**785.4**	**908.9**	**8.4**	**33.3**

- **SDR holdings**

The decline in SDR holdings is the result of the payment of commissions, interest, various expenses and other liabilities arising from IMF loan payments to Greece in the context of the IMF and EU financial support to the country. These expenses were paid out of the aforementioned holdings, in debit of the euro account of the Greek State with the IMF. Most of these holdings were replaced by SDR purchases made by the Bank of Greece.

It should be noted that the largest part of Greece's SDR holdings with the IMF comes from SDR allocations to Greece in 2009 in the context of IMF's general SDR allocation, equivalent to USD 250 billion, to all its member countries, which was approved by the IMF Board of Governors on 7 August 2009 and entered into force on 28 August 2009.

This allocation aimed to provide liquidity to the global economic system by boosting the foreign reserve assets of the IMF member countries according to their quotas.

- **Greece's SDR quota in the IMF**

In 2011, this quota was increased by SDR 69.7 million, in line with IMF Board of Governors Resolution 63-2/28.4.2008 introducing increases in the quotas of all IMF member countries.

The increase was covered by a SDR-denominated loan to the same amount from the Bank to the Greek State.

The above receivables from the IMF were valued at the SDR/euro exchange rate as at 30 December 2011, based on ECB's reference exchange rates, i.e. 1 SDR = €1.1867, compared with €1.1572 as at 31 December 2010.

- **Special non-interest-bearing deposit in SDRs**

In February 2011 the special non-interest-bearing deposit of €5.4 million with the IMF came to maturity.

2.2 Balances with banks and security investments, external loans and other external assets

This item consists of claims on non-euro area residents denominated in foreign currency, e.g. time deposits, balances on correspondent accounts, Treasury bills and non-euro banknotes held in the Bank's vaults.

Categories of claims	31.12.2011	31.12.2010	Change
	(in € millions)		
Time deposits with foreign banks	10.4	4.2	6.2
Current account balances with foreign correspondents	9.2	22.7	-13.5
Marketable debt securities (bonds, Treasury bills)	10.4	58.0	-47.6
Cash holdings of foreign currency	10.1	16.2	-6.1
Total	**40.1**	**101.1**	**-61**

The largest part of these assets as at 31 December 2011 was denominated in US dollar, Japanese yen and pound sterling.

3. Claims on euro area residents denominated in foreign currency

This item consists of claims on general government that stem from long-term loans, time deposits with correspondent banks in other euro area countries, and claims arising from the Bank's reverse transactions with domestic credit institutions.

3.1 General government

These claims include:

– loans in SDRs granted by the Bank of Greece to the Greek State to finance its participation in the IMF (quota), relating to the SDR component of Greece's quota;

– loans in USD and gold-linked loans to the Greek State to finance its participation in international organisations.

These claims amounted to €290.5 million on 31 December 2011, against €200.9 million on 31 December 2010. The increase is mainly attributable to a new loan of €69.7 million SDRs to the Greek State on 5 April 2011, in order to cover the increase in Greece's SDR-denominated quota in the IMF (see asset item 2.1 "Receivables from the IMF").

3.2 Other claims

The balance as at 31 December 2011 includes foreign-currency-denominated time deposits with euro area correspondents and reverse transactions in US dollars with domestic credit institutions.

Categories of claims	31.12.2011	31.12.2010	Change
	(in € millions)		
Time deposits	71.1	26.8	44.3
Reverse transactions with domestic credit institutions	656.9	56.1	600.8
Total	**728.0**	**82.9**	**645.1**

The significant increase recorded above is due to the re-activation since May 2010 of the short-term liquidity supply programme in US dollars to euro area credit institutions, through reverse operations and against adequate eligible collateral. The operations are conducted in line with a temporary reciprocal currency arrangement (swap lines) between the European Central Bank (ECB) and the Federal Reserve System (FED) in order to provide financial markets with short-term liquidity in US dollars.

Under this agreement, the FED makes US dollars available to the ECB through a temporary reciprocal currency arrangement (swap line) in order to provide short-term liquidity, in US dollars, to Eurosystem counterparties.

In turn, the ECB conducts swap operations with the National Central Banks (NCBs) of the Eurosystem, which use these funds to conduct liquidity-providing operations with Eurosystem counterparties (credit institutions).

In this context, the Bank of Greece provided liquidity, in US dollars, to domestic credit institutions, equivalent to a total of €656.9 million on 31 December 2011.

4. Claims on non-euro area residents denominated in euro

4.1 Balances with banks, security investments and loans

This comprises interest-bearing current account balances with banks abroad (outstanding balance as at 31 December 2011: €114 thousand).

5. Lending to euro area credit institutions related to monetary policy operations denominated in euro

This item consists of outstanding balances of loans to credit institutions in Greece mainly against collateral of Greek government securities and securities issued by other euro area countries, in the context of the single monetary policy.

Liquidity is chiefly provided through main refinancing operations (with a maturity of 7 days) and longer-term refinancing operations (with a maturity of 35 days and 3, 6, 12 and 36 months), against adequate eligible collateral (marketable debt securities and other assets).

Categories of operations	31.12.2011	31.12.2010	Change
	(in € millions)		
MROs (maturity of 7 days)	15,177.5	18,023.0	-2,845.5
LTROs (with a maturity of 35 days and 3, 6, 12 and 36 months)	60,942.0	78,382.8	-17,440.8
Fine-tuning reverse operations	0	1,263.0	-1,263.0
Marginal lending facility	40.0	0	40.0
Total	**76,159.5**	**97,668.8**	**-21,509.3**

It should be noted that, according to Article 32 of the Statute of the ESCB and the ECB, the NCBs that conduct monetary policy operations on behalf of the Eurosystem participate in income and provisions, in accordance with their ECB capital key.

6. Other claims on euro area credit institutions denominated in euro

This item mainly includes current account balances with correspondent banks, as well as other claims on credit institutions, excluding the Eurosystem monetary policy operations.

These claims amounted to €71.7 million on 31 December 2011, against €71.6 million on 31 December 2010.

7. Securities of euro area residents denominated in euro

7.1 Securities held for monetary policy purposes

This comprises two categories:

— Securities purchased under the Covered Bonds Purchase Programme (CBPP1)[6]

Comprising covered bonds in euro issued by euro area banks and credit institutions, with maturities of up to 12 years, purchased by the Bank of Greece under the above programme.

It should be noted that this programme was concluded on 30 June 2010 and the total value of covered bonds held by the Bank of Greece was €1.4 billion; the respective amount for the Eurosystem as a whole was €58.8 billion.

— Securities purchased under the Eurosystem Securities Markets Programme (SMP)[7]

The Governing Council of the ECB has decided to put into effect a purchase programme for securities issued in the euro area in order to restore the smooth functioning of the monetary policy transmission mechanism in euro area countries (Securities Markets Programme – SMP).

6 ECB Decision of 2 July 2009 on the implementation of the covered bond purchase programme (CBPP1) (ECB/2009/16), OJ L175, 4.7.2009, page 18.
7 ECB Decision of 14 May 2010 on the adoption of the Securities Markets Programme (SMP) (ECB/2010/5), EU L124, 20.5.2010, page 8.

Under this programme, Eurosystem NCBs and the ECB purchased bonds, amounting on 31 December 2011 to €211.9 billion, while the respective amount held by the Bank of Greece on the same date totalled €6.4 billion. The purchases involved government bonds from Greece, Portugal, Ireland, Spain and Italy.

According to Article 32.4 of the Statute of the ECB, any risks arising from holdings in the context of the SMP programme, if realised, will be allocated to the NCBs of the Eurosystem, in accordance with their ECB capital key.

Securities from both these programmes are held to maturity and valued at amortised cost subject to impairment tests. The test carried out at end-2011 at Eurosystem level showed that there is no evidence of impairment.

7.2 Other securities of euro area residents denominated in euro

This item includes euro-denominated bonds, Treasury bills and commercial paper issued by euro area governments, including the Greek State. They make up the Bank's investment book.

