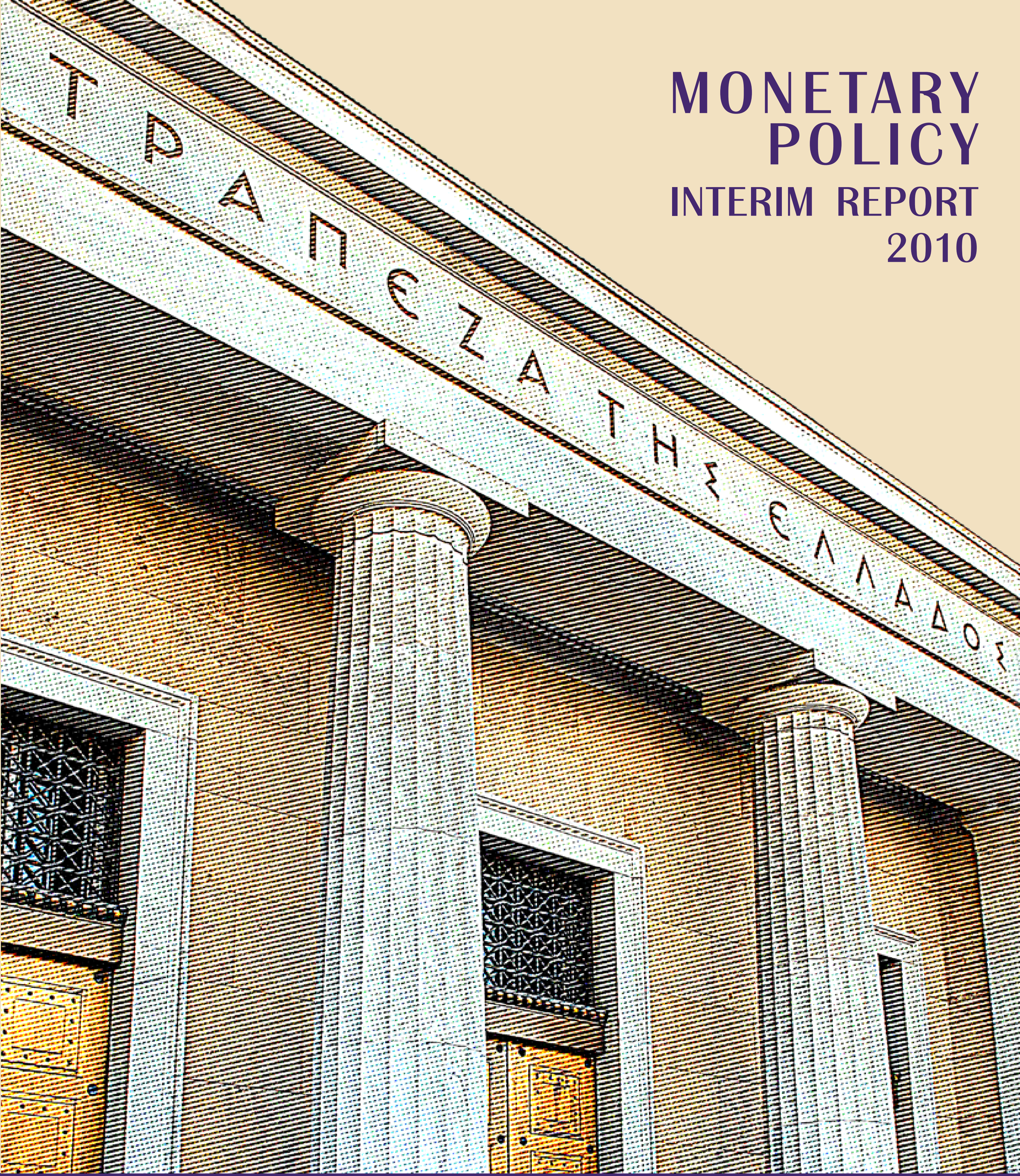

MONETARY POLICY

INTERIM REPORT 2010

OCTOBER 2010

BANK OF GREECE
EUROSYSTEM

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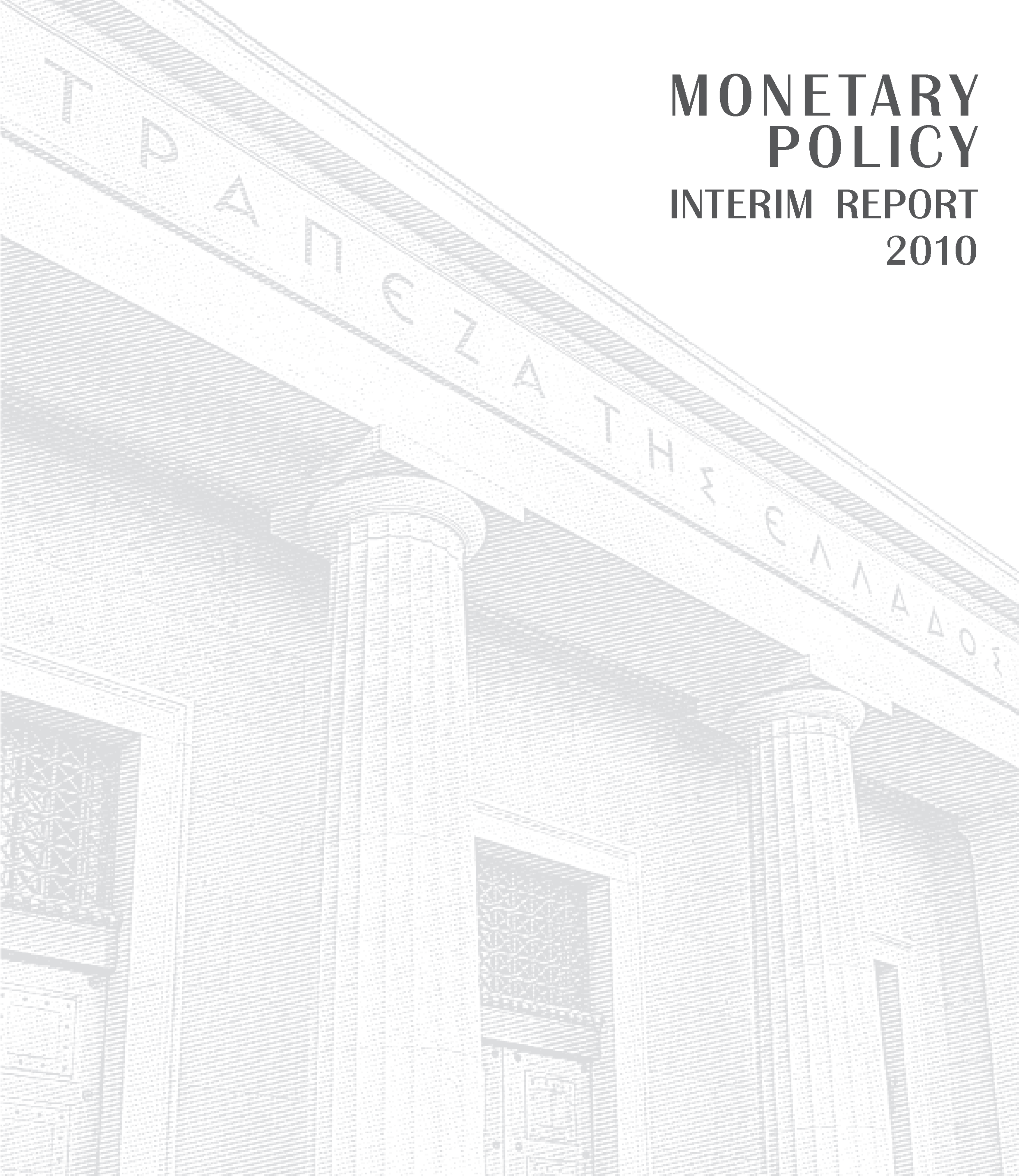

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ΤΡΑΠΕΖΑ ΤΗΣ ΕΛΛΑΔΟΣ 1928

BANK OF GREECE
EUROSYSTEM

To the Greek Parliament
and the Cabinet

In accordance with its Statute, the Bank of Greece hereby submits its Report on Monetary Policy to the Greek Parliament and the Cabinet.

The Greek economy is going through its most difficult phase in recent decades, which is the result of many years of inaction in addressing the problems while they were still manageable. With the advent of the global financial crisis, the dead-end the country was heading for became visible to all and the country's position in international markets was shaken.

The activation of the financial support mechanism for Greece established by euro area countries and the International Monetary Fund, based on the Economic Adjustment Programme, served to avert the catastrophic developments which seemed inevitable in April 2010. At the same time, banks in Greece benefited from the measures taken by the European Central Bank, i.e. the provision of liquidity to Greek banks, the government bond purchase programme and the acceptance of Greek government bonds (or debt securities guaranteed by the Greek government) as collateral in the Eurosystem's refinancing operations.

The Programme secures financing for Greece from the euro area countries and the IMF for a period of three years, at a time when the cost of market financing has become prohibitive. It also sets out the general guidelines of economic policy for the years to come, mainly in the area of public finances, the implementation of structural reforms in the broader public sector and the functioning of markets. The Programme is a consistent medium-term plan of economic adjustment; it includes a specific timetable for its implementation and compresses into a three-year period all changes and reforms that should have been carried out when conditions were more favourable and the associated costs would have been lower.

After years of hesitation regarding the economic policy, the cost of reforms appears high and is spread throughout the economy. The cost is mainly reflected in wages and pensions, particularly in the public sector, an increased tax burden for enterprises and individuals, as well as a downturn of activity which affects incomes and employment across economic sectors.

In the first half of 2010, GDP fell by 3% compared with the corresponding period of 2009, while for the year as a whole it is expected to decline by about 4%. Unemployment is projected to exceed 12%; real average wages, partly reflecting high inflation, will decline by 8% in total economy and 17% in the public sector.

Recession was of course expected for this year; it is also expected for 2011, albeit at a weaker pace. In order to address the serious problems, the economy has to adjust to lower levels of activity, until it starts recovering driven by a more active contribution of the private sector.

The above paints the broad picture of the immediate, already visible, cost of adjustment. It should however be noted that a proper assessment of this cost would entail a *comparison with the cost of non-implementation.* The big contribution of the programme lies in the following:

1. Uncontrollable developments were averted and there is now room for policies that can limit the length and depth of the recession. The programme is binding as regards fiscal targets, but in the area of growth there exist numerous possibilities for intervention, which should be investigated the soonest possible.

2. If the programme is implemented consistently:

- Greece will remain an active member of the euro area, rightfully participating in the processes shaping the future of the EU and of our country.

- The Greek economy will be relieved, once and for all, from the obstacles of the past and will be able to operate more efficiently.

- Privileges and exemptions which were hampering growth and nurturing social inequality will be lifted.

- Potential growth will strengthen, thereby making it feasible to achieve higher and sustainable levels of income and employment.

A first, sine qua non, condition to ensure the success of the Programme is the adequacy and effectiveness of the mechanism needed to implement it, namely public administration. In this respect, important changes are already under way and must be carried through rigorously and without delays. However, these are not enough. What we need now is a comprehensive and complete rebuilding of the state on new foundations, so that its operation will encourage rather than hinder creative initiative.

The second necessary condition is ensuring continuity in the implementation of the Programme. One of the main reasons that led to the current crisis is that similar stabilisation programmes launched in the past were never completed, as they soon lost their momentum and were eventually abandoned or interrupted. As a result, all benefits that had been achieved disappeared within a few months and the economy returned to its initial level or an even lower one. This time, however, the impact would be direct and strong, and the current income and employment levels would take years to recoup.

In order to contain recession and speed up recovery, it is necessary to encourage private business activity, which is currently being suppressed by low demand, low competitiveness, the slowdown in credit expansion and the increased tax burden.

As regards the tax burden, *there is no room for further increases in tax rates for businesses and individuals; policies aimed at increasing public revenue should be geared towards broadening the tax base and combating tax evasion.* Further increasing the tax burden on those who already pay taxes would not only intensify the recession but actually prove counterproductive, bringing about a decline instead of a rise in revenue.

The settlement of tax arrears is not the best option for increasing revenue. In the current conjuncture however this policy can prove useful, provided it is accompanied by a thorough modernisation and restructuring of the tax system and the implementation of new practices and effective methods for curbing tax evasion. At the same time, given that the tax environment has been highly volatile over the recent past, having been subject to major changes, there is an *urgent need to create a credible tax environment, with stable tax rates and efficient tax collection mechanisms.*

For fiscal consolidation to produce better results over the next years, it must rely mainly on expenditure cuts. Admittedly, a large reduction in expenditure has been achieved since the start of the Programme. However, it was predominantly based on cuts in wages and pensions, whereas large margins exist for achieving substantial expenditure savings by addressing and eliminating the structural weaknesses in the public administration, which generate chronic deficits and debts. Fiscal consolidation must now proceed at a much quicker pace, through a drastic reduction in the waste of funds in the broader public sector and through merging or closing down public sector entities which are not really productive. *Fiscal consolidation will be sustainable and successful only if it stems from a radical restructuring of the state at all levels.*

During the first year of the Programme, fiscal consolidation has made remarkable headway. Nevertheless risks to the adjustment path remain high. Adding to these risks is the imminent revision of the 2009 general government deficit (expected to be announced by Eurostat on 22 October, i.e. after the cut-off date of the present report), which may also affect the deficit-to-GDP ratio in 2010.

More generally, in view of the new information, it is self-evident that there must be a stronger effort to cut public expenditure and increase revenues in line with the Programme targets. This will involve, among other things, curtailing discretionary spending and improving the efficiency of the tax collection mechanism. Moreover, the *successful implementation of the Programme crucially requires that fiscal policy be planned on the basis of alternative scenarios and be prepared to take corrective action in the event of deviations from targets.*

A prerequisite for the Greek economy to enter a new virtuous circle is a steady evolution of the fiscal adjustment process at a pace that —if possible— would overshoot the one envisaged in the Programme. This would have a positive effect on the economic climate, improve market confidence earlier and favourably affect the availability and cost of financing. *The Programme sets out the actions that are absolutely necessary to address the current crisis. The strict implementation of the Programme is of the essence, but it is no substitute for the broader responsibility of economic policy to address the major issue of growth and to speed up policies aimed at reviving the economy as soon as possible.*

The Programme is a good start that mitigates risks and gives the Greek economy the time required for its reshaping on new foundations. However, the road will be long and arduous: growth is not just around the corner. Until improvement is visible, there will be further deterioration for a while. Thus, what is currently required, in parallel with the fiscal adjustment, is to draw up a detailed "road map" for limiting the depth of the recession and vigorously reviving the growth process – based this time on solid foundations. In other words, *we need a binding and coherent Action Plan for Growth, which will operate side-by-side with the fiscal adjustment process, complement and/or elaborate on policies which are already being adopted and suggest new policies which will favour growth without jeopardising the achievement of the fiscal targets.*

Such an Action Plan, together with the promotion of reforms already planned and a smooth evolution of the fiscal adjustment effort, will send out a strong signal to the domestic and international markets – that the Greek economy is in the process of reinventing itself, becoming outward-looking, opening up to entrepreneurial initiatives and taking advantage of the opportunity provided by the support mechanism in order to achieve a speedy recovery. What is needed is a focus on growth, a common objective as regards what we want to achieve over the coming years and a clear choice of the instruments that will take us there.

An Action Plan for growth should include the following:

1. The exploitation of the country's comparative advantages and concrete medium-term plans with clear policy targets and instruments to pursue an outward-looking growth strategy – i.e. one that places emphasis on exports and on attracting foreign direct investment. This means that priorities must be set with respect to (a) allocating public resources to public investment and to the support of private investment; and (b) upgrading infrastructure, e.g. the key sectors of transport and energy.

2. The identification, codification, specification and fast implementation of the "horizontal" reforms that are expected to have a favourable effect on the economy's growth potential. This effort mainly aims at the *creation of a business-friendly environment, through an effective improvement in the regulatory and institutional framework.* If tangible results are obtained soon in this respect, it will be easier to attract foreign and domestic capital to finance the necessary investment.

The key areas in which structural changes are urgently needed —and in some cases are already underway— include:

– Modernisation and transparency of public administration.

– Enhanced labour market flexibility.

– Strengthening competition in the markets for goods and services.

– Better absorption of Community funds through the National Strategic Reference Framework (NSRF), the promotion of investment and an enhanced export orientation of the economy.

– A more effective education system.

By implementing the structural changes outlined above, economic policy will create an appropriate environment *—a business "ecosystem"—* that will enable enterprises to operate more efficiently. This system must be characterised by stable rules on competition and taxation, a drastic reduction in administrative obstacles and costs, an unambiguous regulatory framework for the functioning of markets, well-defined and fast procedures relating to land use and licensing for business start-ups, as well as a vigorous fight against corruption.