Type of securities	31.12.2011	31.12.2010	Change
	(in € millions)		
A. Marketable debt securities issued by euro area governments (other than held-to-maturity)			
Euro area securities, other than Greek government securities			
Bonds	1,400.7	2,984.9	-1,584.2
Treasury bills	1,437.0	2,383.5	-946.5
Commercial paper	97.2	67.4	29.8
Zero-coupon bonds	0	19.9	-19.9
Greek government securities			
Bonds	0	877.9	-877.9
Treasury bills	119.7	214.0	-94.3
Total	**3,054.6**	**6,547.6**	**-3,493.0**
B. Marketable debt instruments held to maturity			
Greek government bonds	4.542,7	4,389.4	153.3
Bonds issued by other euro area governments	5,785.5	8,025.6	-2,240.1
Total	**10,328.2**	**12,415.0**	**-2,086.8**
Grand total	**13,382.8**	**18,962.6**	**-5,579.8**

As shown in the table, a predominant part of the Bank's portfolios comprises securities held to maturity (total B).

These are valued at amortised cost and are subject to impairment tests. The test carried out at end-2011 showed that there is no evidence of impairment.

The remaining debt securities (total A) were valued at the average market prices prevailing on 30 December 2011. Gains were taken to revaluation accounts and losses were covered by the provision that was formed for this purpose.

The significant reduction in the value of these portfolios is attributable to the policy of limiting exposure to risks, which was implemented by the Bank in 2011, due to the ongoing fiscal crisis in the euro area.

Post-balance-sheet events

In February 2012, Greek government bonds held by the central banks of the Eurosystem in the framework of the Securities Markets Programme (SMP) and in their investment portfolios, were exchanged with new ones, having the same nominal value, coupons, interest payment dates and maturities. These new bonds were excluded from the sovereign debt restructuring programme (PSI).

8. General government long-term debt denominated in euro

This item consists of the long-term loans in euro extended by the Bank of Greece to the Greek State up to 31 December 1993, and the loan granted in 2011 to finance the increase in Greece's SDR quota in the IMF.

Specifically, it consists of:

– interest-bearing loans extended to the Greek State up to 31 December 1993;

– interest-bearing loans extended by the Bank of Greece to the Greek State on 31 December 1993, in settlement of the balance of the account "Exchange rate valuation differences – Law 1083/80";

– interest-free loans in euro extended by the Bank to the Greek State for the purpose of financing its euro-denominated participation in the IMF. The amount of this participation, which is deposited by the IMF with the Bank, is disclosed under liability item 5 "Liabilities to non-euro area residents denominated in euro". Such a loan of €233.4 million was also extended on 5 April 2011 to finance the increase in Greece's SDR quota in the IMF, pursuant to IMF Board Resolution 63-2/28.4.2008.

Outstanding balance as at 31.12.2011	€ 6,659.9 million
Outstanding balance as at 31.12.2010	€ 6,867.0 million
Decrease	€ 207.1 million

The decrease stems from the gradual repayment of interest-bearing loans.

The amount of paid-up loans was €472.1 million, but the final deducted amount was €207.1 million, mostly due to the new loan for financing Greece's increased SDR quota in the IMF.

9. Intra-Eurosystem claims

9.1 Participating interest in the ECB

The table below shows the items related to the ECB capital, reserves and provisions and the Bank's participation therein.

As at 31.12.2011	(%)	(in € millions)	
ECB's subscribed capital (applying to all 27 EU Member States)		**10,760.7**	
Bank of Greece's key for subscription to the ECB capital (capital key)	1.9649		
ECB capital paid up by the 17 Eurosystem NCBs		**6,363.1**	
Weighting of the Bank of Greece's key for subscription to the ECB capital paid up by the 17 NCBs of the Eurosystem	2.80818		
Bank of Greece's share in the subscribed capital of the ECB			178.7
Bank of Greece's contribution to the ECB's reserves and provisions			322.2
Bank of Greece's total contribution to the ECB capital, reserves and provisions as at 31.12.11			**500.9**

According to Article 28 of the Statute of the European System of Central Banks (ESCB) and the ECB, the national central banks of the ESCB are the sole subscribers to and holders of the capital of the ECB.

Subscription to the ECB capital is based on a key assigned to each NCB and is equal to the sum of 50% of the share of its respective Member State in the gross domestic product of the European Union and 50% of the share of its respective Member State in the population of the European Union (Article 29.1 of the ESCB Statute).

According to Article 28.1 of the Statute of the ESCB, Council Regulation 1009/2000 of 8 May 2000, and following a relevant decision of the Governing Council on 13 December 2010, the ECB increased its subscribed capital by €5 billion, from €5,760.7 million to €10,760.7 million, effective from 29 December 2010. The NCBs of the euro area countries pay the amounts corresponding to the increase in their share in the ECB capital (a total of €3.5 billion) in three equal annual instalments. The first instalment was paid on 29 December 2010, the second on 28 December 2011 and the third will be paid at end-2012.

The increase in the capital of the ECB was deemed appropriate in view of increased volatility in foreign exchange rates, interest rates and gold prices, as well as credit risk. As the maximum size of the ECB's provisions and reserves is equal to the level of its paid-up capital, this decision allows the Governing Council to augment the provision by an amount equivalent to the capital increase, starting with the allocation of part of year 2010 profits. From a longer-term perspective, the capital increase – the first one after 12 years – is also motivated by the need to provide an adequate capital base in a financial system that has grown considerably.

In this context, on 29 December 2011, the Bank of Greece paid the amount of €32.8 million which corresponds to the second instalment of its share in the ECB capital increase.

After the payment, the participation of the Bank of Greece in the capital, together with its contribution to the reserves and equivalent provisions of the ECB, amounted to €500.9 million, on 31 December 2011.

The share of the Bank of Greece in the ECB capital is €178.7 million and has been paid up in full. It corresponds to 2.80818% (capital key weighting) of the ECB capital paid by the 17 NCBs of the Eurosystem, which, after the adjustments of 2011, amounts to €6,363.1 million.

The remaining amount (€322.2 million) relates to the Bank's contribution to the ECB's reserves and provisions. This amount has been paid in full to the ECB.

Pursuant to Article 29.3 of the Statute of the ESCB, the weighting of NCBs' keys for subscription to the ECB capital is adjusted every five years after the establishment of the ESCB (latest adjustment: 2009). Also, according to Article 49.3 of the ESCB Statute, the ECB subscribed capital is automatically adjusted whenever a new country joins the EU and its NCB joins the ESCB.

On 1 January 2011, after Estonia adopted the euro as its national currency and its central bank joined the Eurosystem, NCBs adjusted their keys for subscription to the ECB capital. Thus, the weighting of Bank of Greece's key for subscription to the ECB capital changed from 2.81539% to 2.80818%, and the banknote allocation key was adjusted from 2.590% to 2.5835%, while the capital key remained unchanged.

9.2 Claims equivalent to the transfer of foreign reserves to the ECB

As at 31.12.2011	***(%)***	***(in € millions)***
Total foreign reserve assets transferred to the ECB by the 17 NCBs of the Eurosystem		40,307.6
Weighting of the Bank of Greece's key for subscription to the ECB capital paid by the 17 NCBs of the Eurosystem	2.80818	
Claims of the Bank of Greece on 31.12.2011 arising from the transfer of foreign reserve assets to the ECB		**1,131.9**

These claims stem from the transfer of foreign reserve assets to the ECB, in accordance with the provision of the Treaty on European Union (Article 30 of the Statute of the ESCB).

Out of the said foreign reserve assets, determined on the basis of the Bank's share in the paid-up capital of the ECB, 85% were transferred in the form of assets denominated in USD and JPY and 15% in the form of gold.

These claims are expressed in euro, taking into account the exchange rates prevailing at the time of transfer, and are remunerated at the latest available marginal rate for the Eurosystem's MROs (adjusted to reflect a zero return on the gold component).

9.5 Other claims within the Eurosystem (net)

On 31 December 2011, the net balance of Bank of Greece's other transactions with the Eurosystem represented a liability of the Bank and is therefore disclosed under liability item 9.4 "Other liabilities within the Eurosystem (net)".

10. Items in course of settlement

The outstanding balance of €318 thousand concerning items in course of settlement on 31 December 2011 includes receiveable cheques issued by banks abroad.

11. Other assets

11.1 Coins

This item represents the value of coins issued by the 17 euro area countries and held by the Bank of Greece on the Balance Sheet date.

Coins put in circulation by the Bank of Greece are recorded in a special account of the Greek State, included in liability item 4.1 "General government".

Value of coins as at 31.12.2011	€ 72.1 million
Value of coins as at 31.12.2010	€ 69.3 million
Increase	€ 2.8 million

11.2 Tangible and intangible fixed assets

Fixed assets comprise real estate (land, buildings and fixtures, buildings under construction), furniture, machinery, hardware and software. Fixed assets other than real estate, which is valued at market prices determined by independent assessors, are valued at acquisition cost. As from 2011, the fixed assets (land–buildings) of BoG's staff former main and supplementary pension funds are also included.

The value of fixed assets as at 31 December 2011, less accumulated depreciation, is reported.

Depreciation is calculated on a straight-line basis over the expected lifetime of the asset.

Undepreciated value of fixed assets

Asset category:	31.12.2011	31.12.2010	Change	Depreciation rate (%)
	(in € millions)			
Land	493.8	493.8	0	0
Buildings and fixtures	220.9	225.6	-4.7	2.5
Buildings under construction and advance payments of asset aquisitions	10.4	3.7	6.7	0
Other equipment	33.0	31.0	2.0	8-24
Capitalised expenses (software costs, etc.)	1.1	1.4	-0.3	20-24
Land from main and supplementary pension funds	48.5	0	48.5	0
Buildings from main and supplementary pension funds	19.3	0	19.3	2.5
Total	**827.0**	**755.5**	**71.5**	

11.3 Other financial assets

This item includes the Bank's holdings in DIAS Interbanking Systems SA, the Hellenic Deposit and Investment Guarantee Fund (TEKE), the Hellenic Exchanges SA Holding, Clearing, Settlement and Registry SWIFT, as well as the Bank for International Settlements (BIS), denominated in SDRs.

The value of the above assets at amortised cost was €29.1 million on 31 December 2011, down by €68 thousand against 31 December 2010, due to an equal return of funds from the Hellenic Exchanges SA Holding, Clearing, Settlement and Registry (its share capital decreased).

11.4 Off-balance-sheet instruments revaluation differences

Outstanding balance as at 31.12.2011	€ 7.3 million

This item shows the result of the end-of-year revaluation of unsettled operations in foreign currency recorded in off-balance-sheet accounts.

In comprises unrealised gains amounting to €1.7 million, mainly stemming from currency swaps and forward transactions, and recorded on revaluation accounts.

11.5 Accruals and prepaid expenses

This item includes accrued interest on securities, written-off premia on securities and also interest and other income accrued but not collected up to 31 December 2011. The latter are to be collected in the current financial year and relate mainly to interest income on loans granted by the Bank in the context of the single monetary policy of the Eurosystem, securities holdings and deposits with banks, as well as to interest income on the claim corresponding to the transfer of foreign reserve assets to the ECB. Also included are the balances of other advance payment accounts, as well as the value of drachma banknotes, estimated at €237.9 million, which had not been exchanged for euro banknotes by 31 December 2011 and are treated as accruals.

Outstanding balance as at 31.12.2011	€ 1,203.2 million
Outstanding balance as at 31.12.2010	€ 988.5 million
Increase	€ 214.7 million

11.6 Sundry

This item consists of reserves of the Banknote Printing Works (IETA), balances on the Bank's suspense debit accounts, the outstanding balances of loans to the Bank's staff, and as from 2011 the assets from the former main and supplementary pension funds of its staff, i.e.: holdings of €302 million, claims on various insurance funds to the amount of €67.9 million and debt securities, mostly Greek government bonds, of €53.4 million. Greek government bonds are held to maturity and are valued at amortised cost, subject to impairment.

It should be noted that these bonds were included in the sovereign debt restructuring programme (PSI).

The item also includes:

– the amount of €38.6 billion stemming from the extraordinary provision of liquidity to domestic credit institutions in the context of ELA (Emergency Liquidity Assistance) operations to offset factors reducing the liquidity of the banking system. These operations are not included in the monetary policy operations of the Eurosystem; however, they are conducted by NCBs under the institutional framework of the Eurosystem and with the approval of the European Central Bank.

To provide this liquidity, the Bank of Greece received sufficient assets as collateral, part of which is guaranteed by the Greek State. Moreover, the Greek State provided additional guarantee, directly to the Bank of Greece, in order for the latter to conduct these operations.

– the amount of €13.3 billion relating to the provision of liquidity to credit institutions through reverse repos with the prior permission of the ECB.

Outstanding balance as at 31.12.2011	€ 52,852.9 million
Outstanding balance as at 31.12.2010	€ 428.3 million
Increase	€ 52.424.5 million

LIABILITIES

1. Banknotes in circulation

Outstanding balance as at 31.12.2011	€ 22,957.7 million
Outstanding balance as at 31.12.2010	€ 21,748.3 million
Increase	€ 1,209.4 million

This item consists of the Bank's share of total euro banknotes in circulation, calculated on the basis of the banknote allocation key (2.5835%). The change resulted from the rise in total euro banknotes in circulation, both inside and outside the euro area, to €888.6 billion as at 31 December 2011, compared with €839.7 billion as at 31 December 2010 (see "Banknotes in circulation" under "Accounting policies").

The average value of euro banknotes in circulation that corresponds to the Bank of Greece, on the basis of the banknote allocation key, rose to €22.2 billion over 2011, from €21.1 billion in 2010.

	31.12.2011	31.12.2010	Change
	(in € millions)		
Value of euro banknotes put into circulation by the Bank	41,394.8	29,669.8	11,725
Less:			
– Liability resulting from the ECB's share in the total euro banknote issue (8% of the total value of euro banknotes in circulation)	-1,996.3*	-1,891.2*	-105.1
Less:			
– Liability resulting from the allocation of euro banknotes within the Eurosystem	-16,440.8*	-6,030.3*	-10,410.5
Value of euro banknotes in circulation based on the banknote allocation key of the Bank of Greece	**22,957.7**	**21,748.3**	**1,209.4**

* Recorded under liability item 9.2 "Net liabilities related to the allocation of euro banknotes within the Eurosystem".

2. Liabilities to euro area credit institutions related to monetary policy operations denominated in euro

2.1 Current accounts (covering the minimum reserve system)
These accounts include credit institutions' reserve holdings with the Bank of Greece, which can also be used as settlement accounts for transactions with the central bank.

Outstanding balance as at 31.12.2011	€ 2,506.4	million
Outstanding balance as at 31.12.2010	€ 3,303.4	million
Decrease	€ 797.0	million

The average balance of these accounts in 2011 was €4.4 billion, compared with €5.1 billion in 2010.

2.2 Deposit facility

This relates to the deposit facility offered by the Eurosystem to credit institutions, in the context of the implementation of the single monetary policy in the euro area.

In more detail, it consists of overnight deposits placed by credit institutions with the Bank of Greece at a pre-specified interest rate.

Outstanding balance as at 31.12.2011	€ 1,179.5	million
Outstanding balance as at 31.12.2010	€ 7,165.0	million
Decrease	€ 5,985.5	million

2.3 Fixed-term deposits

This relates to collections from credit institutions for liquidity absorption purposes, owing to the fine-tuning operations of the Eurosystem.

As at 31.12.2011, the balance of these deposits was zero.

2.5 Deposits related to margin calls

Outstanding balance as at 31.12.2011: €1,017.2 million.

These are deposits aiming to cover value decreases in underlying assets provided against credit in the context of the single monetary policy of the Eurosystem (asset item A5).

4. Liabilities to other euro area residents denominated in euro

4.1 General government

This item comprises deposits of the Greek State (central government), public entities and the Deposits and Loans Fund.

Outstanding balance as at 31.12.2011	€ 3,838.3	million
Outstanding balance as at 31.12.2010	€ 781.9	million
Increase	€ 3,056.4	million

The average balance of these deposits decreased to €3.1 billion in 2011, from €3.8 billion in 2010.

4.2 Other liabilities

Outstanding balance as at 31.12.2011	€ 1,714.9	million
Outstanding balance as at 31.12.2010	€ 1,557.5	million
Increase	€ 157.4	million

This item records the balances of deposits held by various entities.

In their most part, these liabilities relate to a €1.3 billion deposit by the Hellenic Financial Stability Fund (HFSF), and to capital injections from the European Investment Fund and the European Investment Bank, totalling €245.6 million.

The HFSF deposit is interest-bearing and will be financed by the EU/IMF support package for Greece. According to Law 3864/2010 establishing the HFSF, the Fund's capital will amount to €10 billion. The objective of the Fund is to maintain the stability of the Greek banking system by strengthening, where necessary, the capital adequacy of credit institutions.

5. Liabilities to non-euro area residents denominated in euro

Outstanding balance as at 31.12.2011	€ 1,041.9 million
Outstanding balance as at 31.12.2010	€ 766.3 million
Increase	€ 275.6 million

This item includes deposits of various entities.