However, *adjustments are also required on the part of enterprises, which must become far-sighted, expand their time horizons and immediately take investment initiatives. The pursuit of maximum possible gains in the shortest possible time is no longer an option.* The global economic crisis has brought a shift from short-termist valuation towards longer-term considerations. The necessary process for the adjustment of enterprises would involve: increasing their size; developing synergies and joint projects; improving productivity also through on-the-job training, thereby contributing to lower costs; strengthening their export orientation by looking for new markets and working jointly with other firms; and adopting eco-friendly practices.

* * *

Unlike in many other countries, where the crisis originated in the banking system and then spilled over to the real economy, the Greek banking system, which has solid foundations, only began to face liquidity constraints when the severe fiscal imbalances led to successive credit rating downgrades of the Greek sovereign and in turn of Greek banks, thereby restricting bank access to sources of finance and raising their borrowing costs. This development, coupled with the tendency of domestic deposits to decline in the first half of the year, inevitably affected banks' liquidity, and hence the supply of credit.

At the same time, recession, which weighed on the financial situation of non-financial enterprises and households, caused credit demand to decline. These factors led to a deterioration in the quality of the banks' loan portfolios and a fall in their profitability. On account of these developments, on both the demand and the supply side, the annual rate of credit expansion declined, whilst still being positive.

Capital adequacy remained relatively high. However, the particularly adverse macroeconomic conditions imply that banks should keep their capital adequacy ratios at levels well above the regulatory minima for precautionary reasons. A positive development in this direction is the successful completion of the recent share capital increase of the National Bank of Greece.

It is important to note that *banking sector aggregates will not change for the better without a correction of the factors that exert pressure on banks' credit ratings and thereby on their ability to raise funds from money and capital markets.* In other words, an improvement in the macroeconomic environment is necessary. This improvement will make a positive contribution towards mitigating not only banks' liquidity risk, but also their credit risk, enabling them to continue to accommodate demand for bank credit.

At the same time, banks should be more far-sighted in adjusting to the new economic and regulatory environment. They need to take into consideration that, even after economic activity has recovered, the growth rate of banking will still fall short of pre-crisis levels. Moreover, the ECB's non-standard measures still in place will eventually be phased out and banks may face more difficulties in tapping the international markets from 2011 on, as governments, banks and non-financial enterprises will be in strong competition for funding. Finally, banks have to prepare themselves for the gradual implementation by 2018 of the new international regulatory framework "Basel III".

These reasons make it necessary for banks to review their business models, seeking to maintain high capital adequacy and liquidity levels by setting aside sufficient provisions for credit risk and by rationalising their cost structure. *Strategic alliances and mergers will certainly contribute to the achievement of these goals, because of the resulting synergies.*

* * *

The arduous effort that the country is making today aims at restoring confidence in the future of the Greek economy, i.e. in its ability to overcome its fiscal difficulties and become more creative, outward-looking and open to business initiatives and investment.

Confidence, however, cannot be restored overnight or automatically. Today, five months after the activation of the financial support mechanism for Greece and the adopting of strict fiscal measures as a prerequisit, markets still treat Greek bonds with cautiousness, although the climate has lately started to improve. One of the challenges for Greece is to show continuity, consistency and perseverance in implementing the Programme. These traits must be continuously confirmed in practice. Market cautiousness is also fuelled by analyses that consider debt restructuring to be unavoidable, as they anticipate that growth rates will be too low to ensure the servicing of the large public debt.

Such scenarios have already been refuted by the IMF, which in a recent analysis concludes that a default for Greece is *unnecessary, undesirable and unlikely*. Statements by EU and ECB officials are in the same vein. In any event, however, *it is up to us to answer with our actions – in two ways: First, by achieving the targets of the Adjustment Programme, and —wherever possible— by overshooting them, thereby sending a clear signal that fiscal consolidation is proceeding at a fast pace. Second, by drawing up and swiftly implementing a coherent Action Plan for Growth, which will convincingly show that, as a beginning, the Greek economy can recover sooner than currently expected and, subsequently, can grow strongly, standing on new and sound foundations.*

If we manage not only to achieve the important fiscal targets but also, over the next two-and-a-half years, to establish the conditions for boosting exports and attracting foreign investment that will enhance growth, we can convince the markets that the debt dynamics will be reversed. The Greek economy has immense growth potential. The situation is already improving, but the road ahead is long and there is no room for complacency. Today's crisis can and must act as a catalyst for reshaping the economy, enhancing the country's competitiveness and prosperity within the euro area. This is what is at stake for Greece.

Athens, October 2010

George A. Provopoulos

Governor

MONETARY POLICY COUNCIL OF THE BANK OF GREECE

CHAIRMAN

George A. Provopoulos

MEMBERS

Helen Dendrinou-Louri

Ioannis M. Papadakis

Georgios D. Dimopoulos

Panayotis A. Thomopoulos*

Georgios E. Oikonomou

* Resigned in October 2010.

CONTENTS

TABLES

CHARTS

BOXES

I DEALING WITH THE CRISIS IN THE GREEK ECONOMY: THE IMPLEMENTATION OF THE ECONOMIC AND FINANCIAL ADJUSTMENT PROGRAMME – CONDITIONS TO EXIT THE CRISIS

1 INTRODUCTION

The Greek economy in the deepest crisis in recent decades

The Greek economy is going through its most difficult phase since the collapse of military dictatorship and the return to democracy in 1974. The exit from the crisis requires long, systematic and painstaking efforts that would cover almost the whole economy and its institutions. After 1974, an initial 5-year period of rapid growth (1975-1979) was followed by a 14-year period of cyclical fluctuations during which economic expansion averaged below 1%. From 1994 to mid-2008 economic growth was continuous and strong. Notwithstanding a marked pick-up in investment over this latter period, reflected in higher capital formation and potential GDP growth, domestic demand and particularly consumption, private and public, grew even faster, also supported by loans to the public and the private sector. At the same time, while considerable progress was made in reinforcing the physical infrastructures of the economy, improvement in non-physical infrastructure (e.g. education) was unsatisfactory, and reforms aimed at enhancing the functioning of public administration and markets proceeded slower than required.

With the supply side failing to keep pace with growing demand, imports kept on rising. It is quite indicative that employment remained relatively low, while the rate of unemployment was relatively high. Moreover, inflation was persistently higher than the average of Greece's major trading partners. Productivity growth was strong but not that much as to avert deterioration in the economy's international competitiveness, which led to a considerable widening of the current account deficit. As a result, the intensification of imbalances, in conjunction with negligible or subdued productive FDI inflows, undermined the country's growth dynamics and prevented any real improvement in its position in the international division of labour.

In this context, business activity, a key driver of robust growth, was inadequate, as it had to grow within a restrictive regulatory framework and ineffective public administration, which, exacerbated by corruption, ended up encouraging black economy. This created a vicious circle, as addressing the inadequacy of business activity was one of the main reasons for the expansion of the public sector, which had contributed to the creation of this inadequacy in the first place. Some private undertakings eventually became reliant on state support/subsidies, or resorted to tax evasion facilitated by administrative corruption, to preserve their competitive position. Corruption manifested itself in many types of transactions involving, on the one hand, the state and, on the other, businesses and individuals. How things went from there is well-known: siphoning resources from other parts of the economy, the public sector grew way too large, at the expense of the private sector. In this context, public debt kept growing, whereas international competitiveness tended to steadily decline.

This distorted growth model plunged the Greek economy into a "twin" crisis, since the problem of public deficit and debt is closely interwoven with the problem of external deficit and debt. This illustrates just how important it is to raise national saving from its current exceptionally low level, bolster the production of internationally marketable goods, improve the country's international competitiveness and enhance its productive capacity to quantitatively and qualitatively meet domestic and external demand. Highlighting the gravity of the problem is the fact that net national saving (i.e. net of depreciation) remained in negative territory almost throughout 2000-2009.[1] Recently revised data put it at -8.0% of GDP in 2008 and -11.8% of GDP in 2009.

1 Except for 2001, when it was positive and equal to 0.2% of GDP.

2 THE ECONOMIC ADJUSTMENT PROGRAMME

A coherent medium-term programme for dealing with the fiscal crisis and overhauling the economy

The Greek fiscal crisis manifested itself in an explosive way in late 2009. It was followed by an unprecedented credibility crisis, which cut off Greece from international capital markets. A direct implication of this was the activation in early May 2010 of a financial support mechanism for Greece set up by euro area Member States and the IMF, based on an Economic Adjustment Programme jointly agreed by the Greek government, the European Commission in laison with the ECB, and the IMF.[2]

The Programme secures financing for Greece from the euro area Member States and the IMF for a period of three years, as the cost of market funding has become prohibitive. Furthermore, it sets out the general guidelines of economic policy for the years to come, mainly in the area of public finances, and the general directions for the implementation of structural reforms in the broader public sector and the functioning of the markets.

The Programme is an internally consistent medium-term plan of economic adjustment; it includes a specific timetable for its implementation and compresses into a three-year period changes and reforms which should have been carried out when conditions were more favourable and the associated costs would have been lower. The primary objective of the Programme is to deal with the dual challenge of fiscal consolidation and of enhancing the country's international competitiveness, together with achieving sustainable growth.

The need for fiscal consolidation has made it necessary to adopt measures that severely affect disposable income and domestic demand over the short term. Fiscal balance is necessary in order to restore confidence in the economy and reverse this short-term negative effect, encourage domestic and attract foreign investment, thereby reviving the growth process – based this time on sound and robust fundamentals.

Restoring confidence is crucial to attracting the necessary foreign funds as the national saving rate is too low, adding to the liquidity strains of Greek banks, which erodes their ability to finance investment. A positive development in this regard was the recent signing of a Memorandum of Understanding between Greece and China aimed at enhancing cooperation between the two countries in the field of investment, and of a series of collaborative arrangements between business bodies of the two countries.

The required reorientation of the economy will come at a cost for economic activity, employment, inflation and income in the short run

As the adjustment is carried out today with delay and has to be compressed into a short period of time, its cost is high; it is spread throughout the economy and is reflected in key economic aggregates. But it is **inevitable when an economy imperatively needs to be radically reoriented within a very short period time.** The cost of the adjustment programme is mainly reflected in public sector nominal wages, pensions, an increased tax burden for businesses and individuals, as well as a downturn of activity which affects incomes and employment across all sectors of the economy. It is also reflected in a temporary surge in inflation sparked by a sharp rise in indirect taxes amid insufficient competition in the domestic market. This surge in inflation would have been even greater, had it not been for a reduction in demand. Of course, as the effect of higher indirect taxes on the annual rate of growth of prices wanes in 2011, inflation is expected to decline substantially.

2 The programme, which is set out in the Memorandum of Economic and Financial Policies and the Memorandum of Understanding on Specific Economic Policy Conditionality, was transposed by the Greek parliament into Law 3845, published on 6 May 2010. The Memoranda, dated 3 May 2010, were signed by the Minister of Finance and the Governor of the Bank of Greece, and were updated on 6 August 2010.

In the first half of 2010 GDP contracted by 3% compared with the corresponding period of 2009, whereas consumer and business expectations have remained negative. Thus, for 2010 as a whole, GDP is expected to decline by around 4% against 2009. A recession of this magnitude was expected and is forecast to continue in 2011, albeit at a weaker pace. A reversal of years of fiscal relaxation pushes the economy to adjust to lower levels of activity, until it starts to recover driven by a more active contribution of the private sector.

Under the pressure of recession, unemployment will probably exceed 12% for the year as a whole and the annual rate of inflation is expected to come close to 4.8% in 2010 (from 1.3% in 2009). The combination of a decline or stagnation in employees' nominal earnings and of the temporary surge in inflation is expected to cause real average pre-tax earnings to drop by about 8% in total economy and 17% in the public sector.

The above paint a broad picture of the immediate, already visible, cost of adjustment. It should be noted that a proper assessment of this cost would entail a comparison with the cost of non-implementation of the programme. In the circumstances that gradually prevailed in the first four months of 2010, as the credibility crisis cut off Greece's access to capital markets while the public sector's obligations for wages and pensions needed to be met, the non-immediate implementation of measures of that magnitude would have meant Greece's default and a protracted period of recession with uncontrollable and unforeseeable developments.

Considerable immediate and medium-term benefits from the Programme

It is obvious that the main immediate benefit of the Programme is the drastic reduction in the central government deficit, by around 30%[3] in the first nine months of the year compared with the corresponding period of the previous year. In this regard, it should be noted that the two latest reports for Greece (one from the European Commission and the other from the International Monetary Fund)[4] estimate that the objective of the Programme will be met and that the general government deficit will decrease to slightly below 8% of GDP, provided that expenditure cuts will more than offset the shortfall in revenue.

But the medium-term benefits of the Programme are of even greater importance:

1. A default has been avoided and there is now considerable room for policies that could limit the duration and depth of the recession and lay the foundations for sustainable growth. The Programme is highly binding as regards fiscal consolidation and the implementation of institutional fiscal reforms. As far as growth-enhancing structural reforms are concerned, the Programme contains a number of well-defined targets but the modalities of their implementation will need to be specified in order to ensure that the broad objectives of the Programme are met, while some extra interventions may also be warranted.

2. If the programme is implemented consistently, the final outcome, which can be envisaged, will include:

- Greece remaining an active member of the euro area, participating in the processes that will shape the future of the EU and of our country.

- The Greek economy doing away with the obstacles and distortions of the past and operating more efficiently.

- Limiting the privileges and exemptions which were hampering growth and nurturing social inequality.

3 Based on provisional fiscal data, the central government deficit was reduced by 31.1% year-on-year in the nine-month period from January to September, whereas, based on cash data, it was reduced by 27.7%.

4 Released on 19 August and 14 September respectively.

• A strengthening of potential growth, thereby making it feasible to achieve higher levels of income.

Key condition for the success of the Programme is an effective public administration that will undertake the interventions required – in other words rebuilding the state on new foundations

The sine qua non condition for the smooth implementation of the Programme is effective public administration. Meeting this condition would be tantamount to a comprehensive reshaping of the state, and would primarily mean:

• clarifying the responsibilities of various public entities;

• abolishing any remaining overlapping competencies, ensuring effective coordination in the case of joint competence or where different entities use different policy tools to pursue the same goals;

• speeding up time-consuming administrative and judicial processes that affect national productivity and nurture corruption;

• promoting effective job matching and establishing productivity-enhancing incentives and quick training schemes for employees in the public sector; and

• computerisation of processes to enable the digital mapping (digitation) of available information and allow swift and informed assessments to be made on the advisability of alternative policy options.

The above should also contribute to remedying the chronic weakness of poor law enforcement – something that turns out to be of utmost importance in the current juncture. This cannot be taken for granted (as it should have been) as it requires the effective operation of judicial institutions and a meaningful public debate before a law is passed.

3 FISCAL ADJUSTMENT POLICY

Fiscal adjustment, although necessary for growth, will not automatically generate it

The Programme is rightly focused on fiscal adjustment problems, which, if addressed properly, will create the conditions for growth. In fact, there has never been a country that achieved sustainable growth based on chronic fiscal deficits. On the contrary, there are numerous examples of countries in which high deficit and debt levels have hampered economic growth. In order to limit the depth of the recession and speed up recovery, it is also necessary to encourage private business activity, which is currently being suppressed by low demand, low competitiveness, the slowdown in credit expansion and the increased tax burden.

The following paragraphs set out the main lines of the current fiscal policy whereas, further below, the need is discussed for a plan to speed up recovery and achieve sustainable growth.

a) In order to increase revenue it is necessary to immediately curtail tax evasion rather than raise tax rates

As regards the tax burden, there is no room for further increases in the tax rates for businesses and individuals; policies to achieve the necessary increase in public revenues should primarily be geared towards broadening the tax base and combating tax evasion. Further increasing the burden on those who already pay taxes would not only intensify the recession but would actually prove counter-productive, bringing about a decline instead of a rise in revenue.

b) Tax amnesty and the need to reshape tax administration

Although in theory the tax amnesty arrangement (i.e. the settlement of unaudited tax cases and tax arrears with favourable terms for those opting for it) enacted last September – the tenth one in the past 30 years— is not the ideal option for increasing revenue as repeatedly stressed,[5] in the present conjuncture it reflects the financial distress of many taxpayers, businesses and professionals. In addition, provided it is accompanied by a thorough modernisation and restructuring of the tax system and the implementation of new practices and effective methods for curbing tax evasion, this policy could be beneficial in that it may lead to an increase in tax revenue, the alleviation of the cumulated workload of tax services through "a cleaning up of the past", as well as a reduction in the scope for corruption. In connection with this it is noted that, according to data from the Ministry of Finance,[6] there are currently some 2,000,000 unaudited tax cases, 150,000 pending tax litigation cases, and 1,300,000 persons with tax arrears in excess of €30 billion (i.e. nearly 13% of GDP, or almost the general government deficit for 2009). The aim of this arrangement is to generate revenue of about €1.5 billion in 24 months. This "cleaning up of the past" comes after the recent major changes, until the completion of which the tax environment will remain highly volatile. Tax amnesty needs to mean the end of this shower of changes. **There is now need to restore a credible and stable tax environment that entails efficient tax collection mechanisms.**

c) Other sources of public revenue: privatisations and utilisation of public real estate

In early June, the government announced the main guiding principles and the ways to implement the programme for privatisations and the utilisation of public real estate – a programme that also attempts to reorganise the operation of Public Enterprises and Organisations (DEKO). The swift implementation of the programme would be quite beneficial. In this respect, a bill on the reorganisation of the Hellenic Railways Organisation (OSE) (see below) has already been tabled to the Parliament, whereas the Minister of Finance has announced the merger of entities responsible for the management of public real estate (Hellenic Public Real Estate Corporation, Hellenic Olympic Properties SA and Hellenic Touristic Properties SA). The utilisation of public real estate is discussed in Chapter VII, Special Feature 3.

d) Fiscal adjustment has to proceed with a focus on structural, in other words sustainable, spending cuts

For fiscal consolidation to produce better results over the next years, it must rely mainly on spending restraint and cuts; two thirds of it must come from this source, as repeatedly stressed by the Bank of Greece. A fiscal consolidation which relies heavily on revenue is vulnerable to cyclical uncertainty, which affects the tax paying capacity of tax payers, as shown by recent developments. Admittedly, quite a large reduction in expenditure has been achieved so far. However, this reduction has predominantly relied on cuts in wages, pensions and public investment, whereas there is ample room for achieving substantial expenditure savings by addressing the structural weaknesses in the public administration, which generate chronic deficits and debts (see Chapter VII, Special Feature 1). Fiscal consolidation must now proceed at a much quicker pace, through a drastic reduction in the squandering of funds in the broader public sector and through merging or closing down public sector entities which are not really productive, in order to reshape and increase the effectiveness of the broader public sector. Fiscal consolidation will be sustainable and successful only if it stems from a radical restructuring of the state at all levels, including local government. The Economic Adjustment Programme includes several key structural fiscal reforms that would make a considerable contribution to this effect. Some have already been introduced including:

– Law 3863 on the reform of the social security system is expected to have a positive fiscal impact, both in the short and the long term. By end-March 2011, the necessary assessments will have been completed in order to deter-

5 See Bank of Greece, *Monetary Policy* 2008-2009, p. 32.
6 Contribution of the Minister of Finance in a relevant consultation, 22 September 2010.

mine whether further adjustments of the pension system would be required by the end of June 2011 in order to keep the growth of pension expenditure to 2.5% of GDP between 2009 and 2060.

– **Law 3842** introduced significant changes in property and personal income tax, together with a set of measures to combat tax evasion, broadening at the same time the VAT base.

– **Law 3871 on fiscal management and responsibility** introduces a new medium-term (three-year) fiscal strategy framework that will be applicable also to the 2011 budget. The Minister of Finance will be able to impose a ceiling on the expenditure of ministries, local authorities and on social budgets. At the same time, the Single Payment Authority was established. It will be responsible for the payment of employees in the general government sector, while the "electronic census" of civil servants was also completed.

– **Law 3852 on the new architecture of Local Government and Regional Administration** ("Callicrates Project") is expected to lead to significant cost savings in a sector where expenditure had risen considerably and under insufficient control. The law aims at achieving cost savings by reducing the number of local authorities and municipal public entities, thereby leading to economies of scale, as well as at establishing strong development institutions at the first and second levels of local government that will be able to create added value. To achieve this, an operational programme to support "Callicrates" should be designed (this has yet to be completed), while Callicrates itself must be implemented consistently in terms of time and quality. The government has committed to achieve an improvement of the fiscal balance by €500 million annually in the period 2011-13 by implementing this project.

– **Law 3868 on upgrading the National Health System** envisages arrangements to improve the operation of public hospitals and the administration of health services in general, and to reinforce accountability, transparency and volunteering. In order to increase cost-effectiveness in the health sector and achieve substantial progress in the modernisation of the health system, it is necessary, inter alia, to drastically improve the recording of the financial situation of hospitals, by immediately adopting the double entry accounting system on an accrual basis, to speed up payments made by hospitals so as to avoid accumulation of overdue debts and reduce the carry-forward of liabilities to 2011, to reduce pharmaceutical expenditure (the bill on the electronic prescription system has been submitted to Parliament) and —as it has already been decided— to involve audit companies in the financial management and the control of hospital expenses. As a result of the relaxed behaviour that prevailed for decades, realising these goals will not be easy, yet it will be necessary if squandering is to be reduced and the provision of a critical social good is to be ensured. (For more details, see Chapter VII, Special Feature 4.)

– **The bill on the restructuring of OSE and TRAINOSE** is highly important, as OSE is a heavily loss-making public enterprise. This bill represents the beginning of an effort to ensure the soundness of public enterprises. Accordingly, the recent bill on the elimination and merger of government departments and public sector entities[7] is a first step towards the considerable reduction of squandering that can be achieved by the abolition and merger of many more entities.

e) The current situation makes it imperative to firmly pursue fiscal consolidation, be prepared to correct deviations from targets and place greater emphasis on the control of general government expenditure

Despite the considerable progress made, important challenges and risks are still ahead with regard to achieving the fiscal targets of the

7 The bill provides for the abolition of 18 public sector entities and the merger of 13 others into 5.

Programme. These risks relate to the following:

- lower than expected collection of revenue due to the recession;

- inefficiency of the tax collection mechanism that has yet to be addressed;

- accumulation of accounts payable and outstanding debts (e.g. of hospitals and social security organisations);

- worsening of the financial results of local authorities, social security organisations, legal entities in public law and public enterprises and organisations;

- increased expenses in the second half of the year due to delays in the payment of liabilities during the first one.

These risks make it necessary to **reform the tax mechanism, effectively combat tax evasion, intensify the effort to collect and process statistical data on all general government entities, and implement an efficient system for monitoring and controlling their expenses.**

The Draft Budget for 2011 estimates that total expenditure in the state budget will be contained at €75.2 billion in 2010, i.e. €1.9 billion below the target set in the Programme (€77.1 billion), while the shortfall in total net revenue will reach €2.7 billion, which means that the *state budget deficit* will exceed the target in the Programme by €0.8 billion this year. However, the *general government deficit* is expected to drop to €18,508 billion or 7.8% of GDP (on a national accounts basis), that is below the target (€18,722 million), mostly as a result of reduced defence expenditure for new deliveries. The level of expenditure is estimated to stand below the initial target as a result of the decrease in operating expenses and in the expenses for the national component of the Public Investment Programme, while at the same time adequate provisions should be made to cover for increased transfers to social security organisations, if need be, so as to achieve a reduction in the accumulated payable accounts of hospitals.

According to the Draft Budget for 2011, the government is committed to pursue its policy of containing the state budget primary expenditure, which is expected to decrease by 2.3% in 2011 (following an estimated decrease by 10.3% this year). Furthermore, in the case of deviations from the targets set in the Programme for 2011, the government will take corrective measures emphasising on the containment of operating expenses, while consideration is given to replacing some temporary cost saving measures with measures of a permanent nature.

f) The downward revision of GDP and public deficit estimates for 2009 can be addressed so as not to substantially affect fiscal performance for 2010 and 2011

However, in order to make an assessment of the fiscal figures for 2010 and of the prospects for 2011, account must be taken of the most recent data (Eurostat is expected to announce revised data on 22 October, after the publication of this report). In particular:

- Real and nominal GDP figures for recent years have been revised downwards: according to provisional estimates, nominal GDP for 2009 is now by 1.9% lower (compared to the previous estimate) and the deficit-to-GDP ratio is 13.9%, from the initially estimated 13.6%,

- At the same time, though, the general government deficit for 2009 was revised upwards, following two changes: (a) the inclusion in the general government sector of some loss-making public enterprises, mostly from the transport sector and the defence industry, as well as of other entities from the wider public sector that were not formerly considered part of the "general government" on the basis of the European System of Accounts, and (b) the reassessment, on the basis of ELSTAT survey data, of the result of social security organisations, which fall within the general government sector. These changes considerably increase the general government deficit for 2009.

- As a result of the above, the 2009 deficit-to-GDP ratio has also been revised upwards.

For 2010 these new data entail the following:

- The revision of GDP alone means that the target for the 2010 deficit now comes to 8.0% of GDP (rather than 7.8%).

- What is most important is that:

– (a) although the general government deficit will rise as a result of the inclusion of the deficit of public enterprises and other entities that are now included in general government, it will no longer include the forfeiture of guarantees for loans contracted by these public enterprises (and amortisations payments are *not* included in the deficit), and

– (b) the question is raised whether social security organisations are able to record a surplus of the size indicated in the Draft Budget, taking into account that last year they finally registered a small deficit amounting to 0.5% of GDP rather than a surplus, as originally expected.

Some approximative estimates suggest that the above would entail that the deficit-to-GDP ratio would overshoot the target already **this year**. With regard to **2011**, the target set in the Draft Budget to reduce the general government deficit to 7.0% of GDP now corresponds to 7.2% of the revised GDP. *It is, however, possible to avoid a higher deficit in 2011*, given that:

- implementing the bill on restructuring OSE and TRAINOSE and ensuring the sound operation of other loss-making public enterprises is expected to reduce their deficits and, therefore, their burden on the general government deficit, and

- implementing Law 3863 on the social security system and enforcing the measures already taken or to be taken to address the evasion of social security contributions and reduce the pharmaceutical expenditure will bring about an appreciable improvement in the results of social security organisations.

In general, in view of the new data, it goes without saying that it is necessary to consolidate efforts to reduce public expenditure and increase income in conformity with the targets of the Economic Adjustment Programme, inter alia, by cutting discretionary expenditure and improving the performance of the tax-collection mechanism.

g) Fiscal developments globally make it even more urgent to achieve fiscal consolidation in Greece

Greece is not the only developed country that faces serious fiscal challenges, although it is in a unique situation in that it is affected by a dangerous mix of problems derived from the structural weaknesses of the economy and reflected in the "twin" deficits and debt.[8] It is true that high fiscal deficits are recorded not only in countries of the euro area periphery, such as Ireland and Portugal, but also in countries like the United Kingdom and the USA, while the upward trend of the public debt as a percentage of GDP is generalised among developed economies and heightened tensions in the respective government security markets are recorded. Recently, Ireland announced that its public deficit this year would reach 32% of GDP due to the costs of rescuing Anglo Irish Bank. Portugal, Spain, France and the United Kingdom announced fiscal austerity budgets for 2011.

These developments should not lead to complacency. On the contrary, they imply that conditions are getting tougher for Greece with regard to access of the government and com-

8 See also Bank of Greece, *Annual Report* 2009, April 2010, p. 24-25.

mercial banks to markets. It is almost certain that conditions will remain difficult in the future, when the government will turn to the international markets for medium to long term borrowing, at a time when there will be increased demand for market-based debt financing coming not only from the public sector of developed economies, but also from large enterprises and banks in countries seeking to adjust to the new international rules on capital requirements. The obvious result is that **Greece will have to fully and timely meet its fiscal objectives and, if possible, to exceed them, in order to improve the relative position of the country.** Before the adoption of the Economic Adjustment Programme, the Bank of Greece had already pointed out that it would be of most importance for the expenditure component of fiscal consolidation to go further than planned by drastically reducing squandering and by merging or eliminating public sector entities that are unproductive. A further increase in the already high tax burden of those who pay their taxes would have a severe impact on economic activity, also taking into account the strong tax competition in Europe. On the contrary, speeding up fiscal consolidation by reducing expenditure may positively surprise markets and contribute to a faster restoration of market confidence, which will have a positive influence on the borrowing costs of the government and, therefore, banks, enterprises and households.[9]

4 A COMPLEX GLOBAL ENVIRONMENT

The global economy is up against complex challenges that require new responses

The Greek economy is now called to exit the crisis in a global environment characterised by complex challenges. If the current trend continues, the recovery of the world economy, anticipated for 2010, will decelerate in 2011 both in developed and in emerging economies. The main risks for economic growth come from: (a) economic recovery not coupled with recovery of employment in major developed economies, (b) weakened financial position of households, in their effort to reduce their debt, (c) restrictive fiscal policies, and (d) possibly weakened demand in emerging markets.

These risks, as well as experience from the crisis, raise new concerns. These concerns are of particular interest for Greece, as they portend possible changes in economic policy at global level. In this framework, the following are of relevance:

– The recent joint IMF-ILO conference on the "Challenges of Growth, Employment and Social Cohesion",[10] focused on employment issues. It was stressed[11] that action must be taken promptly, before unemployment becomes a structural problem. Indeed, given that increased output is a key factor for increasing employment, it is necessary to exhaust all fiscal and monetary policy tools —as well as measures aimed at reducing the general uncertainty surrounding the economic outlook— in order to achieve a fast recovery of economic activity.

In addition, three conclusions in the analysis made by the ILO are of particular relevance for Greece. First, an important policy challenge is to **establish labour market institutions which effectively "signal" to social partners the scope for sustainable wage improvements**, and how that scope might evolve into the future. Second, as structural changes in the economy shift employment opportunities towards the most productive and dynamic sectors, ensuring worker mobility requires not only promoting appropriate training programmes, but also supporting the *most dynamic* among small businesses. Third, a stronger social protection net-

9 Bank of Greece, ibid., p. 20.
10 Oslo, 13 September. Among the leaders that participated was the Greek Prime Minister.
11 Statement by D. Strauss-Kahn, Managing Director of the IMF, at the conference, 13.9.2010, and interview of O. Blanchard, chief economist of the IMF, with *IMF Survey Magazine*, 9.9.2010. See also, ILO-IMF, "Joint Discussion Document", The Challenges of Growth, Employment and Social Cohesion (includes two separate contributions from the IMF and the ILO). Similar views are put forward in the editorial of *Employment Outlook* 2010, OECD, July 2010, by John Martin.

work ultimately enhances human capital and productivity.

– In the G-20 summit of Toronto (27 June), it was stressed that these countries need to boost recovery and, at the same time, put in place credible, properly phased and growth-friendly plans to deliver fiscal sustainability, differentiated for and tailored to national circumstances. According to the IMF,[12] emerging economies with large external surpluses should nurture domestic demand in order to offset the loss in demand from restrictive fiscal policies in advanced economies. Combined with structural reforms, this rebalancing of demand would increase the global output growth rate, a development that would have a positive impact on job creation in the medium term.

In the recent annual meeting of the International Monetary Fund in early October, its Managing Director summarised the recent discussion on global economic challenges and the policy responses it should produce:[13]

- Public debt in advanced economies, starting from 75% before the crisis, is expected to increase to 110% by 2014. Only 1/10 of this increase comes directly from the fiscal stimulus measures, while the remaining comes from expenditure linked to the rescue of the financial sector and to decreased revenue because of the economic downturn. Therefore, low growth rates represent the biggest threat to fiscal sustainability. According to the IMF, all countries should achieve fiscal sustainability in the medium run. In the short run, they must do everything possible in this direction (depending on the specifics of each country) and —while the recovery is still fragile— use all the fiscal room available to boost growth.

- The medium- to long-term impact of the increase in unemployment during the crisis could be very serious – this is why the risk of a jobless recovery has to be addressed.

- During the crisis important promises were made globally concerning the reform of the financial sector; much has already been done. However, better regulation is not enough – better supervision is also needed (in implementing these rules), together with mechanisms to address/resolve crises.

- The upcoming changes in the global economy *over the next two decades* have important consequences for our growth model. New sources of growth will have to be sought for, including green growth. A rebalancing between the public part of growth and the private part of growth will be needed, as well a rebalancing of demand between surplus countries and deficit countries. Finally, enhanced cooperation between countries and better economic governance will be needed.

5 THE ROLE OF THE SINGLE MONETARY POLICY

Considerable contribution from the ECB in safeguarding financial stability in the euro area and supporting the Greek economy

– During the current year, the monetary policy pursued by the ECB (including non-standard measures) provided considerable support to economic recovery and safeguarding financial stability in the euro area. **The liquidity-providing measures of the Eurosystem are particularly important for Greek banks, following their cut-off from international markets and the decrease in deposits.** In addition, the contribution of the ECB was substantial in setting up the support mechanism for the Greek economy and in drafting the Economic Adjustment Programme, while it is also participates in its monitoring.