The bulk of these liabilities (€1,021.8 million) consists of a deposit account in euro held by the IMF with the Bank and corresponding to Greece's euro-denominated participation (quota) in the IMF. Through this account, the Bank effects financial transactions with third countries, according to IMF instructions.

The observed increase is largely the result of the €233.4 million increase in Greece's participation (quota) in the IMF (IMF Board of Governors Resolution 63-2/28.4.2008), financed by a loan to the same amount from the Bank to the Greek State.

6. Liabilities to euro area residents denominated in foreign currency

These liabilities mainly stem from interest-bearing deposits of public entities denominated in foreign currency.

Outstanding balance as at 31.12.2011	€ 16.2 million
Outstanding balance as at 31.12.2010	€ 22.3 million
Decrease	€ 6.1 million

7. Liabilities to non-euro area residents denominated in foreign currency

7.1 Deposits and other liabilities

This item contains €2,000 of interest and non-interest bearing deposits made by various entities.

8. Counterpart of special drawing rights allocated by the IMF

This item comprises the Bank's liabilities to the IMF stemming from the cumulative allocation of special drawing rights (SDR 782.3 million) to Greece. This amount was allocated by the IMF to Greece gradually. An amount of SDR 103.5 million was allocated between 1970 and 1981 and the remaining SDR 678.8 million in 2009. The latter allocation was effected in the context of IMF's general SDR allocation, equivalent to USD 250 billion, to all its member countries, which was approved by the IMF Board of Governors on 7 August 2009 and entered into force on 28 August 2009.

This allocation was aimed to provide liquidity to the world economy by boosting the foreign reserve assets of the IMF member countries according to their quotas.

Outstanding balance as at 31.12.2011	€ 928.4 million
Outstanding balance as at 31.12.2010	€ 905.3 million
Increase	€ 23.1 million

The increase reflects adjustments for exchange rate variations due to the depreciation of the euro against the SDR in 2011.

9. Intra-Eurosystem liabilities

9.2 Net liabilities related to the allocation of euro banknotes within the Eurosystem

This item shows liabilities that stem from the allocation of euro banknotes within the Eurosystem (see "Banknotes in circulation" under "Accounting policies").

Outstanding balance as at 31.12.2011	€ 18,437.1 million
Outstanding balance as at 31.12.2010	€ 7,921.5 million
Increase	€ 10,515.6 million

The balance as at 31.12.2011 is made up of the following:

– €1,996.3 million; these refer to the value of euro banknotes issued by the Bank of Greece on behalf of the ECB (8% of the total value of banknotes in circulation are issued on behalf of the ECB). The Bank's share in this amount is calculated according to its share in the subscribed capital of the ECB. This amount was 105.1 million higher on 31.12.2011 than on 31.12.2010 (€1,891.2 million), due to the general increase in euro banknotes in circulation.

– €16,440.8 million; these represent an adjustment (reduction) in the amount of euro banknotes that the Bank has actually put into circulation, after deducting 8% in favour of the ECB. The purpose of this adjustment is to equalise the Bank's share in total euro banknotes in circulation (liability item 1) with its banknote allocation key.

The significant change seen in this item (from €6,030.3 million as at 31.12.2010 to €16,440.8 million as at 31.12. 2011) reflects the large increase in the value of euro banknotes that the Bank has actually put into circulation over 2011 (see table on p. A27).

9.3 Net liabilities arising from balances of TARGET2 accounts

These are net liabilities to the ESCB stemming from the Bank's cross-border transactions with other national central banks of the Eurosystem, the ECB and non-Eurosystem EU central banks that participate in the TARGET2 system.

TARGET2 account, year-end balances

31.12.05	31.12.06	31.12.07	31.12.08 *(in € millions)*	31.12.09	31.12.10	31.12.11
7,216.8	8,183.5	10,796.6	35,348.3	49,036.1	87,088.1	104,750.0

TARGET2 account, average annual balances						
2005	2006	2007	2008 *(in € millions)*	2009	2010	2011
12,019	11,762	9,298	14,650	37,647	77,022	93,090

These liabilities were originally created on 1 January 2001, the date on which the Bank of Greece joined the Eurosystem.

From the onset of the financial crisis in 2008, and especially during 2009-2011, there was a significant gradual increase in the balance of this account, as a result of the weak financial conditions that prevailed and their impact on cross-border payments.

This did not affect the Bank's financial results, as the increased amount of interest payments to the Eurosystem was offset by an equal amount of interest income from the Bank's provision of liquidy to credit institutions.

9.4 Other liabilities within the Eurosystem (net)

These liabilities, amounting to €57.9 million, stem from:

– The negative result from the reallocation of the monetary income of the Eurosystem for 2011, given that the monetary income that actually accrued to the Bank was greater than the one that would have been allocated to it according to the weighting of its key for subscription to the ECB capital, i.e:

Monetary income actually accruing to the Bank	€ 517.8 million
Monetary income as per the Bank's weighting of its key for subscription to the ECB capital	€ 440.5 million
Balance	€ 77.3 million

This was due to the fact that the value of Greek government securities held by the Bank under the Securities Markets Programme (SMP) was more than the share corresponding to it – Greek government securities are higher-yielding compared with those of other euro area governments.

– The amount of €1.1 million received by the Bank from adjustments to the reallocation of monetary income for the financial years 2008-2009-2010.

– The amount of €18.3 million received by the Bank from the distribution of the ECB's income on euro banknotes in circulation.

10. Items in course of settlement

This item mainly consists of the float of cheques and payment orders whose settlement is pending, as well as balances, in course of settlement, of various intermediate accounts, totalling €15.1 million.

11. Other liabilities

11.1 Off-balance-sheet instruments revaluation differences

Balance as at 31.12.2011	€ 2,889

This item represents the outcome of the end-year revaluation of outstanding currency instruments recorded in off-balance-sheet (memorandum) accounts.

It relates to €2,889 of unrealised losses from spot operations, which were transferred to the profit and loss account and covered by the provision formed for this purpose.

11.2 Accruals and income collected in advance

This item represents interest expenses accrued up to 31 December 2011 and other expenses. Such expenses shall be paid within the new financial year and mainly involve various categories of interest payable (on the outstanding balance of the TARGET2 account, on credit institutions' reserve holdings and on other liabilities).

Balance as at 31.12.2011	€ 181.1 million
Balance as at 31.12.2010	€ 114.9 million
Increase	€ 66.2 million

11.3 Sundry

Sundry liabilities	**31.12.2011**	**31.12.2010**	**Change**
	(in € millions)		
Dividends to be distributed	13.3	31.0	-17.7
Tax on dividends	3.3	20.7	-17.4
Profit to be transferred to the Greek State	80.0	126.8	-46.8
Value of drachma banknotes in circulation	237.9	240.9	-3.0
Liability to the Greek State (Greece's SDR-denominated participation in the IMF)	285.7	197.8	87.9
Other liabilities	58.3	55.3	3.0
Liabilities to the staff's main and supplementary pension funds	300.0	0	300.0
Total	**978.5**	**672.5**	**306.0**

This item comprises the distributable profit for the year, tax on dividends, profit to be transferred to the Greek State, the equivalent of drachma banknotes not withdrawn from circulation (ultimate deadline for exchanging drachma for euro banknotes: 1 March 2012), the Bank's liability towards the Greek State regarding Greece's SDR-denominated participation in the IMF (the corresponding claim of the Bank on the IMF is recorded under asset item 2.1 "Receivables from the IMF"), other taxes to be paid, and the balances of credit suspense accounts and other accounts on behalf of third parties (suppliers, etc.).

Sundry liabilities for the year 2011 also include the Bank's liabilities to its staff's main and supplementary pension funds, as well as those funds' liabilities to third parties (taxes, social insurance contributions, etc.).

12. Provisions

Category of provisions	31.12.2011	31.12.2010	Change
	(in € millions)		
a. Special provisions against operational risk, unexpected losses and doubtful claims	128.8	150.6	-21.8
b. Provision covering the Bank's obligation to provide social insurance to its staff	1,464.7	1,464.7	0
c. Provision against foreign exchange, interest rate, credit and gold price risks	1,758.9	215.4	1,543.5
d. Provision against counterparty risks from Eurosystem monetary policy operations	24.7	57.5	-32.8
e. Provision against general risks under Article 71 of the Statute	100	497.2	-397.2
f. Provisions equivalent to the staff's main and supplementary pension fund reserves	474.0	0	474.0
Total	**3,951.1**	**2,385.4**	**1,565.7**

Total provisions amounted to €3,951.1 million.

High provisioning aims to strengthen the financial position of the Bank of Greece and enable it to best fulfil its tasks and is in line with the principle of prudence followed by the ECB and the other NCBs of the Eurosystem.

The Bank reviews these provisions annually and adjusts them, accordingly, following a risk assessment. Such risk assessment takes into account a series of factors, including:

– the amount of risky assets;

– risk exposure;

– risk assessment and estimation studies;

– developments in money markets and the general economic conditions in the euro area and Greece;

– current reserve assets and provisions; and

– the outstanding balances of revaluation accounts.

In greater detail:

a. Special provisions against operational risk, unexpected losses and doubtful claims
These are special provisions directly associated with the Bank's operation, that include:

– cash deficits;

– the value of drachma banknotes exchanged for euros;

– compensation to employees paid upon retirement; and

– doubtful claims.

These provisions were formed in response to real needs and liabilities and their level was determined using estimates of the amounts likely to be required for covering risks and losses and of the amounts of doubtful claims that will not be collected.

b. Provision covering the Bank's obligation to provide social insurance to its staff
As of 1 January 2011, the Bank has undertaken and provides social insurance for its staff in the main and supplementary pension sectors, in accordance with Article 64 of Law 3863/2010. This provision has been formed to cover this liability and to meet the staff's social insurance needs in general. In keeping with its standard practice, which is in line with the practice of the ECB and the other central banks of the euro area, and in the light of overall conditions in money markets, the Bank of Greece formed provisions for general risks also in 2009.

c. Provision against foreign exchange, interest rate, credit and gold price risks
In keeping with its standard practice, which is in line with the practice of the ECB and the other central banks of the euro area, and taking account of the results of risk assessment by the Risk Management Unit for these risks and the outcome of the Eurosystem harmonised impairment tests for SMP and CBPP1 securities, the Bank substantially increased this provision in 2011 as well.

Specifically, this provision is intended to cover:

• Risks at Eurosystem level, potentially arising from the Eurosystem's key task to formulate and implement the single monetary policy of the euro area, including in particular:

– risks associated with the provision of liquidity to the credit system; and

– risks arising from portfolios acquired under the Securities Markets Programme (SMP) and the first Covered Bond Purchase Programme (CBPP1).

• Credit and market risks (interest rate risks, foreign exchange risks) associated with securities and foreign currency portfolios managed by the Bank.

d. Provision against counterparty risks from Eurosystem monetary policy operations
The provision, the purpose of which is to provide a buffer against counterparty risks arising from Eurosystem monetary policy operations, was first established in the financial year 2008, following a decision by the Governing Council of the ECB and in accordance with Article 32.4 of the ESCB/ECB Statute.

The initial amount of this provision was €149.5 million for the Bank, against €5,736 million at Eurosystem level.

In the financial years 2009, 2010 and 2011, after an upward revaluation of the collateral that the Eurosystem accepted in order to conduct monetary policy operations and a downward reassessment of risk exposures, an amount of €4,787 million was released from the provision, reducing its balance to €949 million as at 31 December 2011. The respective amounts released for the Bank were €45 million in 2009, €47 million in 2010 and €32.8 million in 2011 and were transferred to income from unused provisions.

It should be noted that the NCBs, including the Bank of Greece, that conduct monetary policy operations on behalf of the Eurosystem participate in monetary income and, hence, in risk provisions according to their shares in the ECB capital.

The current collateral and risk control framework is adequate.

However, the large-scale Eurosystem intervention in the money markets, mainly in the 2008-2011 period, with a view to maintaining financial stability, resulted to higher risk exposure, as well as, of course, to the generation of satisfactory income.

Against this background and in order to cover possible risks, the necessary provisions are formed on the basis of the principle of prudence.

The extent to which these provisions will be used depends on future developments in money markets.

e. Provision against general risks under Article 71 of the Statute
This provision is intended to cover:

- any other risks and liabilities potentially arising from the Bank's business as the country's central bank; and

- any additional liabilities of the Bank arising from the provision of social insurance to its staff.

f. Provisions equivalent to the staff's main and auxiliary pension fund reserves
Formed from the surpluses of the acquired main and supplementary pension funds, these provisions were included in the Bank's accounts for the financial year 2011, after the Bank became the provider of an insurance plan for its staff in the main and supplementary pension sectors.

13. Revaluation accounts

In accordance with the accounting principles set out by the European Central Bank for the NCBs that the part of the ESCB, especially the principle of prudence, unrealised valuation gains on gold, financial instruments in foreign currency and securities are not recognised as income in the Profit and Loss Account, but are transferred directly to revaluation accounts (functioning as reserves for these particular assets only). By contrast, unrealised valuation losses at year-end are recognised as expenditure and are taken to the Profit and Loss Account (see "Income recognition" under "Accounting policies").

Valuation at end-2011 produced unrealised gains of €4,049.7 million (largely stemming from gold), which were transferred to the corresponding revaluation accounts (see breakdown in the table below).

Unrealised valuation gains	**31.12.2011**	**31.12.2010**	**Change**
	(in € millions)		
– on foreign currency instruments	0.1	0.1	0
– on securities	31.2	4.5	26.7
– on gold	4,018.4	3,259.1	759.3
Total	**4,049.7**	**3,263.7**	**786.0**

Unrealised losses of €299 thousand, as a result of the valuation of foreign exchange and securities made on 31 December 2011, were taken to the Profit and Loss Account and were covered by the provision established for this purpose.

14. Capital and reserves

14.1 Capital
The Bank's capital, following the increases effected by virtue of Legislative Decrees 413/1970 and 889/1971, Laws 542/1977 and 1249/1982, Ministerial Decision E.2665/1988, Law 2065/1992, Ministerial Decision 1281/30.10.1996 and Cabinet Acts No. 8/4.2.2000, 32/23.5.2002, 17/4.7.2005 and 8/10.6.2008, has reached €111,243,362 **divided into 19,864,886 shares of a par value of €5.60 each**.

14.2 Ordinary reserve
The Bank's ordinary reserve amounts to €111,243,362 and is equal to the capital.

14.3 Extraordinary reserve
The extraordinary reserve amounts to €84.5 million.

14.4 Special reserve from the revaluation of land and buildings
This special reserve was established during financial years 2004 and 2007 with the capital gains from the restatement of land and buildings of the Bank at fair (market) value (as determined by an independent assessor).

In 2005 and 2008, part of these gains were capitalised through the allotment of bonus shares to shareholders, while a small part, stemming from land and buildings of the Bank that were sold, was transferred to profit in 2008, 2009 and 2010.

14.5 Other special reserves
These amount to €1.2 million and represent the value of artworks and fixed assets (mostly buildings) transferred gratis to the Bank.

OFF-BALANCE SHEET (MEMORANDUM) ITEMS

	31.12.2011	31.12.2010	Change
	(in € millions)		
– Greek government securities management of the "Common fund" (surpluses of public entities and social insurance organisations) under Law 2469/97	23,415.4	22,599.5	815.9
– Greek government securities and other debt securities (management and safe custody on behalf of public entities, social security organisations and private-sector agents)	6,746.0	9,408.1	-2,662.1
– Assets eligible as collateral for participation in the Eurosystem monetary policy operations and in the provision of intraday liquidity	142,876.5	162,000.7	-19,124.2
– Other off-balance sheet accounts[1]	106,545.9	10,870.0	95,675.9
Total	**279,583.8**	**204,878.3**	**74,705.5**

1 These reflect:
– a non-interest bearing, non-negotiable promissory note of €20.8 billion (SDR 17.5 billion) issued by the Greek government in respect of IMF loans received up until 31.12.2011. The note is kept at the Bank of Greece, which acts as fiscal agent for Greece vis-à-vis the IMF.
– assets, amounting to €84.8 billion, used as collateral by domestic credit institutions for obtaining emergency liquidity through the Bank's ELA (Emergency Liquidity Assistance) operations.
– forward, spot and swap operations related to the Bank's portfolios.
– documentary credits to be executed, third-party guarantees for good performance, coins in storage at the Bank, etc.
– forward liabilities to the ECB and forward claims on domestic credit institutions, which arose in connection with the provision of US dollar liquidity to Eurosystem counterparties. Through temporary reciprocal currency arrangements (swap lines), the US Federal Reserve (FED) provided the ECB with US dollars. The ECB simultaneously entered into back-to-back swap transactions with euro area NCBs, which used the resulting funds to conduct US dollar liquidity-providing operations with Eurosystem counterparties in the form of swap transactions.