In the first nine months of 2010, Eurosystem key interest rates remained unchanged at very low levels. At the same time, the ECB Governing Council continued to implement non-standard monetary policy measures. These measures

12 Interview of O. Blanchard with *IMF Survey Magazine*, 9.9.2010.

13 Dominique Strauss-Kahn, "A New Globalisation for a New World", opening address to the annual meeting of the World Bank and the IMF, 8 October 2010.

safeguard financial stability and help restore normal conditions in the interbank market in order to facilitate the flow of bank credit to business firms and households in the euro area.

In January-April 2010, some non-standard measures that had been implemented in previous years were withdrawn, after the gradual restoration of normal conditions in financial markets. However, tensions reappeared in financial markets as a result of concerns over the fiscal situation in some Member States. In order to address these tensions, the Governing Council reactivated some non-standard monetary policy measures and, moreover, launched the Securities Purchase Programme. The implementation of these measures by the Eurosystem, the adoption by the Ecofin Council and Member States of a package of measures to safeguard financial stability in Europe (on 9 May 2010), including the establishment of a European Financial Stabilisation Mechanism, as well as the results of the European stress test of July 2010, open the way for a progressive easing of tensions.

The single monetary policy aims at achieving the primary objective of the Eurosystem, namely price stability in the euro area over the medium term. Achieving price stability is the main contribution of the single monetary policy, which is necessary in order to ensure the conditions for sustainable economic growth, increasing employment and financial stability. The adoption of non-standard monetary policy measures ("enhanced credit support" measures) by the Governing Council amid strong tensions in financial markets and the adoption of the Securities Markets Programme do not conflict with the achievement of the primary objective of price stability. Rather, they contribute to the effective transmission of monetary policy into the real economy. The above measures are of a temporary nature.

The increased overall liquidity of the banking system resulting from the acquisition of securities by the Eurosystem is sterilised by other extraordinary open market operations which absorb an amount of liquidity equal to the previous securities purchase, so as to ensure that the monetary policy stance remains unchanged.

During the current year, the Governing Council took important decisions with regard to eligible assets provided by credit institutions as collateral in Eurosystem credit operations. Some of these decisions are of particular relevance to Greek banks. In greater detail:

– (a) Some types of securities had been included among eligible collateral for the first time in October 2008. This was a measure that helped expand the collateral framework in order to address the heightened financial turmoil at the time. In April 2010, it was decided that this measure would only apply until end-2010.

– (b) The list of eligible collateral was also broadened by reducing the minimum credit threshold required for an asset to be eligible as collateral by the Eurosystem. In April 2010, ECB's Governing Council decided that this lower threshold would continue to apply beyond the end of 2010.

– (c) Moreover, the Governing Council decided in May that the minimum credit threshold would not apply to marketable debt instruments issued or guaranteed by the Greek government which are provided as collateral by credit institutions. The Eurosystem would provide funding against these instruments irrespective of the ratings attributed by rating agencies. This decision was based on the fact that the Governing Council has assessed the economic and financial adjustment programme for the Greek economy and considered it to be appropriate.

6 MEETING THE GROWTH CHALLENGE

The next step for the Greek economy: a coherent Action Plan for Growth

In order for the Greek economy to enter a new virtuous circle, fiscal adjustment has to follow a steady course and even outpace the Programme, where feasible. This would have a positive effect on the economic climate, strengthen market confidence and favourably affect the availability and cost of financing. Under the circumstances, fiscal consolidation is necessary in order to set the economy back into motion; but this does not mean that it is a panacea.

What is needed today is an equally binding, coherent **Action Plan for Growth**, which will operate side-by-side with the fiscal adjustment process, elaborate on fiscal policies already being adopted through the Economic Adjustment Programme, complement them with new ones and prioritise rigorously and coordinate all the actions of public entities that favour growth without jeopardising achievement of the fiscal targets. The Economic Adjustment Programme provides for what is absolutely necessary to address the current crisis. Nevertheless, the responsibility of economic policy goes beyond the implementation of these measures as, at the same time, it should speed up policies aimed at reviving the economy as soon as possible, and address the major issue of growth in a decisive manner.

An Action Plan that would coordinate these policies and promote already planned reforms and the smooth evolution of the fiscal adjustment effort, will send out a strong signal to the domestic and international markets: that the Greek economy is in the process of reinventing and transforming itself, opening up to dynamic entrepreneurial initiatives in a more outward-looking way, taking advantage of the opportunity provided by the support mechanism to achieve a speedy recovery.

The starting points of the Action Plan for Growth

To ensure sustainable growth, what is needed is a focus on growth, an explicit decision as regards what we want to achieve over the coming years and an equally clear choice of the instruments that will take us there.

First of all, it must be understood that there is no turning back to the pre-crisis growth model. That model of growth was not sustainable. For this reason, the Action Plan should lead the economy away from the old, distorted growth model —based mainly on increasing demand (in particular, consumer demand) and lending to the public and the private sector— towards an **outward-looking growth model relying on a strong productive base, supported by investment and structural reforms. At the same time, the new model must encompass environmental protection and reinforce social cohesion.** This means that structural reforms must be designed on the basis of a multi-faceted, "holistic" approach.

From a long-term perspective, it should be taken into consideration that the current crisis in Greece is characterised not only by serious fiscal challenges, but also by an additional —equally important— challenge, i.e. the economy's external imbalance, which manifests itself in the large and persistent current account deficit.[14] The two challenges are interwoven, to the degree that the high fiscal deficit is linked to the chronic high current account deficit, while the extent and persistence of the external imbalance imply that there exist major structural problems. From 2000 onwards, the current account deficit widened significantly, exceeding 14% of GDP in 2008. These high and sustained deficits, which reflect the insufficiency of private and pubic saving, also create a rising external debt.

The current account deficit can be attributed to the fact that growth was mainly triggered by demand. In other words, domestic demand for goods and services exceeded the potential output of the Greek economy, reflecting the public and the private sector's internal imbalances. At the same time, price and cost competitiveness indicators show a cumulative loss of price and cost competitiveness of about 20-25% for

14 On 23 September, the Bank of Greece published *The Greek current account: causes of imbalances and policy recommendations* (in Greek).

Greece, since it joined the euro area. Certainly, the improvement of a country's macroeconomic performance by enhancing its competitiveness eventually becomes a matter of improving total factor productivity (labour and capital productivity) and of whether production is oriented towards high added value sectors.

All the above lead to clear conclusions as regards competitiveness: policies that improve the fiscal position also contribute to reducing the current account deficit. At the same time, policies that encourage private sector saving and restrain consumer borrowing contribute to bridging the gap between private sector investment and saving. Such policies try to deal with the current account deficit primarily on the demand side and aim at realigning the growth rates of total demand in the economy with those of its production potential.

Meanwhile, it is necessary to improve the performance of the Greek economy on the *supply side* and to enhance its export orientation and flexibility in handling potential external shocks. To this end, and for an economy that participates in a monetary union, *reforms* are required both *in the labour market* (among others, by adapting educational and vocational training systems to the current needs) and in *product markets, together with an upgrade of the quality of institutions.*

The reforms required in these areas outline the directions of the structural policies that should be included in an Action Plan for Growth (apart from those already included in the Economic Adjustment Programme and aimed at boosting growth and international competitiveness), in order to achieve the transformation of the Greek economy by taking advantage of its substantial growth potential.

Key elements of the Action Plan for Growth

The Action Plan should include the following:

First, a targeted exploitation of the country's comparative advantages and concrete medium-term plans with clear policy targets and instruments to pursue an outward-looking growth strategy – i.e. one that places emphasis on exports and on attracting foreign direct investment. This means that priorities must be set with respect to (a) the allocation of public resources and (b) the upgrading of infrastructure, e.g. in the key sectors of transport and energy.

Second, specification and fast implementation of the "horizontal" reforms that are expected to have a favourable effect on the economy's growth potential. This effort mainly aims at the creation of a business-friendly environment, through the effective improvement of the regulatory and institutional framework.

Intermediate targets for boosting growth and improving international competitiveness are:

I – Modernisation and transparency of public administration

In this area, important reforms are already underway, such as:

• **Enhancing the transparency of decisions on public expenditure** by establishing (Law 3861) the obligation to post on the internet all decisions concerning recruitment and expenditure in general government and **placing all public sector recruitments under the responsibility of ASEP** (Supreme Council for Civil Personnel Selection, Law 3812) contribute to the streamlining of public administration, provided that recruitment standards will be further rationalised.

• **The expected introduction of a single payroll in the public sector** also serves the same purpose (in order to eliminate, among other things, wage differentials that are not justified by differences in productivity).

• A key prerequisite for carrying out these initiatives was the **civil servants' census** that has already been completed. A second condition involves the **Single Payment Authority** which will be put into operation in the course of the year.

• Another positive development is **the wider use of electronic media** in citizen transactions with the State, as well as the expected wider use of electronic invoicing by enterprises, which is going to help fight tax evasion.

• Finally **the effort to streamline** the public sector through the elimination or merger of public entities is underway.

Nevertheless, the complexity of rules and the lack of information continue to hinder the effective functioning of public administration. Other necessary actions are: training and retraining of civil servants, introduction of incentives, compilation and publication of indicators on the effectiveness of the public sector. The introduction of incentives and life-long learning are imperative in the crucial sectors of education and health.

2 – Enhanced flexibility and mobility in the labour market

Several measures have already been taken to enhance flexibility in the labour market.[15] On the basis of these measures, dismissal compensation is practically reduced (by shortening the required period of notice), the ceiling beyond which redundancies are deemed to be collective rises, overtime payments decrease, young people under the age of 25 can be recruited with gross earnings lower than the minimum earnings (but with net earnings equal to the net minimum earnings), while arrangements are introduced to avert the dismissal of employees who are over 55. In addition —in the context of the collective bargaining for wages, arbitration— awards and mediators' proposals over 2010-2012 should not provide for wage increases higher than those set for the minimum earnings by the National General Collective Labour Agreement in July this year.[16] Besides, social partners are already discussing the draft presidential decree on the reform of the arbitration procedure, with equal treatment of both parties and a commonly accepted way of selecting arbitrators and mediators. Most of the above measures can facilitate labour mobility (across businesses, sectors and geographic regions). Flexibility can also be enhanced by: (i) training/re-training and life-long learning programmes that are in line with developments in the economy and technology, (ii) rules for successive insurance schemes that allow for greater flexibility,[17] (iii) reducing the fragmentation of the social security system, (iv) establishing requirements for active job searching in order to continue to receive unemployment benefits, (v) improving public transportation, as well as the road and railway network.[18]

3 – Promoting reforms in the markets for goods and services to strengthen competition

The need to promote reforms in the market for goods and services is also evident, among other things, in the following:

• First, Greece ranks low in the international classification according to competitiveness and entrepreneurship indicators.[19]

• Second, inflation invariably exceeds the euro area average and remains at relatively high levels despite the recession, even net of the effect of the increase in indirect taxes.

Business activity is hindered by the complex and costly (in terms of money and time) procedures for setting up a business and by the limited possibility of new entrepreneurs-businessmen to enter specific professions – with

15 Article 2 of Law 3845, Law 3846, articles 73-74 of Law. 3863, article 51 of Law 3871.
16 No increase during 2010, an increase equal to the euro area average annual inflation rate in 2010 as from 1.7.2011 and an increase equal to the euro area average annual inflation rate in 2011 as from 1.7.2012.
17 Article 5 of Law 3863 already provides for a new method of calculating the pension of those subject to successive insurance schemes that will take effect as of 1 January 2011.
18 Attiki Odos and the Suburban Railway have greatly contributed to the geographic mobility of people working in the wider area of Corinth-Athens-Chalkida.
19 As shown in the indicators compiled by the World Bank (see World Bank, *Doing Business 2010*, based on 2009 data) and the World Economic Forum (*Global Competitiveness Report* 2010-2011).

adverse repercussions on the activity of a large number of sectors for whom the output of these professions constitutes an inflow. When entry in a specific branch is obstructed, competition in this branch is by definition limited. Also, certain enterprises apply oligopolistic practices, thus burdening the end consumer with higher prices. This situation is perpetuated because of the rather weak consumer movement.

A first step to address the abovementioned problems is **Law 3853 on simplifying procedures for setting up businesses**, which provides for the creation of one-stop shops. However, its implementation presupposes the existence of a General Commercial Register, which is not yet operational. In addition, it is crucial to also **simplify the procedures for the functioning of businesses** (not yet realised).

As of April, the EU directive on the liberalisation of the supply of services in the internal market has been transposed into national legislation (Law 3844). By the end of December, the government intends to further specify its provisions and proceed to the opening up of certain other "closed professions" (lawyers, notaries, engineers, architects) and activities (e.g. pharmacies). In late September the law on road freight transport was passed establishing free access to the road transport profession, the criteria being credibility, financial capacity and professional competence. The new law also deregulates freight rates and includes provisions to modernise the sector's structure. The deregulation of the road transport sector is of great importance. The non-issuance of new licenses had led to an increase in the value of licenses that were transferred among road hauliers at a high cost. Moreover, the limited number of public-use trucks had resulted in a large number of private-use trucks, with a corresponding cost for the companies that had to maintain these vehicles. So, the cost of services supplied was high and was passed through to the end consumer, at the same time dampening the activity of both the agricultural and the secondary sector. **All the above are positive steps, as they eliminate some of the obstacles to the functioning of the markets. It is certain though that —even if the steps are carried out in full— many of the obstacles will remain intact. These obstacles must be identified in the Action Plan and removed as soon as possible.**

Besides, in August, Law 3872 was passed on cruises by non-EU flagged ships homeporting out of Greek ports (cabotage). By applying its provisions, it is possible to increase the number of cruise companies that will choose Greek embarkation ports for their vessels. The impact on tourist receipts will be positive, while the liberalisation of the cruise market can contribute to a substantial increase of Greece's share in a developing form of tourism. Needless to say, a prerequisite for attracting major companies is the improvement of the relevant infrastructure (ports, airports).

4 – Promoting investment, strengthening the export orientation of the economy and improving absorption of Community funds through the NSRF

The overall institutional framework for supporting productive investment is currently under reform, a process that should be completed as fast as possible. In March, Law 3840 was passed on the decentralisation, simplification and improvement of the effectiveness of NSRF procedures; in June, the guidelines and the means for the implementation of the privitasation programme were announced, and Law 3853 was passed on the simplification of procedures for setting up businesses; in August, the Action Plan for "research and development" and for innovation was published, while later on a draft law on the acceleration of strategic investment and the transparency thereof was submitted to Parliament, and Law 3889 was passed on financing environmental interventions and establishing a "Green Fund". What is expected in the near future is the revised draft law on granting aid to private investment ("development law"), as well as the creation of the "National Hellenic Fund for Entrepreneurship and Development" (ETEAN) in the place of TEMPME and the establishment of the "Extroversion Fund".

It is obvious that these measures should be adopted together with a clear definition of responsibilities of the individual government agencies, that would enable the prompt assessment and implementation of investment plans. The protection of the environment, of areas of natural beauty and of archaeological significance is of particular importance but this should not lead to unjustified long and costly delays. Apart from promoting large-scale business investment, it is necessary to also encourage smaller-scale, innovative business initiatives.

It is crucial to enhance the economy's export orientation; while the ratio of exports of goods and services to GDP reached 42% in 2008 in the euro area, it amounted to just 23.6% in Greece. Indeed, the country's relevant position with respect to the euro area has deteriorated over the years. As pointed out in a recent European Commission analysis,[20] for most of the Greek manufacturing firms, exports account for just a small share of their production. At the same time, however, the percentage of firms engaged –even to a limited extent– in export activities is higher than that of other countries. As stressed by the European Commission, in the current conjuncture, when efforts are being made towards reorienting production from domestic demand to exports, this particular feature of the Greek manufacturing sector is a potential advantage: firms that have already established a commercial presence in foreign markets can contribute to the expansion of exports *easier and faster* than firms with no export experience. **Hence, reforms that improve competitiveness are likely to yield results earlier.**

In order to dynamically promote exports and to considerably strengthen the economy's export orientation, efforts should be made towards three interrelated directions:

First, the operating cost of enterprises must be reduced for products to regain their competitiveness.

Second, action is needed to improve the productivity of enterprises so that they produce higher quality, innovative products.

Third, actions are required to expand the network for the promotion of products.

Policies that promote these goals are required while, at the same time, enterprises must be actively engaged. **Economic policy must create the appropriate environment –a business ecosystem[21]– within which enterprises will be able to operate efficiently. This "system" must be characterised by simple, transparent and firm rules regarding competition and taxation, clear division of powers between central and local government, explicit labour law and a defined spatial planning framework. The imposition of strict time schedules for the licensing of investment and the avoidance of delays due to the possibility to easily lodge an appeal (by those opposed to the investment) would be particularly helpful. In conclusion, the framework should be entrepreneurship-friendly and free from mistrust against it.**

For its part, the private sector is called to assume an important role in this process. The indebtedness of the Greek business sector as a percentage of GDP is lower than the corresponding ratio abroad, therefore leaving more room for investment. Experience shows that a perceptive - holistic approach is needed. It is essential to focus on the branches that could yield immediate results and that already present a comparative advantage for the country (e.g. manufacturing and standardisation of agricultural products, tourism, shipping and services to enterprises), while emphasis should be put on the knowledge industry and the provision of education services.

Small and medium-sized Greek enterprises, that have been the keystone of the growth process over the past 30 years and were sup-

20 European Commission, *Quarterly Report on the Euro Area*, Vol. 9, No. 3, 5.10.2010, p. 8, 28-31.
21 The concept first appeared in *Harvard Business Review*.

ported by economic policies, should gradually turn into larger enterprises. Their small size has often been praised because it was considered to be an element of flexibility. However, within the particular business environment that had been formed, such flexibility was only helpful for keeping enterprises to a balanced level of low productive capacity. Enterprises of this size often find it difficult to attain the dynamism required by globalisation and new technologies. **A larger size will help them exploit economies of scale. This transition can be achieved only by implementing an appropriate policy that will encourage healthy entrepreneurship.** The reasons that led to the moderate growth of Greek enterprises should be looked for in the legal framework, the functioning of public administration, the lack of corporate governance rules, the particularly high employer contributions (that come together with widespread contribution evasion), the negative stance of trade unions towards entrepreneurship, the lack of rules on fair competition and the short-termism of many enterprises.

In sum, it is certain that the process described above generates requirements both for the state (since the state sets the rules and the framework) and the business community (which will assume the leading role in this new era). Mistrust against the business world, which is endemic, has been fed in part by short-termism. Besides, enterprises should take into account that the global economic crisis will bring about changes in approaches to stock valuation. For this reason, they are now being called to demonstrate long-term business planning instead of short-term profits. The emphasis that enterprises put on professional training, on assuming social responsibility and on adopting environment-friendly practices is able to reverse the negative attitude against them. However, a decisive factor will be the perceptiveness of the private sector, i.e. its capacity to look beyond the recession and proceed to investments now. Historically, there are examples of countries (e.g. Finland) that recovered by developing an outward-oriented strategy for their enterprises.

5 – More effective education

Upgrading all education levels, as well as professional training and lifelong learning,[22] is of particular importance for meeting the challenges of strengthening potential growth —by increasing productivity and attracting foreign investors— and enhancing social cohesion (also taking into account the large influx of immigrants in the country over the past 15 years).

Secondary education has actually been degraded, since it serves as a preparatory stage for AEI admission. This is also certified by the standardised international assessments carried out by the OECD, according to which the performance of Greek students lags considerably behind that of students in other European Union countries.[23] A paradox, however, is that, at the same time, Greece has a large number of teachers in primary and secondary education in relation to its population. However, this might be the reason why teachers' earnings are relatively low, often driving them to get a second job (in the so-called system of "shadow education"). That's why there is a need to prepare and streamline the curriculum, to disassociate studies in secondary education from preparation for entering AEI, to apply evaluation procedures for teachers and educational units at all levels, as well as to constantly provide training to teachers.

Turning to *tertiary education*, the standing of Greek universities is not high in international rankings (although there are some exceptions), while the graduation rate is the lowest among OECD countries.[24] If universities were to be autonomous from central government and if

22 Law 3848 on upgrading the teachers' role and introducing rules of evaluation and meritocracy in the education system was passed in May and, in September, Law 3879 on developing lifelong learning was passed. The national debate on the reform of tertiary education (AEI and TEI) was launched at end-September.

23 This is the PISA programme (Programme for International Student Assessment). See also OECD-PISA, *The High Cost of Low Educational Performance – The Long-Run Economic Impact of Improving PISA Outcomes*, 2010.

24 See, among others, St. Aubyn, M., A. Pina, F. Garcia and J. Pais (2009), "Study on the efficiency and effectiveness of public spending on tertiary education", *European Economy*, Economic Papers, No. 390.

teachers and units were to be assessed on the basis of specific qualitative objectives, this would upgrade tertiary education, reduce student migration and limit education inequalities. The greatest challenges for tertiary education would be to increase the number of students while improving the quality of studies, link teaching with research so as to exploit the synergies between them, and reduce the fragmentation of educational institutes in order to exploit economies of scale.

Finally, in order to increase productivity and enhance social cohesion in times of structural changes and increased labour mobility, like today, it is particularly useful to support *professional training and lifelong learning*, as well as to encourage and facilitate the *integration of immigrants and their children in the educational system.*

7 CHALLENGES FOR THE BANKING SYSTEM

The banking system is up against great challenges. Recession has weighed on the financial situation of non-financial enterprises and households, leading to a decline in credit demand, a deterioration in the quality of banks' loan portfolios and a fall in their profitability. Moreover, the successive credit rating downgrades of Greece led to the corresponding downgrading of Greek banks and the securities they issue, making it practically impossible for Greek banks to obtain funding from money and capital markets. This development, together with a decrease in domestic deposits, inevitably affected banks' liquidity, while the financing they receive from the Eurosystem increased further, coming close to €94 billion at end-September 2010. Nevertheless, despite those adverse liquidity conditions, the annual rate of credit expansion remained positive, reflecting the banks' effort to finance real economy. A counterweight to the negative developments for the banking sector, as also shown by the results of the EU-wide stress-tests conducted in July 2010, was the fact that banks' capital adequacy, albeit slightly lower compared with end-2009, remained high.

In the first half of 2010, the quality of the portfolio of bank loans to the private sector in Greece deteriorated further, with the ratio of non-performing loans to total loans coming to 9% (December 2009: 7.7%).[25] This ratio increased for all loan categories and, especially, consumer loans. At the same time, the coverage ratio of non-performing loans to accumulated provisions remained relatively low (June 2010: 42.8%, December 2009: 41.5%), a development that requires a substantial increase in the stock of provisions for credit risk.

The pressure exerted on the liquidity of Greek banks and banking groups was reflected in the worsening of the supervisory liquidity ratios and the loan-to-deposit ratio, which rose to 115.6% for banks and 122.4% for banking groups at end-June 2010 (against 106.6% and 113.7% at end-2009). These adverse developments were somewhat contained by measures taken by the Greek government aimed at facilitating banks' access to liquidity; ECB decisions on the expansion of collateral that is eligible in Eurosystem refinancing operations and the launch of a purchase programme for government and corporate bonds issued by euro area countries also contributed to that direction. As already mentioned in part 5 of this chapter, the Governing Council of the ECB decided in May that the minimum credit rating threshold for the acceptance of collateral shall not apply in the case of credit institutions that provide as collateral marketable instruments issued or guaranteed by the Greek government. This decision was based on the Governing Council's positive assessment of the economic and financial adjustment programme of the Greek economy.

Profitability was affected also in the first half of 2010 by losses from financial operations and

25 Excluding data on foreign bank subsidiaries in Greece, non-performing loans came to 7.9% at end-June 2010, up from 6.8% in 2009.

the limited non-interest income, as well as by the small increase in operating costs. Net income (operating income minus operating costs) declined in the first half of 2010 compared with the same period of 2009 by 41% at bank level and 23.1% at group level. Provisions for credit risk increased considerably (because of the deterioration in the quality of the loan portfolio) and, as a consequence, pre-tax and after-provision profits were negative.

At end-June 2010, both the capital adequacy ratio (banks: 12.3%, banking groups: 11.2%) and the Tier 1 capital ratio (banks: 11.0%, banking groups: 10.1%) remained relatively high, albeit slightly lower against end-2009. The particularly adverse macroeconomic conditions imply that banks should keep their capital adequacy ratios at levels well above the regulatory minima for precautionary reasons. In fact, Greek banks' ratios remained at a level well above the regulatory minimum and, as a result, the "capital buffer" (i.e. funds in excess of the minimum capital adequacy ratio (8%)) stood at €9.2 billion at system level. The successful completion of the share capital increase of the National Bank of Greece is encouraging as regards the further enhancement of the "capital buffer". This development indicates the gradual restoration of investor confidence in the domestic banking system.

The functioning of the Hellenic Financial Stability Fund, the purpose of which is to strengthen banks' capital adequacy, whenever necessary, will make a positive contribution to financial stability.

It is important to note that banking sector aggregates will not change for the better without a correction of the factors that exert pressure on banks' credit ratings and thereby on their ability to raise funds from money and capital markets. An improvement in the macroeconomic environment is also necessary. This improvement will make a positive contribution towards mitigating not only banks' liquidity risk, but also their credit risk, enabling them to continue to accommodate demand for bank credit.

At the same time, Greek banks should be more far-sighted in adjusting to the new macroeconomic and regulatory environment. They need to take into consideration that, even after economic activity has recovered, the growth rate of banking will still fall short of its previous levels. Moreover, the ECB's non-standard measures still in place will eventually be phased out and, even in 2011, banks will continue to face difficulties in tapping the international markets, since governments, non-financial enterprises and banks will definitely be in strong competition for funding, as already mentioned. Therefore, banks should be prepared in a timely manner to adapt to the new liquidity conditions. At the same time, banks have to prepare themselves for the gradual implementation —from 2013 to 2018— of the new international regulatory framework agreed upon by the Basel Committee on Banking Supervision on 12 September 2010. The reforms envisaged in the new framework aim at enhancing the quantity and quality of credit institutions' funds and at limiting banks' exposure to risks by introducing a leverage ratio, calculating "dynamic provisions" for credit risk and setting up a global standard for measuring liquidity risk.

These reasons make it necessary for banks to review their business models, seeking to maintain a high capital adequacy level by setting aside sufficient provisions for credit risk and by rationalising their cost structure. **Strategic alliances and mergers will certainly contribute to the achievement of these goals, because of the benefits that will come from synergies in terms of profitability, capital adequacy, curtailment of expenses and obtaining liquidity from the markets.**

8 RESTORING CONFIDENCE IN THE GREEK ECONOMY

Confidence in the Greek economy will not be restored overnight or automatically; it will rely exclusively on the country's ability to earnestly and accurately implement the targets of the Economic

Adjustment Programme, to overshoot them, if possible, and to promote, at the same time, changes that are not explicitly envisaged in the Programme but should be included in the Action Plan for Growth that is urgently needed. Today, five months after the activation of the financial support mechanism for the Greek economy and the adoption of required fiscal measures, markets still treat Greek bonds with great cautiousness, *although the climate has started to improve, as shown by the fact that the interest rate spread of 10-year bonds fell below 700 basis points in mid-October, from 824 basis points at end-September and 937 basis points at end-August.*

Markets require continuity, consistency and perseverance in the measures implemented. These traits should be constantly corroborated by facts.

Markets' cautiousness seems to reflect both a favourable and an unfavourable forecast. The former is that Greece will indeed manage to eliminate the general government primary deficit by 2012, also according to the IMF, whose latest report forecasts a primary deficit of 0.8% in 2011 and a primary surplus of 1.0% of GDP in 2012. The negative forecast is that, after turning positive, the growth rate will remain subdued, thus hampering public debt servicing after the end of the period covered by the support mechanism. So, some analysts reach the conclusion that, after achieving a primary surplus, Greece will be forced to partly shake off the public debt servicing burden by negotiating debt restructuring (haircut). Apart from the explicit rejection of such a prospect (which would also entail high "moral hazard") on the part of EU institutions and the Greek government, this hypothetical scenario is unacceptable for many reasons. The most important of these reasons are documented in a recent IMF analysis (that does not concern only Greece, but other developed economies as well),[26] which explains why **default is unnecessary, undesirable, and unlikely.**

The main arguments underlying this conclusion are:

– 1. The required fiscal adjustment is indeed large and difficult, but it has been achieved in various countries in the past.

– 2. The "option of default/debt restructuring" would not significantly reduce the need for fiscal adjustment, because the main problem lies with the primary deficit rather than interest payments. In 2009, the general government primary deficit was 8.6% of GDP, based on the initial estimates included in the Economic Adjustment Programme, and the total deficit (which includes taxes) was 13.6%, while these ratios were higher according to the revised data expected to be announced by Eurostat on 22 October. Certainly, although the policy pursued is expected to eliminate the primary deficit by 2012, interest payments as a percentage of GDP are likely to keep increasing until 2014, starting though to decline from 2015, according to IMF forecasts that are, however, based on conservative assumptions about the growth rate. In addition, even with a 50% haircut, it would be necessary to achieve a primary surplus equal to 2.8% of GDP in order to stabilise the public debt-to-GDP ratio, while in the absence of a haircut, the primary surplus would need to be 5.5%. Having as a starting point the primary deficit in 2009, which stood at 8.6% of GDP (on the basis of initial estimates), if no haircut is applied, the needed adjustment will reach 14 percentage points of GDP, while in the opposite case the required adjustment would almost be 11.5 percentage points, according to IMF calculations. All the above imply that Greece has every reason to achieve a faster fiscal adjustment and, at the same time, a faster and more robust recovery of its economy, in order to also alleviate the burden of interest payments over the following years.

As regards **debt dynamics**, the impact of the revision of data on GDP and debt should also be taken into account. **It is feasible and absolutely necessary to avert an adverse development** in three ways:

26 Cottareli, Forni, Gottschalk and Mauro, "Default in Today's Advanced Economies: Unnecessary, Undesirable, and Unlikely", IMF Staff Position Paper SPN/10/12, 1.9.2010.

(a) by accelerating fiscal adjustment, i.e. by reducing the primary deficit to a greater extent and by achieving primary surpluses sooner,

(b) by accelerating privatisations (starting from the restructuring of OSE and TRAINOSE that is envisaged in the relevant draft law), as well as the more effective use of public sector real property (see Chapter VII, Special Features 3 and 5).

(c) by taking growth-generating structural measures in a coordinated way, so as to speed up the recovery of the economy and to create the conditions for satisfactory and sustainable GDP growth rates.

– 3. Despite the high government borrowing rate today, the average interest rate on total public debt is much lower, given that 76% of central government debt is contracted at a fixed rate, while its average maturity is 7.9 years (according to calculations in the IMF analysis).

– 4. Historical records show that those developed countries that attained a zero primary balance or a primary surplus avoided default, furthering the effort of fiscal adjustment. This is also the explicit commitment of the Greek government.

– 5. The political and economic cost of a default could be much greater than the short-term cost incurred under a strategy of fiscal adjustment. As regards Greece, in particular, the following should be noted:

(a) Even after the State has attained zero primary balance or a primary surplus, the exclusion of Greece from the international money and capital markets, in the case of default, would be detrimental both to Greek banks and Greek enterprises (in terms of their access to financing), resulting in highly adverse repercussions on economic activity and on income and —eventually— on the State's tax revenue and expenditure (since the State would be called to compensate for the insufficient bank financing of investment, for example). So, among other things, the primary surplus would rapidly turn back into a deficit.

(b) A default with debt restructuring would have a direct and severe negative impact not only on the assets of certain foreign banks but also on Greek banks, Greek insurance funds and individuals holding public debt, as well as on pension funds in other countries and on EU countries' banks with considerable holdings of Greek public debt.

– 6. In order to ease the fiscal adjustment process and to mitigate its direct negative side effects, reforms are needed to improve international competitiveness and to increase the potential growth rate. As mentioned earlier, Greece is already in the process of implementing such reforms. This effort should become more systematic, coordinated on the basis of specific targets and time schedules, intensified and considered as a matter of urgency. This is the goal of the proposed Action Plan for Growth. **Indeed, if we manage to achieve the important fiscal targets and, over the next two-and-a-half years, to establish the conditions for boosting exports and attracting foreign investment that will enhance growth, we can also convince the markets that the debt dynamics will be reversed. The Greek economy's growth potential is immense. The situation is already improving, but the road ahead is long and there is no room for complacency. Today's crisis can act as a catalyst for reshaping the economy, enhancing the country's competitiveness and prosperity within the euro area. This is what is at stake for Greece.**

II THE EXTERNAL ENVIRONMENT OF THE GREEK ECONOMY

1 ECONOMIC DEVELOPMENTS, PROSPECTS AND POLICY INTERVENTIONS IN THE WORLD AND THE EURO AREA[1]

The global and the European economy are recovering, but prospects are surrounded by a high degree of uncertainty as the smooth functioning of global financial markets has not been fully restored and new risks are emerging due to high levels of public debt. The global economic crisis exacerbated macroeconomic imbalances in many national economies and contributed to the emergence of a public debt crisis which casts a shadow over prospects for a sustainable recovery, as mounting debt levels push up risk premiums and servicing costs. At the same time, fiscal adjustment efforts in several countries may seem to slow down recovery, but are essential for the achievement of long-term sustainability and financial stability.