GENERAL NOTES ON THE PROFIT AND LOSS ACCOUNT FOR 2011

The Bank's profit in 2011 amounted to €96.6 million, from €190.4 million in 2010, i.e. it fell by 49.3%, as a result of high provisioning.

ANALYSIS OF THE PROFIT AND LOSS ACCOUNT FOR 2011

INCOME

The Bank's net income from the conduct of the single monetary policy of the Eurosystem and its net income from interest, commission fees and other revenue from domestic and foreign activities totalled €1,594.8 million, compared with €1,044.4 million in 2010, up by 52.7%.

In greater detail:

- ***Net income from interest, financial operations and the reallocation of the Eurosystem's monetary income*** reached €1,458.8 million, against €878 million in the previous financial year (+66.2%).

- ***Net income from fees and commissions*** fell by 30.6% to €98.3 million, from €141.5 million in 2010, due to the decrease – as of 1 January 2011 – in fees received for transactions conducted on behalf of the Greek State.

- ***Income from equity shares and participating interests*** rose by €11.5 million to €23.8 million, from €12.3 million in 2010, on account of an increase in the profit distributed by the European Central Bank.

- ***Finally, other income*** amounted to €13.9 million, from €12.5 million in the previous financial year, having increased by 11.2%.

EXPENSES

Total expenses rose by €644.2 million (or 75.4%) to €1,498.2 million in 2011, from €854 million in 2010.

In greater detail:

- ***The Bank's general operating expenses excluding provisions*** (staff costs, pensions, depreciation and other expenses) dropped, for second consecutive year, by €34.4 million (or 9%) to €346.7 million, from €381.1 million in 2010, largely on account of a significant reduction of €33.5 million (or 10.5%) in staff and pension costs.

- ***Provisions*** grew considerably in 2011 as well, by €1,151.4 million to €3,951.1 million, (see notes on liability item 12).

NOTES ON NET OPERATING INCOME ACCOUNTS

The Bank's net operating income in 2011 from the conduct of the single monetary policy of the Eurosystem and its net operating income from interest, commissions fees and other revenue from domestic and foreign activities totalled €1,594.8 million, compared with €1,044.4 million in 2010, up by 52.7%.

In greater detail:

1. Net interest income

Net interest income (interest income less interest expense) increased by 77.8% to €1,468.7 million, from €825.9 million in the previous financial year.

The individual categories of interest are as follows:

1.1 Interest income

Interest income increased by €1.2 billion to stand at €2.9 billion, compared with €1.7 billion in 2010.

Interest income	**31.12.2011**	**31.12.2010**	**Change**
	(in € millions)		
a. Interest on loans to credit institutions related to monetary policy operations	1,125.0	848.0	277.0
b. Interest on securities held for monetary policy purposes	329.2	166.3	162.9
c. Interest on special funding to credit institutions against collateral of debt securities, guaranteed by the Greek government	574.0	0	574.0
d. Interest on investment portfolios (excluding Greek government debt securities)	431.2	395.5	35.7
e. Interest on the investment portfolio of Greek government debt securities	336.6	205.3	131.3
f. Remuneration of long-term euro-denominated claims arising from the transfer of foreign reserve assets to the ECB	12.2	9.8	2.4
g. Interest on long-term claims against the Greek State	115.4	109.6	5.8
h. Interest on the IMF reserve tranche position and SDR holdings	3.6	2.6	1.0
i. Interest on loans to the personnel of the Bank of Greece	3.5	4.0	-0.5
j. Other interest income	0.2	0.2	0
Total	**2,930.9**	**1,741.3**	**1,189,6**

In particular:

a) Interest on lending to credit institutions related to monetary policy operations

This refers to the funding of domestic credit institutions through the liquidity-providing open market operations conducted by the Eurosystem in the context of the single monetary policy of the euro area.

In 2011, this income rose to €1,125 million, from €848 million in 2010, mainly owing to an increase (from €83.4 billion on average in 2010 to €89 billion in 2011) in the liquidity available to credit institutions in response to their heightened liquidity needs due to the financial crisis, as well as the rise in the MRO rate from 1% in 2010 to 1.25% on average in 2011.

Interest on lending to credit institutions	**2011**	**2010**	**Change**
	(in € millions)		
– main refinancing operations (MROs)	203.4	171.8	31.6
– longer-term refinancing operations (LTROs)	920.2	672.3	247.9
–fine-tuning reverse operations	0.1	3.2	-3.1
– marginal lending facility	1.3	0.7	0.6
Total	**1,125**	**848.0**	**277**

b) Interest on securities held for monetary policy purposes

This amounted to €329.2 million (2010: €166.3 million) and refers to interest from securities purchased by the Bank under the Eurosystem's first covered bond purchase programme (CBPP1) and Securities Markets Programme (SMP). These programmes were launched in the context of Eurosystem interventions conducted in euro area debt securities markets with a view to ensuring liquidity, addressing the malfunctioning of certain market segments and restoring the smooth functioning of the monetary policy transmission mechanism. The value of the Bank's holdings of CBPP1 and SMP securities as at 31 December 2011 was €7.8 billion, against €4.9 billion as at 31 December 2010, valued at amortised cost.

c) Interest on special funding to credit institutions against collateral of debt securities, guaranteed by the Greek government

This amounted to €574 million and represents interest on emergency liquidity made available to credit institutions mostly through emergency liquidity assistance (ELA) operations and reverse repurchase transactions (reverse repos) (see notes on pp. A 24-26 "Other assets").

d) Interest on investment portfolios (excluding Greek government debt securities)

In its most part, this amount refers to interest on euro-denominated debt securities issued by governments in the euro area.

Interest by type of asset	2011	2010	Change
	(in € millions)		
– on securities	430.7	395.3	35.4
– on time deposits and current accounts	0.5	0.2	0.3
Total	**431.2**	**395.5**	**35.7**

e) Interest on the investment portfolio of Greek government debt securities

Interest on the Bank's holdings of Greek government securities rose strongly, by €131.3 million, relative to the previous financial year (2011: €336.6 million, 2010: €205.3 million).

f) Remuneration of long-term euro-denominated claims arising from the transfer of foreign reserve assets to the ECB

This refers to interest on the Bank's euro-denominated claims against the ECB with respect to the foreign reserve assets transferred to the latter, in accordance with Article 30 of the Statute of the ESCB. This claim is remunerated at 85% of the latest marginal MRO rate. This item rose by €2.4 million to €12.2 million in 2011 (2010: €9.8 million), exclusively on account of the increase in the MRO rate (the average level of this rate was 1.25% in 2011, compared to 1% in 2010).

g) Interest on long-term claims against the Greek State

This represents interest on loans granted by the Bank of Greece to the Greek State up to 31 December 1993.

This interest income rose by €5.8 million to €115.4 million in 2011 (2010: €109.6 million), owing to an increase in the 12-month euro LIBOR and LIBID rates applicable to all loans granted to the Greek State and resulting from the conversion of the debit balances of the account "Foreign exchange valuation differences under Law 1083/80".

h) Interest on the IMF reserve tranche position and SDR holdings

In 2011, this item stood at a considerably higher level than in 2010 (2011: €3.6 million, 2010: €2.6 million). It chiefly comprises interest on Greece's participation (quota) in the IMF and on SDR holdings with the Fund, which derive from the IMF's SDR allocation that took place in 2009 in the context of the general SDR allocation to all IMF member countries. The increase is mostly attributable to the rise in the SDR interest rate. It should be noted that interest expense on the Bank's SDR liabilities to the IMF also increased commensurately.

i) Interest on loans to the personnel of the Bank of Greece

Interest on loans (for house purchase or personal loans) granted by the Bank of Greece to members of its staff amounted to €3.5 million (2010: €4 million).

j) Other interest income

This item stood at €223 thousand, compared with €235 thousand in 2010.

1.2 Interest expense

Interest expense increased by 59.7% to €1,462.2 million in 2011, from €915.4 million in 2010.