Tough macroeconomic policy dilemmas call for country-specific approaches. At the European level, the Greek fiscal crisis, the resulting terms of borrowing of the Greek State on world markets and the risk of a debt crisis spreading to other EU countries led the EU to decide to grant, together with the IMF, a package of financial support to Greece and set up a European Financial Stability Facility (EFSF).[2] The European Council finalised the new European strategy for jobs and growth ("Europe 2020"), approving a first set of guidelines on reinforcing economic governance (see Box II.1).[3]

The fiscal crisis and the ensuing heightened uncertainty also impacted on the exchange rates of the euro, which declined considerably from the record-high levels of 2009. Subsequently, the euro rebounded significantly, mainly vis-à-vis the US dollar, reflecting the adoption of support mechanisms, the gradual implementation of the Greek stabilisation programme and additional fiscal adjustment measures in certain euro area countries, as well as the overall positive results of the July stress tests on European banks. Despite the generally expansionary macroeconomic policy, inflation in advanced economies is expected to remain at low levels in 2010.

The global crisis, which began as a banking crisis in August 2007 and evolved into a financial crisis from September 2008 onwards, was addressed with an unusually expansionary monetary (see Chart II.1) and fiscal policy which, coupled with the slowdown in economic activity, led to a significant deterioration of the financial position of almost every advanced economy in 2008-2009. The fiscal deficit of all major advanced economies stood at 10.1% of GDP in 2009, up from 2.1% in 2007, while gross public debt as a percentage of GDP rose considerably. Curbing public expenditure so as to reverse fiscal trends is now an imperative in many economies in order for the recent public debt dynamics to be reversed. The fiscal deficit of the major advanced economies is not expected to drop considerably in 2010 (it is expected to reach 9.3% of GDP), while public debt will continue to accumulate.

According to IMF forecasts, world GDP is expected to rise by 4.8% in 2010, compared with a 0.6% drop in 2009. More specifically, the recovery in advanced economies, albeit quicker than initially expected, remains vulnerable to external shocks and to the slow rise in employment, while it is unequally distributed across geographic areas. Despite greatly improved money and capital market conditions, the smooth financing of economies has not been completely restored, and the increased propensity to save (as households

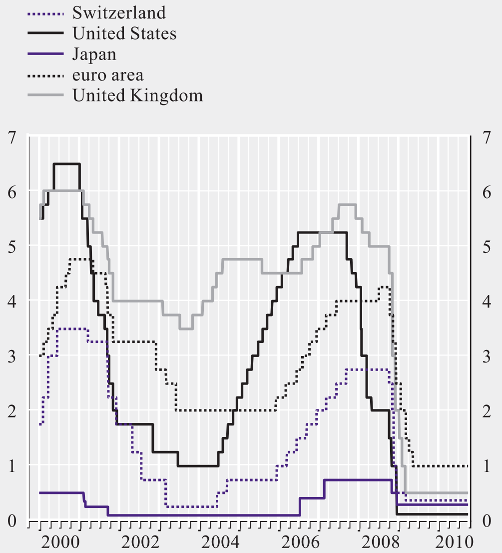
1 The analysis that follows is based on developments up to early October and takes into consideration the recent forecasts of the IMF (*World Economic Outlook*, October 2010), the OECD (*Economic Outlook*, June 2010, *Interim Assessment*, September 2010), the European Commission (*Interim Forecast*, September 2010), ECB staff projections (2 September 2010) and other available data.

2 For a more detailed discussion of these support instruments and other initiatives and measures to ensure stability in the European Union and the euro area, see Bank of Greece, *Financial Stability Report*, July 2010.

3 At the institutional level, the ECOFIN Council decided, following a discussion at the European Council, to allow Estonia to adopt the euro as of 1 January 2011. The conversion rate was set at 15.6466 Estonian krooni per euro, which corresponds to the fixed exchange rate currently applicable under the Exchange Rate Mechanism II (ERM II).

Chart II.1 Central bank policy rates (January 2000 - September 2010)

(percentages per annum, daily data)



Sources: Euro area: European Central Bank (ECB), interest rate on main refinancing operations; United States: 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.

aim at limiting their indebtedness) remains a constraint to the rise in domestic demand. In the United States, GDP is forecast to grow by 2.6% in 2010 (2009: -2.6%) and in Japan by 2.8% (2009: -5.2%).

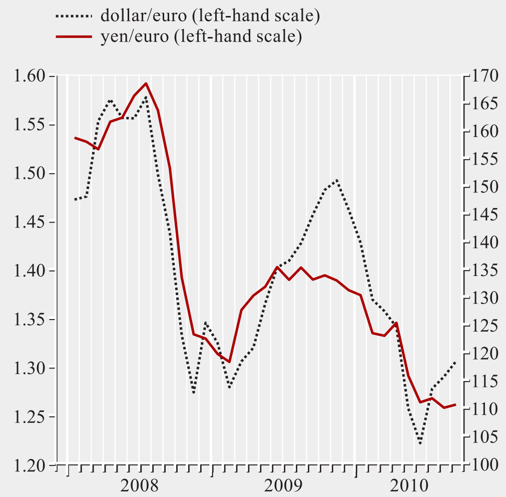
The **euro area** economy entered a phase of mild recovery in the second half of 2009, mainly thanks to improved external demand and a return of inventories back to normal levels, while financing conditions also improved.[4] Quarter-on-quarter GDP growth accelerated markedly in the second quarter of 2010 to 1.0% against 0.3% in the first quarter, whereas investment expenditure also made a notably positive contribution (after remaining negative for several quarters). Recovery remains fragile, however, as it is mainly supported by expansionary macroeconomic policies, which are gradually being reversed in several economies since spring 2010. The GDP growth rate will stand between 1.4% and 1.8% (according to the ECB staff projections) or at 1.7% (according to European Commission and IMF forecasts), up from -4.1% in 2009. External demand (which will keep rising, fueled by strong demand from emerging Asia), the lagged effects of improved competitiveness after the depreciation of the euro (despite its recent appreciation, the euro was 9.6% lower in September against December 2009), and the rise in private consumption and investment will contribute to this development. It should be pointed out that there exist considerable differences across individual euro area economies; some member countries, e.g. Greece and, to a lesser extent, Ireland and Spain, are expected to continue experiencing a recession this year, while other economies should register positive, albeit generally moderate, growth. A notable performance is that of Germany, as its GDP is expected to rise (3.3% according to the IMF), owing primarily to higher exports and secondarily to domestic demand. As regards non-euro area EU Member States, GDP should grow by 1.7% in the United Kingdom, 3.4% in Poland and 4.4% in Sweden in 2010.

Inflation in the euro area stood at low levels (between 0.9% and 1.4%) in the first half of 2010 and then grew and stood at 1.8% in September. According to the ECB staff projections, inflation is expected to average between 1.5% and 1.7% in 2010, as both domestic and external inflationary pressures are expected to be limited. Wage moderation over the past few years is expected to continue in the short term, while the projected increase in productivity will have a downward effect on unit labour cost growth. With regard to the fiscal outlook, the general government deficit in the euro area is expected to reach 6.8% of GDP (up from 6.3% in 2009 and 2.0% in 2008). It should be noted that, despite the debt crisis in some member countries, the public deficit and the public debt in the euro area as a whole are expected to remain lower in 2010 (at 6.5% and 84.1%,

4 The debt crisis interrupted the gradual improvement of financing conditions, which even deteriorated in certain cases (see *ECB Lending Survey*, July 2010).

Chart II.2 Exchange rate of the euro against the US dollar and the Japanese yen (January 2008-September 2010)

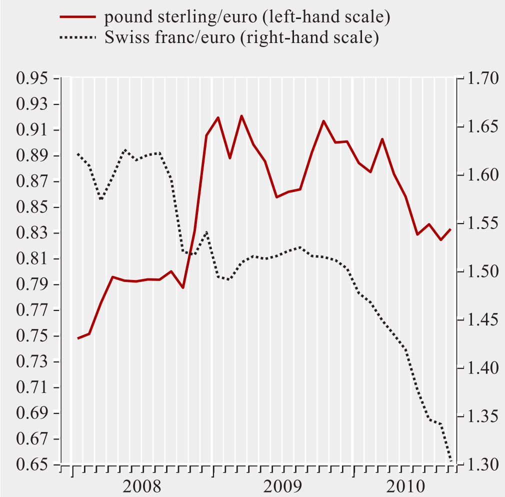
(monthly data)



Sources: ECB and Bank of Greece.

Chart II.3 Exchange rate of the euro against the pound sterling and the Swiss franc (January 2008 - September 2010)

(monthly data)



Sources: ECB and Bank of Greece.

respectively) than in the United States (11.1% and 92.7%, respectively) and Japan (9.6% and 225.9%).[5]

The nominal effective exchange rate (EER) of the euro rose in 2009 for the eighth consecutive year. The nominal EER index recorded a 2.2% increase in 2009 compared with 2008 and, in annual average terms, stood 37.3% higher than in 2000, while the corresponding real EER index (based on the CPI) was 25.7% higher. Since November 2009, however, both the nominal and the real euro EER indices have been on the decline, as market expectations have been negatively affected by euro area's lagged recovery compared with other regions and the questionable fiscal and macroeconomic prospects in some euro area countries. Despite its fall, the nominal EER of the euro in July 2010 was some 10% above its long-term average (1993-2009). The euro rebounded in the third quarter of 2010. In September, nominal EER fell by 9.6% compared with December 2009, while the bilateral exchange rate of the euro against the US dollar, the Japanese yen and the British pound fell by 10.6%, 16.0% and 6.7% respectively (see Charts II.2 and II.3).

In advanced economies, improved prospects are accompanied by major economic policy challenges. Obviously, different policies are warranted in individual countries. Economies with high external and internal deficits will inevitably have to give top priority to reducing deficits within a credible medium-term adjustment framework. Economies with persistently large foreign trade surpluses will have to implement appropriate structural reforms and policies to boost domestic demand. Certain emerging economies will have to adopt policies for greater exchange-rate flexibility, thereby contributing to the correction of global macroeconomic imbalances and promoting the stability of the global financial system.

According to an IMF report on the euro area,[6] the current crisis provides an opportunity to move ahead with difficult but necessary reforms, which should bolster economic

5 It should be noted that Japan's net public debt is considerably lower than its gross public debt (projected to reach 121.2% of GDP in 2010).

growth and enhance fiscal sustainability. Most Mediterranean euro area countries need to improve the functioning of their labour markets, upgrade their education systems and foster capital deepening and innovation. Finally, all euro area countries will have to further liberalise their goods and services markets within the single European market, in order to maximise the positive effect of labour market reforms.

The slow recovery in the labour market is a significant source of uncertainty as regards economic recovery in both the United States[7] and the euro area. In late 2009, the rate of unemployment stood at approximately 10% in both economies and remained at the same level in mid-2010 in the euro area, while it fell only slightly in the United States (to 9.6% in September) despite the economic recovery. It should be noted that during the global crisis, the rate of unemployment doubled in the United States from 4.8% in March 2008 to 10% in December 2009, while in the euro area the rise was less pronounced, from 7.8% in March 2008 to 10% in May 2010, despite the fact the real GDP declined more. One of the reasons behind the limited loss of jobs in the euro area is the more extensive use of reduced working hours often backed by government subsidies (see ECB, *Monthly Bulletin*, July 2010, p. 40).

The recovery has been more robust in **emerging and developing economies**, particularly in Asia, mostly as a result of strong domestic demand and relatively lower exposure to financial shocks. Overheating, high inflation, as well as real estate price increases in some economies are the main risks in this region. GDP growth in emerging and developing economies as a whole will reach 7.1% in 2010, from 2.5% in 2009. In China growth has already returned to its pre-crisis levels. For 2010, it is expected to exceed its 2008 level and reach 10.5% (see Table II.1).

Inflation, having fallen to 0.1% in advanced economies and 5.2% in emerging and developing economies in 2009 on account of the recession and a sharp drop in commodity prices, is expected to rebound in 2010, to 1.4% and 6.2% respectively. The impact of excess capacity and of the continued relatively high output gap —estimated at 3.8% of potential output in the OECD countries for 2010, compared with 5.1% in 2009— is being offset in 2010 by a recovery in commodity prices.

Global trade, badly hit in 2009, was the main channel of contagion of the recession across regions. Despite a rebound in the second half of 2009, the volume of world trade in goods and services declined by 11.0% in 2009. The value of global trade (at current prices) rose by 25% in the first half of 2010 year-on-year and, according to forecasts for 2010, the volume of global trade is expected to rise by 11.4%. Commodity prices kept rising in 2009, spurred mainly by the recovery of demand from emerging Asia, but also by adverse weather conditions in North America and Europe. In annual average terms, **commodity prices** in 2009 fell significantly from the historical highs of 2008. The international price of crude oil (average for three types of crude oil) fell by 36.3% to USD 61.8 per barrel in 2009, but is forecast to rebound (by 23.3% in annual average terms) to USD 76.2 in 2010, driven by the strong recovery mainly of Asian economies. (According to Eurosystem staff projections, the price of the Brent blend will rise by 27% in US dollar terms or by 34% in euro terms, on the basis of current euro/USD exchange rate trends.)

2 THE ECONOMIES OF SOUTHEASTERN EUROPE[8]

The downturn in Southeastern (SE) Europe in 2009 (with the exception of Albania) eased significantly in the first half of 2010. However, the annual GDP growth rate remained negative in

6 IMF, *Euro Area Policies: 2010 Article IV Consultation*, July 2010.
7 See report by the Chairman of the U.S. Federal Reserve on 21 July 2010.
8 The discussion covers Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, the Former Yugoslav Republic of Macedonia (FYROM), Romania, Serbia and Turkey.

Table II.1 Key macroeconomic aggregates of the world economy

	Number of states	Share in GDP[1] (%)	Output (annual percentage changes in real GDP)			Inflation[2] (annual percentage changes)			Fiscal balance[3] (% of GDP)			Current account balance (% of GDP)		
			2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011
World total	183	100.0	-0.6	4.8	4.2	-	-	-	-	-	-	-	-	-
1. Advanced economies	*33*	*53.8*	*-3.2*	*2.7*	*2.2*	*0.1*	*1.4*	*1.3*	*-10.1*	*-9.3*	*-8.0*	*-0.3*	*-0.3*	*-0.1*
United States		20.4	-2.6	2.6	2.3	-0.3	1.4	1.0	-12.9	-11.1	-9.7	-2.7	-3.2	-2.6
Japan		6.0	-5.2	2.8	1.5	-1.4	-1.0	-0.3	-10.2	-9.6	-8.9	2.8	3.1	2.3
United Kingdom		3.1	-4.9	1.7	2.0	2.1	3.1	2.5	-10.3	-10.2	-8.1	-1.1	-2.2	-2.0
Euro area	16	15.1	-4.1	1.7	1.7	0.3	1.6	1.5	-6.3	-6.5	-5.1	-0.6	0.2	0.5
2. Emerging and developing economies	*150*	*46.2*	*2.5*	*7.1*	*6.4*	*5.2*	*6.2*	*5.2*	*-4.5*	*-3.7*	*-2.9*	*1.9*	*1.6*	*1.6*
China		12.6	9.1	10.5	9.6	-0.7	3.5	2.7	-3.0	-2.9	-1.9	6.0	4.7	5.1

Sources: IMF, *World Economic Outlook*, Oct. 2010.

Notes: 2010: estimates, 2011: forecasts. According to IMF classification: *Advanced economies*: Euro area-16, the four *newly industrialised Asian economies* (Korea, Singapore, Taiwan Province of China and Hong Kong SAR) and United States, Japan, Canada, Australia, Switzerland, United Kingdom, Iceland, Israel, Cyprus, Norway, New Zealand, Sweden and Czech Republic. *Emerging and developing economies*: Africa (44), Central and Eastern Europe (15), Commonwealth of Independent States (13 incl. Mongolia), Developing Asia (26), Middle East (20) and Western Hemisphere (32).