In greater detail:

Interest expense	31.12.2011	31.12.2010	Change
	(in € millions)		
a. Interest on intra-ESCB balances (TARGET2)	1,186.8	7798.8	407.0
b. Interest on net liabilities related to the allocation of euro banknotes within the Eurosystem	162.2	39.0	123.2
c. Interest on banks' current accounts in the context of monetary policy operations (including minimum reserves)	65.1	58.4	6.7
d. Interest on deposits of the Greek State	32.2	34.9	-2.7
e. Interest on euro- and foreign-currency-denominated deposits of various entities	0.3	0.1	0.2
f. Interest on SDR allocations	3.6	2.6	1.0
g. Interest on deposits of the Hellenic Financial Stability Fund	12.0	0.6	11.4
Total	**1,462.2**	**915.4**	**546.8**

a) Interest on intra-ESCB balances (TARGET2)

Interest expense on the TARGET2 account (in € millions)						
2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
252.1	333.5	369.7	545.2	477.1	779.8	1,186.8

The above interest and expenses are calculated on the basis of the daily balances of the account dedicated to the transactions of the Bank of Greece with the ECB and other ESCB NCBs within the TARGET2 system.

The substantial rise in 2011 is the result, on the one hand, of the increase (from an average of 1% in 2010 to 1.25% in 2011) in the key ECB interest rate on TARGET2 balances and, on the other, of the enhanced liquidity available to domestic credit institutions. In its largest part, this liquidity was transferred by credit institutions to other EU countries through the TARGET2 account. However, TARGET2-related interest expense was fully offset by an equal amount of interest income from the Bank's liquidity-providing operations, therefore there was no impact on the Bank's financial results.

b) Interest on net liabilities related to the allocation of euro banknotes within the Eurosystem

This item rose to €162.2 million from €39 million in 2010, owing to the fact that the value of euro banknotes actually put into circulation by the Bank in 2011 was higher than the value of euro banknotes that would have been allocated to it in accordance with the banknote allocation key. Interest calculated on the basis of the key ECB interest rate and amounting to €162.2 million was paid on the resulting difference, which represents a liability of the Bank to the Eurosystem.

This interest expense is calculated on the basis of:

– the intra-Eurosystem claim/liability corresponding to the value of euro banknotes put into circulation by the Bank of Greece, adjusted to ensure that the Bank's share in total euro banknotes in circulation (after the deduction of the 8% share allocated to the ECB) is equal to its banknote allocation key;

– the Bank's liability from the issue of euro banknotes on behalf of the ECB (a share of 8% of the total value of euro banknotes in circulation has been allocated to the ECB);

– the amount of adjustment. Since 2002, intra-Eurosystem balances related to the allocation of euro banknotes have been adjusted in order to avoid sharp fluctuations in the monetary income of Eurosystem NCBs (see section "Banknotes in circulation" under "Accounting Policies", as well as the note on liability item 9.2).

c) Interest on banks' current accounts in the context of monetary policy operations (including minimum reserves)

This mainly involves interest paid on banks' minimum reserves and, to a lesser extent, interest paid on deposits related to margin calls and on overnight deposits of domestic credit institutions with the Bank of Greece, in the context of the single monetary policy of the euro area.

This item increased by €6.7 million in 2011 (2011: €65.1 million, 2010: 58.4 million), exclusively due to the rise in the applicable key ECB interest rate (from an annual average of 1% in 2010 to 1.25% in 2011). By contrast, the average amount of deposits dropped to €6.1 billion in 2011, from €7.6 billion in 2010.

d) Interest on deposits of the Greek State

Interest on deposits fell by 7.7% to €32.2 million, from €34.9 million in 2010, due to a decrease in deposits.

The average daily level of the Greek State's total deposits with the Bank was €2.7 billion in 2011, compared with €3.5 billion in 2010, remunerated at an average interest rate of 1.16%, compared with 0.99% in 2010.

This item comprises interest paid on cash and time deposits of the Greek State with the Bank of Greece, following the revision of the relevant agreement between the Bank and the Greek State, whereby, as from 29 January 2008, daily balances of more than €2 billion in government deposit accounts with the Bank of Greece are converted to time deposits.

e) Interest on euro- and foreign-currency-denominated deposits of various entities

This item increased substantially, from €134 thousand in 2010 to €298 thousand in 2011, due to a significant rise in deposits.

f) Interest on SDR allocations

Interest on the Bank's liabilities from the allocation of IMF special drawing rights (SDRs) increased by €1 million (2011: €3.6 million, 2010: €2.6 million), due to the rise in the SDR interest rate.

g) Interest on deposits of the Hellenic Financial Stability Fund

This interest expense amounted to €12 million. In the course of 2011, the average level of deposits held by the Hellenic Financial Stability Fund was €1.5 billion in 2011, remunerated at an average interest rate of 0.761%.

2. Net result of financial operations, write-downs and risk provisions

The net result from financial operations in 2011 declined by €16.8 million to €33.5 million, from €50.3 million in 2010.

A detailed breakdown is provided below.

2.1 Realised gains from financial operations	**2011**	**2010** *(in € millions)*	**Change**
– foreign exchange operations	6.7	11.0	-4.3
– transactions in securities	10.3	20.8	-10.5
– foreign exchange valuation differences due to changes in the €/SDR parity	-0.6	-1.7	1.1
– purchases and sales of gold coins	17.1	20.2	-3.1
Total	**33.5**	**50.3**	**-16.8**
2.2 Write-downs of financial assets and positions (unrealised losses)			
– from the valuation of foreign exchange	0	0	0
– from the valuation of securities	-0.3	-21.3	21.0
Total	**-0.3**	**-21.3**	**21.0**
2.3 Transfer from the provision for foreign exchange, interest rate, credit and gold price risks	**0.3**	**21.3**	**-21.0**
Grand total	**33.5**	**50.3**	**-16.8**

As shown in the table, the €16.8 million decline in the net result from financial transactions was exclusively due to a €10.5 million drop in gains from transactions in securities on the back of significant portfolio decreases (as disclosed under asset item 7.2), offset by interest income. Gains from foreign exchange operations fell by €4.3 million, while gains from the sale of gold coins (British sovereigns) amounted to €17.1 million, down from €20.2 million in 2010.

Finally, the results for 2011 include unrealised losses of €0.3 million (2010: €21.3 million) from the year-end valuation of securities. These losses were fully covered by the provision established for this purpose.

3. Net income from fees and commissions

Net income from fees and commissions fell by 30.6% to €98.3 million in 2011, from €141.5 million in 2010, due to the decrease – as of 1 January 2011 – in the fees received for transactions conducted on behalf of the Greek State.

A breakdown is provided below.

Net income from fees and commissions	**2011**	**2010** *(in € millions)*	**Change**
3.1 Fees and commissions income			
– management of Greek government securities	16.8	26.1	-9.3
– payments and receipts on behalf of the Greek State	32.8	75.9	-43.1
– management of the "Common Fund" (surpluses of public entities and social insurance organisations) under Law 2469/97	35.7	31.8	3.9
– private insurance supervision	5.2	0	5.2
– other	9.9	9.3	0.6
Total	**100.4**	**143.1**	**-42.7**
3.2 Fees and commissions expense	**-2.1**	**-1.6**	**-0.5**
Total net income from fees and commissions	**98.3**	**141.5**	**-43.2**

4. Income from equity shares and participating interests

Income from equity shares and participating interests increased considerably to €23.8 million in 2011, from €12.3 million in 2010, as a result of the increased profits distributed by the European Central Bank (ECB).

Income from equity shares and participating interests	**2011**	**2010** *(in € millions)*	**Change**
• income from the ECB			
– from the distribution of part of the ECB's income from euro banknotes in circulation	18.3	0	18.3
– from the distribution of the ECB's net profits	2.2	4.8	-2.6
• other income from equity shares and participating interests	3.3	7.5	-4.2
Total	**23.8**	**12.3**	**11.5**

- **Income from the ECB**

In 2011, the Bank received from the ECB an amount of €18.3 million corresponding to its allocated share in the distribution of the ECB's income from euro banknotes in circulation, as well as €2.2 million from the distribution of the ECB's net profit remaining after setting aside an amount of €1,166 million in increase of the provision for foreign exchange, interest rate, credit and gold price risks. The ECB's net profit is distributed to the Eurosystem NCBs according to their paid-up shares in the capital of the ECB.

- **Other income from equity shares and participating interests**

This income, amounting to €3.3 million, largely consists of deferred payments of dividends for financial year 2010 in respect of the Bank's participating interests in the Bank of International Settlements (BIS), DIAS Interbanking Systems SA and the Hellenic Exchanges S.A. Holding, Clearing, Settlement and Registry, while a small part (€32 thousand) represents a return of capital from the Hellenic Exchanges S.A. Holding, Clearing, Settlement and Registry.