1 Percentage share in world GDP in 2009, on the basis of purchasing power parities.

2 HICP for the euro area and the United Kingdom, CPI for the other countries. Year averages.

3 The total for the "advanced economies" refers to the seven major advanced economies (G-7).

several countries in the first half of the year, although the average annual rate for 2010 as a whole is expected to be positive in all countries except Romania (-1.9% from -7.1% in 2009), Croatia (-1.5% from -5.8% in 2009) and Montenegro (-1.8% from -5.7% in 2009). In Bulgaria, the change in GDP will be zero (after decreasing by 5.0% in 2009). In the case of FYROM the slowdown was rather moderate in 2009 (-0.5%, compared with a 4.8% increase in 2008), whereas a relatively mild recovery is expected in 2010 (GDP is expected to grow by 1.2%). Finally in Turkey, the GDP growth rate stood at very high levels in the first two quarters of the year (11.7% and 10.3%), having accelerated spectacularly, whereas average annual GDP growth for the whole of 2010 is expected to come to 7.8%, compared with a 4.7% drop in 2009 (see Table II.2.A). Consumer demand remained subdued in most countries, mainly due to the decline in household confidence, the continuing deterioration in labour market conditions and the weaker credit expansion to households in certain countries (but not in Turkey). The drop in investment demand reflects the decline in the rate of capacity utilization and the difficulties in ensuring sufficient funding. Given weaker domestic demand, the recovery in the countries of the region hinges upon the outlook of export growth. However, low competitiveness, coupled with the slow pace of economic recovery in most EU Member States, is significantly dampening an improvement in export performance and, therefore, the prospects for faster growth.

The downturn and excess capacity (reflected in the negative "output gap") have contributed to a significant deceleration of inflation in most SE European countries. However, some of them expect slightly increased inflation in 2010 (Romania: 5.9% from 5.6% in 2009, Albania: 3.4% from 2.2%, Bosnia and Herzegovina: 2.4% from -0.4%, FYROM: 1.9% from -0.8%), while the increase in Turkey will probably be marked (8.7% from 6.3%) (see Table II.2.A).

Lower domestic demand helped improve the external balances of individual countries. The current account deficits in most SE European countries decreased significantly owing mainly to the improved trade balance. This trend is expected to continue also in 2010, with the exception of Serbia, Romania and Turkey; in the latter, the deficit should more than double as a percentage of GDP (from 2.3% to 5.2%) mainly owing to high economic growth (see Table II.2.B). Foreign direct investment (FDI) is still the most significant component of capital inflows in most countries in the area. However, in certain countries, e.g. Bulgaria, Serbia and Turkey, FDI inflows as a percentage of GDP declined in the first half of 2010 (Bulgaria: 1.7% compared with 4.6% in the first half of 2009, Serbia: 1.6% against 2.9%, and Turkey: 0.4% against about 0.7%). The external borrowing requirements of SE European countries have been considerably reduced, mainly owing to the decline in current account deficits, and also to the continuing support from the EU and other international organizations. Capital transferred from multinational banking groups to their subsidiaries also helped to this direction.

According to data for the first half of 2010, efforts to restore fiscal balance seem to have paid off in most cases (see Table II.2.B). Based on available forecasts, the fiscal deficit as a percentage of GDP is expected to increase in three countries (Montenegro, Bulgaria and Croatia) and drop slightly in Serbia to about 4%. The slow pace of economic recovery may jeopardize the achievement of budgetary objectives and may render corrective measures necessary in several countries, expect for Turkey which records high growth rates and has already significantly reduced its deficit as a percentage of GDP in the first half of 2010.

With regard to the conduct of monetary policy, countries with fixed exchange rates did not have any problems with maintaining their exchange rates. Those with floating exchange rates, having initially recorded losses, were able to tackle the crisis more effectively with the deceleration of inflation, which dampened

Table II.2 Key macroeconomic indicators of Southeastern European countries[1]

A. GDP and inflation
(annual percentage changes)

Country	GDP 2007	GDP 2008	GDP 2009 (estimate)	GDP Q1 2010	GDP Q2 2010	GDP 2010 (forecast)	Inflation 2007	Inflation 2008	Inflation 2009 (estimate)	Inflation H1 2010	Inflation 2010 (forecast)
Albania	5.9	7.7	3.3	2.0	1.5	2.6	2.9	3.4	2.2	3.2	3.4
Bosnia-Herzegovina	6.1	5.7	-3.1	1.3	-	0.5	1.5	7.4	-0.4	2.5	2.4
Bulgaria	6.2	6.0	-5.0	-3.6	-1.4	0.0	7.6	12.0	2.5	1.4	2.2
Croatia	5.5	2.4	-5.8	-2.5	-	-1.5	2.9	6.1	2.4	0.7	1.9
FYROM	5.9	4.8	-0.5	-0.9	0.4	1.2	2.3	8.3	-0.8	1.8	1.9
Montenegro	10.7	6.9	-5.7	-1.5	-	-1.8	4.2	8.5	3.4	0.2	0.6
Romania	6.3	7.3	-7.1	-2.6	-0.5	-1.9	4.8	7.8	5.6	4.4	5.9
Serbia	6.9	5.5	-3.0	0.6	1.8	1.5	6.5	12.4	8.1	4.2	4.6
Turkey	4.7	0.7	-4.7	11.7	10.3	7.8	8.8	10.4	6.3	8.4	8.7

B. Current account balance and fiscal balance
(as percentage of GDP)

Country	Current account balance 2007	Current account balance 2008	Current account balance 2009 (estimate)	Current account balance Q1 2010	Current account balance Q2 2010	Current account balance 2010 (forecast)	Fiscal balance 2007	Fiscal balance 2008	Fiscal balance 2009 (estimate)	Fiscal balance H1 2010[2]	Fiscal balance 2010 (forecast)
Albania	-10.4	-15.2	-14.0	-14.2	-13.1	-9.2	-3.5	-5.7	-7.4	-1.7	-4.1
Bosnia-Herzegovina	-10.4	-15.2	-6.9	-6.6	-5.5	-5.5	1.3	1.4	-5.7	-	-4.5
Bulgaria	-26.9	-24.2	-9.5	-1.5	-1.8	-3.0	3.5	1.8	-0.9	-2.2	-4.9
Croatia	-7.6	-9.2	-5.3	-4.4	-3.1	-3.8	-1.7	-1.4	-3.2	-	-4.7
FYROM	-7.2	-12.7	-7.2	-3.1	-2.3	-3.9	0.6	-1.0	-2.6	-1.3	-2.5
Montenegro	-39.5	-51.8	-30.3	-28.2	-28.9	-17.0	6.7	-0.4	-4.4	-	-7.1
Romania	-13.4	-11.6	-4.5	-6.2	-7.1	-5.1	-3.1	-5.4	-7.4	-3.9	-6.8
Serbia	-16.0	-17.7	-6.7	-10.5	-7.2	-9.6	-2.0	-2.5	-4.8	-1.9	-4.1
Turkey	-5.9	-5.7	-2.3	-1.5	-2.9	-5.2	-2.1	-1.9	-6.2	-1.4	-4.0

Sources: National central banks, IMF, European Bank for Reconstruction and Development and Reuters.
1 Estimates for 2009 and forecasts for 2010 are expected to be revised.
2 For FYROM and Romania, data for January-July 2010. For Serbia, data for January-August.

pressures in the foreign exchange market, thus enabling the easing of monetary policy. However, in certain countries (e.g. Serbia), the effort to contain inflationary pressures and the need to maintain the exchange rate clearly restricted the margins to further ease monetary policy. In particular, the devaluation of the Serbian dinar by about 9% against the euro since the beginning of the year led the country's central bank to raise its key interest rates.

The economic recovery in most countries of the region reflects the conditions in the financial sector, which generally remains strong and quite resilient to the crisis. There are three main reasons for this: (a) the high quality of banks' assets before the onset of the crisis (no toxic or generally complex financial instruments), (b) improved capital adequacy, standing clearly above the minimum capital requirements (the banking systems of the area were protected in a timely manner by significant initiatives for macroprudential supervision) and (c) the assured bank credit flow. It should also be noted that the presence of important foreign banking groups contributed to a large extent to the preservation of the financial system stability in the region.

However, the ongoing cautiousness on the part of foreign investors, coupled with deleveraging of financial institutions all over the world and weak domestic demand, has contributed to the deterioration of fund-raising conditions and thus to the further decline in credit expansion in most countries of the region. Credit expansion to the private sector in most countries in the first half of 2010 ranged from negative to, at best, marginally positive levels. Turkey was the exception, as its speedy economic recovery is reflected in the high rates of credit expansion, which stood at 16% in the first half of 2010. At the same time, the ratio of non-performing loans worsened considerably and reached two-digit figures in several countries.[9]

Sustainable growth necessitates a move towards a more balanced model of production. Resources have to be shifted from non-internationally tradable goods towards internationally tradable goods, thereby raising the export performance of countries in the area. In short, these countries will have to avert the reemergence of macroeconomic imbalances of the past, which were mainly the result of high credit expansion and a significant rise in asset prices.

9 The ratio was over 10% in Albania, Romania and Serbia, and close to 14% in Bulgaria. With an NPL ratio of 4.1%, Turkey is the exception.

Box II.1

THE NEW EUROPEAN STRATEGY FOR JOBS AND GROWTH "EUROPE 2020" AND ENHANCING ECONOMIC GOVERNANCE

The European Council of 17 June 2010 finalised the European Union's new strategy for jobs and growth ("Europe 2020" Strategy), approving a first set of guidelines on the enhancement of economic governance and reaffirming the commitment of Member States to ensure financial stability by addressing the gaps in the regulation and supervision of financial markets.[1]

In the European Council conclusions it is pointed out that the EU has met the global financial crisis with collective determination and has done what was necessary to safeguard the stability of the Economic and Monetary Union. In particular, in May an agreement was reached on a support package for Greece as well as on a European financial stabilisation mechanism and facility, which was finalised in June. The foundations for much stronger economic governance have thus been laid. The main points of the European Council's decisions on "Europe 2020" Strategy and economic governance, as well as the ECB's contribution to the consultation on reinforcing economic governance in the euro area, are as follows:

1. Finalisation and implementation of the "Europe 2020" Strategy

The European Union's new strategy for jobs and smart, sustainable and inclusive growth will help Europe recover from the crisis and come out stronger, both internally and at the international

1 On 22 September 2010 the European Parliament formally approved of the new financial supervisory framework that is expected to enter into force on 1 January 2011.

level, by boosting competitiveness, productivity, growth potential, social cohesion and economic convergence. The new strategy responds to the challenge of reorienting policies away from crisis management towards the introduction of medium- to longer-term reforms that promote growth and employment and ensure the sustainability of public finances, inter alia through the reform of pension systems.

Member States will continue to adopt a differentiated speed in fiscal consolidation taking both fiscal and non-fiscal risks into account. Several Member States have recently strengthened and frontloaded budgetary consolidation and all Member States are ready, if necessary, to take additional measures to accelerate fiscal consolidation. Priority should be given to growth-friendly budgetary consolidation strategies mainly focused on expenditure restraint. Increasing the growth potential should be seen as paramount to ease fiscal adjustment in the long run.

The European Council confirms the five EU headline targets, which will constitute shared objectives guiding the action of Member States and the Union as regards (a) promoting employment, (b) improving the conditions for innovation, research and development, (c) meeting the climate change and energy objectives, (d) improving education levels and (e) promoting social inclusion in particular through the reduction of poverty. In more detail:

- aiming to raise to 75% the employment rate for women and men aged 20-64, including through the greater participation of young people, older workers and low-skilled workers and the better integration of legal migrants;

- improving the conditions for research and development, in particular with the aim of raising combined public and private investment levels in this sector to 3% of GDP; The Commission will elaborate an indicator reflecting R&D and innovation intensity;

- reducing greenhouse gas emissions by 20% compared to 1990 levels; increasing the share of renewable energy sources in final energy consumption to 20%; and moving towards a 20% increase in energy efficiency;

- improving education levels, in particular by aiming to reduce school drop-out rates to less than 10% and by increasing the share of 30-34 years old having completed tertiary or equivalent education to at least 40%;

- promoting social inclusion, in particular through the reduction of poverty, by aiming to lift at least 20 million people out of the risk of poverty and exclusion;

The European Council gives its political endorsement to the Integrated Guidelines for economic and employment policies, which will be formally adopted following the European Parliament's opinion on the latter. The guidelines will continue to be the basis for any country-specific recommendations that the Council may address to Member States.

Member States must now act to implement these policy priorities at their level. They should, in close dialogue with the Commission, rapidly finalise their national targets, taking account of their relative starting positions and national circumstances, and according to their national decision-making procedures. Progress towards the headline targets will be regularly reviewed.

All common policies, including the common agricultural policy and cohesion policy, will need to support the strategy "Europe 2020". A sustainable, productive and competitive agricultural sector will make an important contribution to the new strategy, considering the growth and employment potential of rural areas while ensuring fair competition.

In particular, the Single Market needs be taken to a new level, through a comprehensive set of initiatives. The European Council welcomes the report presented by Mr. Mario Monti on a new strategy for the Single Market and the Commission's intention to follow it up by presenting concrete proposals. The European Council will revert to this matter in December 2010.

Further to the presentation by the Commission of the first flagship initiative on a 'Digital Agenda for Europe', the European Council endorses the establishment of an ambitious action agenda based on concrete proposals and calls upon all institutions to engage in its full implementation, including the creation of a fully functioning digital single market by 2015.

2. Enhancing economic governance

According to the European Council, the crisis revealed clear weaknesses in EU economic governance, in particular as regards budgetary and broader macroeconomic surveillance. Reinforcing economic policy coordination therefore constitutes a crucial and urgent priority.

The rules on budgetary discipline must be fully implemented. As regards their strengthening, the European Council agrees on the following orientations relating to the Stability and Growth Pact, as well as budgetary and broader macro-economic surveillance:

- Strengthening both the preventive and corrective arms of the Stability and Growth Pact, with sanctions attached to the consolidation path towards the medium term objective. Due account will be taken of the particular situation of Member States which are members of the euro area and Member States' respective obligations under the Treaties will be fully respected.

- Giving, in budgetary surveillance, a much more prominent role to levels and evolutions of debt and overall sustainability, as originally foreseen in the Stability and Growth Pact.

- From 2011 onwards, in the context of a "European semester", presenting to the Commission Stability and Convergence Programmes for the upcoming years, taking account of national budgetary procedures.[2]

- Ensuring that all Member States have national budgetary rules and medium term budgetary frameworks in line with the Stability and Growth Pact.

- Ensuring the quality of statistical data, essential for a sound budgetary policy and budgetary surveillance; statistical offices should be fully independent for data provision.

As regards macroeconomic surveillance, the Council agreed on the following orientations:

2 The Ecofin Council of 7 September 2010 endorsed changes to the way in which the EU's Stability and Growth Pact is implemented in order to allow a "European semester" to be introduced as from 1 January 2011, as part of a reform of EU provisions on economic policy coordination.

- Developing a scoreboard to better assess competitiveness developments and imbalances and allow for an early detection of unsustainable or dangerous trends.

- Developing an effective surveillance framework, reflecting the particular situation of euro area Member States.

The ECB's contribution on reinforcing economic governance in the euro area

On 15 June 2010 the ECB published its proposals for improving economic governance in the euro area.[3] ECB's proposals are aimed at strengthening surveillance of budgetary policies and compliance with the Stability and Growth Pact, monitoring more closely developments in the relative competitiveness of euro area countries, formulating the tools for addressing macroeconomic imbalances and designing an effective crisis management framework that will minimise moral hazard.

According to the ECB, these proposals entail a qualitative quantum leap in terms of the progress made towards strengthening the institutional foundations of EMU, and thus towards a deeper economic union that is commensurate with the degree of economic integration and interdependency already achieved through the monetary union. The proposals focus on the euro area, but could, selectively, also be applied to the EU-27.

The European Commission's proposals

On 29 September 2010 the European Commission published a comprehensive package of legislative measures containing the most comprehensive reinforcement of economic governance in the EU and the euro area since the launch of the Economic and Monetary Union. Broader and enhanced surveillance of fiscal policies, but also macroeconomic policies and structural reforms is sought in the light of the shortcomings of the existing legislation. New enforcement mechanisms are foreseen for non-compliant Member States. The recently agreed "European semester" will integrate all revised and new surveillance processes into a comprehensive and effective economic policy framework.

The package comprises four proposals that deal with fiscal issues, including a wide-ranging reform of the Stability and Growth Pact, and two new regulations aimed at detecting and effectively addressing emerging macroeconomic imbalances within the EU and the euro area.

For Member States of the euro area, changes will give teeth to enforcement mechanism and limit discretion in the application of sanctions. In this way, the Stability and Growth Pact will become more "rules based" and sanctions will be the normal consequence to expect for countries in breach of their commitments, as pointed out in the European Commission's press release.

3 ECB's proposals were included in a letter by the ECB President, Jean-Claude Trichet, to the President of the European Council and head of the Task Force on economic governance, H. Van Rompuy.