5. Net result of pooling of monetary income

	2011	2010	Change
	(in € millions)		
– Income from the reallocation of the Eurosystem monetary income	-76.2	-45.2	-31.0
– Transfer to income from the provision against counterparty risks arising from Eurosystem monetary policy operations	32.8	47.0	-14.2
Total	**-43.4**	**1.8**	**-45.2**

As shown in the table, the net result from the pooling and reallocation of Eurosystem monetary income was negative by €43.4 million in 2011, compared with a positive result of €1.8 million in 2010.

In greater detail:

Net result of pooling and reallocation of Eurosystem monetary income

Monetary income is the income accruing to the euro area NCBs in the performance of the Eurosystem's monetary policy function.

The amount of each NCB's monetary income is equal to its annual income (actual and imputed) derived from its assets held against the "liability base".

The liability base consists of the following liability items:

– banknotes in circulation;

– deposit liabilities to euro area credit institutions in euro, related to monetary policy operations;

– net intra-Eurosystem liabilities arising from balances of TARGET2 accounts;

– net liabilities related to the allocation of euro banknotes within the Eurosystem.

Any interest paid by an NCB on items included in the liability base is deducted from the monetary income of that NCB.

The assets that are held against the liability base ("earmarkable assets") are the following:

– loans to euro area credit institutions related to monetary policy operations denominated in euro;

– securities held for monetary policy purposes. These include covered bonds issued by euro area credit institutions and securities involved in the Securities Markets Programme (SMP).The yields on the former are calculated daily on the basis of the latest available marginal rate for the Eurosystem's main refinancing operations, while those on the latter are calculated in real terms;

– intra-Eurosystem claims equivalent to the transfer of foreign reserve assets to the ECB;

– net intra-Eurosystem claims arising from balances of TARGET2 accounts;

– net claims related to the allocation of euro banknotes within the Eurosystem;

– gold, including claims in respect of gold transferred to the ECB, in an amount permitting each NCB to earmark a proportion of its gold that corresponds to the application of its share in the subscribed capital key to the total amount of gold earmarked by all NCBs. Gold is deemed to generate no income.

Where the value of an NCB's earmarkable asset exceeds or falls short of the value of its liability base, the return on the difference (gap) is calculated daily on the basis of the latest available marginal rate for the Eurosystem's main refinancing operations.

At the end of each financial year, the monetary income pooled by the Eurosystem is reallocated to the NCBs according to their paid-up shares in the capital of the ECB.

The negative result (€76.2 million) recorded in 2011 was partly a consequence of the fact that the monetary income that actually accrued to the Bank in 2011 (€517.8 million) was by €77.3 million higher than the €440.5 million estimated according to the Bank's share in the capital of the ECB). However, it also reflected revenue of €1.1 million arising from adjustments of monetary income for 2008, 2009, 2010 (see note on liability item 9.4).

Transfer to income from the provision against counterparty risks arising from the Eurosystem's monetary policy operations

The Bank's income in 2011 includes a transfer of a further €32.8 million (in addition to the €45 million transferred in 2009, and the €47 million transferred in 2010) from the €149.5 million provision against counterparty risks from monetary policy operations.

This provision was initially established in 2008, following a decision by the Governing Council of the ECB on 18 December 2008, in view of the exceptionally adverse conditions that prevailed in the money market in 2008 and affected the liquidity-providing monetary policy operations conducted in that year.

In this context, the Governing Council of the ECB decided, in line with the principle of prudence, that the NCBs should form respective provisions totalling €5.7 billion in their annual accounts for 2008 as a buffer against counterparty risks arising from the monetary policy operations conducted in 2008.

In accordance with the Statute of the European System of Central Banks (ESCB) and of the ECB, this provision was funded by all the national central banks of the Member States according to their subscribed shares in the capital of the ECB.

In accordance with the above-mentioned decision of the Governing Council of the ECB, the amount of the provision will be adjusted annually after the revaluation of collateral received from defaulted counterparties.

The favourable outcome of the revaluation of collateral in 2009, 2010 and 2011, which is attributable to improved conditions in financial markets, combined with the reduced balance of collateral due to the sale of part of the portfolio and the proceeds of coupons, resulted in a reduction in the relevant risk and, therefore, a decrease in the relevant provision from €5.7 billion to €949 million; also, in the transfer to income of a total amount of €4.8 billion from the unused provisions of Eurosystem NCBs for 2009, 2010 and 2011.

In the case of the Bank of Greece, a total of €124.8 million was transferred to income. After the transfer, the balance of the provision is €24.7 million.

6. Other income

Other income increased by €1.4 million to €13.9 million, compared with €12.5 million in 2010.

Other income includes revenue of €11.8 million from the activities of the Banknote Printing Works (IETA) of the Bank of Greece, derived from the production of items on behalf of the Greek State (coins, lottery tickets, passports, forms), as well as other revenue, amounting to €2.1 million, from accreditation fees, tax discounts, etc.

OPERATING COSTS, DEPRECIATION AND PROVISIONS

	2011	2010 *(in euro)*	Change
STAFF COSTS AND PENSIONS	286,055,899	319,516,458	-33,460,559
ADMINISTRATIVE AND OTHER EXPENSES	47,018,524	48,106,674	-1,088,150
DEPRECIATION OF TANGIBLE AND INTANGIBLE FIXED ASSETS	13,642,905	13,481,729	161,176
PROVISIONS	1,151,441,512	472,865,662	678,575,850
TOTAL EXPENSES	1,498,158,840	853,970,523	644,188,317

NOTES ON THE EXPENDITURE ACCOUNTS

Expenditure in 2011 grew by €644.2 million (75.4%), to €1,498.2 million, from €854.0 million in 2010, exclusively on account of high provisioning, while operating costs excluding provisions declined.

In particular:

• ***Operating costs excluding provisions (staff costs, pensions, depreciation and other costs)*** dropped by €34.4 million (or 9%) to €346.7 million, from €381.1 million in 2010, primarily on account of a significant decline of €33.5 million (or 10.5%) in outlays for staff costs and pensions.

In greater detail:

– ***Outlays for staff costs (wages, social insurance contributions, etc.) and pensions*** fell by €33.5 million (or 10.5%) to €286.1 million, from €319.5 million in 2010.

– ***Administrative and other expenses*** decreased by 2.3%, to €47.0 million, from €48.1 million in 2010. These include the expenditure of the Banknote Printing Works (IETA) for raw materials for the production of banknotes and other items on behalf of the Greek State (coins, lottery tickets, passports, forms), the repair and maintenance cost of premises, the procurement of computer hardware and other equipment, insurance premiums, overhead costs, etc.

The low rate of decrease was attributable to higher IETA expenditure on raw materials for the production of items on behalf of the Greek State (with a commensurate increase in revenue), as well as to the new obligations (such as additional audits) of the Bank of Greece in respect of safeguarding financial stability.

The Bank's cost-streamlining efforts continued in 2011 as well, with the reduction of basic operating costs. For instance, travel expenses decreased by 36% and the Bank's new outsourcing contracts also decreased by 14%.

– ***Depreciation*** rose slightly, by 1.2%, to €13.6 million, from €13.5 million in 2010.

• **Provisions** increased considerably **in 2011 as well** (+ €1,151.4 million), in order to cover operational risks and other liabilities of the Bank (see notes on liability item 12 "Provisions").

DISTRIBUTION OF NET PROFIT

Profit amounted to €96.6 million in 2011, compared with €190.4 million in 2010, having decreased by 49.3%.

The General Council proposes to the General Meeting of Shareholders that the profit be distributed as follows:

	2011	2010**
	(in euro)	
Dividend of €0.67 per share (number of shares 19,864,886)*	13,309,473	13,309,473
Extraordinary reserve	0	12,000,000
Additional dividend	0	25,943,542
Tax on dividends (applicable rate: 20%; Article 14 para. 9 and 10 of Law 3943/2011)	3,327,369	12,395,689
To the government	80,000,000	126,803,588
	96,636,842	**190,452,292**

* Total gross dividend in 2011 is €0.8375 per share, compared with €2.60 in 2010. Dividends are subject to a tax withholding of 25%, in accordance with Law 3943/2011, Article 14, para. 1 and 2.
** The profit distribution of 2010 is presented here as effected under Law 3943. This Law was published in the Government Gazette on 31 March 2011, i.e. later than the publication of these annual accounts (14 March 2011).

Athens, 19 March 2012

For the General Council
THE CHAIRMAN

GEORGE A. PROVOPOULOS
GOVERNOR OF THE BANK OF GREECE

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