III THE SINGLE MONETARY POLICY[1] AND EUROSYSTEM INTERVENTIONS

Amid subdued inflationary pressures in the first ten months of 2010, the stance of the single monetary policy remained accommodative, contributing to economic recovery in the euro area. Eurosystem policy rates (see Table III.1) remained unchanged at 1% (main refinancing rate), 1.75% (marginal lending rate) and 0.25% (deposit rate).[2] At the same time, the Governing Council of the ECB continued to implement non-standard monetary policy measures.[3] This contributed to safeguarding financial stability, which was undermined by the financial crisis, and to improving conditions in the interbank market after the tensions that emerged because of the financial crisis, thereby sustaining a sufficient flow of bank credit to euro area enterprises and households and underpinning economic activity.

January-April 2010 saw the phasing out of some non-standard measures that were put in place in previous years as a result of the ongoing normalisation of financial market conditions since early 2009. However, in May 2010 financial market tensions resurged amid concerns about the fiscal situation in some Member States. In response, the Governing Council of the ECB reactivated a number of non-standard monetary policy measures and established the Securities Markets Programme.[4] The implementation of these measures by the Eurosystem, combined with the introduction by the ECOFIN and the Member States, on 9 May 2010, of another package of measures for safeguarding financial stability in Europe, including a Financial Stabilisation Mechanism, are helping to gradually ease these tensions.

The ECB Governing Council formulates monetary policy with a view to achieving Eurosystem's primary objective, i.e. price stability over the medium term.[5] During the first ten months of 2010, the Governing Council of the ECB repeatedly stressed that Eurosystem policy rates remained appropriate. This is also suggested by inflation expectations, according to which inflation rates will stand below, but close to 2%, in the medium term.

Since May 2010, the Governing Council of the ECB has on many occasions reaffirmed that, in remaining firmly committed to the primary objective of the Eurosystem, it will do everything necessary, in the conduct of the single monetary policy, to maintain price stability in the euro area over the medium term. It also stressed that this is the necessary and central contribution that monetary policy makes to sustainable economic growth, job creation and financial stability. The non-standard measures (known as "enhanced credit support"), taken during the period of severe financial market tensions and the recent Securities Markets Programme are fully consistent with the fulfillment of Eurosystem's primary objective and temporary in nature. Moreover, the Governing Council of the ECB has on several occasions reaffirmed that all decision-making regarding the monetary policy stance, the overall provision of liquidity and the allotment modes in liquidity-providing open market operations (full allotment or pre-set allotment amounts) will be aimed at preserving price stability over the medium term.

In formulating the single monetary policy, the Governing Council cross checks the results of its economic analysis with those of its monetary analysis.

The economic analysis in the ten months through October 2010 pointed to a continua-

1 According to the introductory statements of the President of the ECB to the press conferences following the first Governing Council meeting of each month – in which monetary policy is discussed – during the first ten months of 2010. Account has also been taken of other announcements of the ECB and its Governing Council.
2 The main refinancing rate and the marginal lending rate were last changed (reduced) in May 2009. The deposit rate – already reduced to 0.25% in April 2009 – has remained unchanged ever since.
3 These measures are characterised as "non-standard", because they involve changes in the operational framework – i.e. in the instruments and procedures – for the implementation of monetary policy. They are designed to provide "enhanced credit support" to the euro area economy. More specifically, they improve funding conditions and strengthen the flow of credit to the economy (for the euro area, mainly banks) more than would have been achieved through interest rate decisions alone.
4 As discussed below in greater detail, under this programme the Eurosystem conducts interventions in (euro-denominated) securities markets to make sure they have sufficient depth and liquidity. Removing financial market dysfunctions is essential as otherwise they would hamper the monetary policy transmission mechanism.
5 Price stability is defined, in the context of Eurosystem's monetary policy strategy, as inflation rates of below, but close to, 2%.

Table III.1 Changes in key ECB interest rates

(percentages per annum)

With effect from:[1]		Deposit facility	Main refinancing operations		Marginal lending facility
			Fixed rate tenders (fixed rate)	Variable rate tenders (minimum bid rate)	
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

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 at which this decision is made.

tion of the recovery in economic activity which began in the euro area in mid-2009. In the second quarter of 2010, the quarterly growth of GDP rose to 1%, on account of stronger domestic demand which was, however, somewhat linked to temporary factors. Recent economic data and survey results point to a moderation in the pace of economic growth in the second half of 2010 in the euro area and the rest of the world. Despite prevailing uncertainty, economic recovery will continue, but GDP growth in the euro area will remain modest in 2010 and 2011. The Governing Council of the ECB expects the pick-up in economic activity to be supported by a rise in exports given the global recovery,[6] the Eurosystem's accommodative monetary policy stance, as well as the measures taken to restore the functioning of the financial system. By contrast, a dampening effect on economic activity is

6 The Governing Council of the ECB underlined that euro area economic activity may be adversely affected, if cross-border transactions decline on account of protectionism or an abrupt and disorderly correction of existing global economic imbalances. In the press conference following the meeting of the ECB Governing Council of 7 October 2010, the President of the ECB stressed that "more than ever exchange rates should reflect economic fundamentals" and that "excess volatility and disorderly movements in exchange rates have adverse implications for economic and financial stability" worldwide.

expected to come from the ongoing process of balance sheet adjustment in the financial and non-financial sectors both within and outside the euro area.

In the context of its economic analysis, the Governing Council of the ECB found that during the first nine months of 2010 inflation accelerated, reaching 1.8% in September, compared with 0.9% in December 2009. This development is mainly associated with higher energy prices but also reflects other external factors, such as the stronger price increases in fast-growing economic regions. The Governing Council of the ECB expects inflation to hover around its current levels in the coming months; thereafter, however, it will decline considerably, remaining at moderate levels in 2011 overall, as euro area domestic inflationary pressures should remain subdued. As already mentioned, throughout the first ten months of 2010, the Governing Council of the ECB stressed that, according to inflation expectations, price stability would be maintained in the euro area over the medium term.

According to the latest ECB staff macroeconomic projections (September 2010), average annual inflation will range between 1.5% and 1.7% in 2010 and between 1.2% and 2.2% in 2011. Inflation, however, may increase as it cannot be excluded that (i) increases in crude oil and other commodity prices might be stronger than expected and (ii) rises in indirect taxation and administered prices may be higher than projected. Notwithstanding that, euro area domestic price and labour cost developments are expected to be subdued.[7]

The monetary analysis, which the Governing Council of the ECB conducted in the first ten months of 2010 in tandem with its economic analysis, confirmed the latter's conclusion that inflationary pressures will remain contained over the medium term, as the *underlying* pace of monetary expansion[8] —which is closely related to medium- and long-term inflationary pressures— is still moderate on account of continued weak money and credit growth in the euro area during the first eight months of 2010.[9]

Based on its regular economic and monetary analysis summarised above, and taking into account all the new input, the Governing Council of the ECB decided, in all the monetary policy meetings it held between January and October 2010, to leave the key interest rates unchanged.

Financial market tensions, which, as mentioned above, increased considerably in early May 2010, disrupted monetary policy transmission. In the ECB Governing Council's assessment, this could hamper the effective conduct of monetary policy oriented towards price stability in the medium term. To address this risk, on 9 May 2010, it re-introduced a number of non-standard monetary policy measures[10] and, additionally, established a temporary programme ("the Securities Markets Programme") aimed at restoring normality in securities markets. Under this programme, the Eurosystem conducted interventions to acquire government bonds and private sector debt securities denominated in euro.[11] The objective of the Securities Markets Programme is to ensure sufficient depth and liquidity in dysfunctional markets for securities.

7 For instance, unit labour costs are expected to decline in 2010.
8 The underlying pace of monetary expansion is calculated by the ECB with several alternative methods (see ECB, *Monthly Bulletin*, May 2008, Box 1, p.15) and is not published. It is thought to be more closely related to inflation developments than M3 growth, considering the time lags.
9 Rate of change in M3: August 2010: 1.1%, December 2009: -0.3%; growth rate of bank credit to the private sector: August 2010: 1.2%, December 2009: -0.2%.
10 Namely fixed-rate, full allotment LTROs with a maturity of 3 or 6 months. It is noted that the fixed rate for the 6-month LTRO of May, as well as for the 3-month LTROs from October 2010 onwards, will be computed *ex post*.
11 Bonds and debt instruments issued by other public entities are purchased only in the secondary market, as according to the Treaty on the functioning of the European Union (Article 123) and the ESCB and ECB Statute (Article 21), the Eurosystem is not allowed to acquire government securities in the primary market. By contrast, private sector debt instruments can, in principle, be purchased in the primary market as well. Under the Securities Markets Programme, the ECB and the NCBs can intervene in debt securities markets and all eligible counterparties to Eurosystem monetary policy operations, as well as any other counterparties that are used by a NCB or the ECB for the investment of their euro-denominated investment portfolios, are acceptable as their counterparties; see Decision of the European Central Bank of 14 May 2010 establishing a securities markets programme (ECB/2010/5).

By the end of the first week of October 2010, the Eurosystem had purchased securities worth €63.3 billion.[12]

To sterilise the impact of the increased overall amount of liquidity injected in the banking system through these interventions, the Eurosystem conducts extraordinary open market operations to re-absorb the liquidity generated by such debt instrument purchases, so that the monetary policy stance remains unaffected. Indeed, every week the Eurosystem executes quick tenders, in the form of one-week variable rate tenders with a maximum bid rate of 1%, to collect deposits from credit institutions.

As regards other types of open market operations (see Table III.2), purchases of covered bonds[13] were completed in June 2010. Purchased bonds will continue to be held in the Eurosystem's portfolio until maturity.

Initially, in December 2009, the Governing Council of the ECB had announced that the longer-term refinancing operation (LTRO) with settlement on 31 March 2010 was going to be the last one with 6-month maturity. However, it performed one more 6-month LTRO on 12 May 2010 in response to the above-mentioned tensions.

Through these operations credit institutions obtained unlimited liquidity[14] at rates to be determined ex post using a special calculation method.[15]

3-month LTROs continued to be conducted as fixed rate tenders with full allotment in the first quarter of 2010, as decided by the ECB Governing Council in December 2009. However, in March 2010, the Governing Council of the ECB decided that, starting from 28 April 2010, 3-month LTROs would be executed as variable rate tenders, as had also been the case prior to October 2008, and as indeed happened in the 3-month LTRO conducted in end-April 2010.

However, against the background of recent tensions, the Governing Council of the ECB decided on 9 May and 10 June 2010 that the 3-month LTROs with settlement towards the end of each month from May to September 2010 would be conducted as fixed rate tenders with full allotment. More recently, on 2 September 2010, the Governing Council of the ECB decided to use the full allotment mode in the 3-month liquidity-providing LTROs with settlement towards the end of each month from October to December 2010. It also decided that the special calculation method for 6-month LTROs described above would also apply to the rates of these operations.

Finally, the Governing Council of the ECB had decided in December 2009 that the special-term refinancing operations with a maturity of one maintenance period (roughly 30 days)[16] and the main refinancing operations (MROs) with a maturity of one week would continue to be conducted as fixed rate tender procedures with full allotment for as long as needed, and at least until 13 April 2010. In March 2010, this period was extended to 12 October 2010. In September 2010, the Governing Council of the ECB gave another extension at least until 18 January 2011.

In April, May and July 2010, the Governing Council of the ECB made several important decisions about assets eligible for use as collateral in Eurosystem credit operations.

12 Total amount paid for the purchased securities. It corresponds to the extra liquidity injected through the Securities Markets Programme, which was re-absorbed through fine-tuning operations, as also described in Table III.2 below. Not necessarily equal to the face value of the purchased securities.

13 See Bank of Greece, *Monetary Policy – Interim Report* 2009, footnote 31, p. 67.

14 All bids submitted by credit institutions against eligible collateral were satisfied.

15 The rates in these operations were fixed at the average of MROs over the 6-month life of the respective LTRO.

16 A reserve maintenance period in 2010 lasted from 21 to 42 days (average duration: 30.3 days), compared with 21 to 43 days in 2009 (average duration: 30.3 days). The term "maintenance period" refers to a predefined time frame used to calculate the average daily level of reserves that credit institutions must hold with the national central bank. The resulting level must not fall short of that derived by multiplying the reserve ratio of 2% by the value of a subset of the credit institution's liabilities as at the end of the month preceding the last month, as the opposite is regarded as tantamount to non-compliance with the minimum reserve requirement and may cause the credit institution to be sanctioned. Let it be noted that credit institutions' daily reserve holdings may vary.

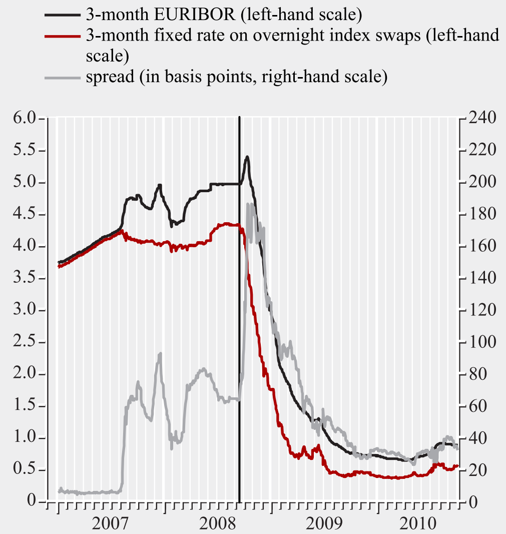
Table III.2 Eurosystem's open market operations in 2010

1. Regular operations:	
1.1 Main refinancing operations (MROs): provision of liquidity with a maturity of one week	**Frequency**: Once a week. **Procedure**: At least until 18.01.11, 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 continue to be carried out at least until end-2010. **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 (at a rate equal to the MRO rate) with full allotment, from January to September 2010, with the exception of the operation allotted on 28 April, which was conducted as a variable rate tender. In the October 2010-December 2010 period, such operations will continue to provide liquidity with full allotment, but the interest rate will be set ex post to equal the average value of the fixed rate in the MROs conducted over the life of the respective three-month operations.
1.2.3 Provision of liquidity with a maturity of six months	**Frequency**: One operation was conducted on 31 March and one on 12 May 2010. **Procedure**: Fixed rate tender with full allotment, the interest rate being fixed ex post at the average value of the fixed rate in the MROs over the life of the respective LTRO.
2. Operations introduced solely in view of the financial crisis:	
2.1 Covered Bond Purchase Programme	The Programme lasted from July 2009 to June 2010. The Eurosystem purchased bonds of a total nominal value of €60 billion.*
2.2 Securities Markets Programme	The Programme was introduced on 9 May 2010. Up until 8 October 2010 the Eurosystem had purchased securities to the amount of €63.3 billion. It should be noted that the level of weekly securities purchases declined gradually (with some fluctuations).
3. Fine-tuning operations:	
3.1 Liquidity absorption on the last day of each maintenance period	**Procedure**: Collection of overnight deposits from credit institutions through variable rate tenders with a maximum bid rate of 1%.
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 one-week deposits from credit institutions through variable rate tenders at a maximum bid rate of 1%.
3.3 Provision of liquidity for 6 or 13 days to mitigate the effect of maturing LTROs on the overall liquidity of the banking system	The initial operation was conducted on 1 July 2010 with the aim of mitigating the impact on the total liquidity of the banking system, as the first longer-term refinancing operation with a maturity of one year ended. In September 2009, the Governing Council of the ECB decided to conduct similar operations on 30 September 2010 and 11 November 2010 (with a maturity of six days), as well as on 23 December 2010 (with a maturity of 13 days, so as to cover the end of the year), in order to smooth out the impact on the total liquidity of the banking system, due to the maturing of the six-month operations (on 30 September 2010 and 11 November 2010) and the twelve-month longer-term refinancing operations (on 30 September 2010 and 23 December 2010). **Procedure:** Fixed rate tender (at a rate equal to the MRO rate) with full allotment.
4. US dollar liquidity-providing operations:	
4.1 With a maturity of seven days 4.2 With a maturity of 84 days	These operations were discontinued after 27 January 2010 (from around 15 October 2009 to end-January 2010 only operations with a maturity of 7 days were conducted). Given that recent tensions also affected European markets as regards US dollar short-term funding of banks, these operations started again on 11 May 2010. They provide liquidity in US dollars against collateral eligible for the Eurosystem's credit operations in euro. **Procedure:** Fixed rate tender with full allotment for the provision of US dollar liquidity.
5. Swiss franc liquidity-providing operations:	
These operations were discontinued after 25 January 2010. They took the form of weekly EUR/CHF foreign exchange swaps with a seven-day maturity, whereby the Eurosystem provided Swiss franc liquidity against euro.	

* Given that the market value of securities was not the same as their nominal value, Eurosystem's purchases contributed in creating liquidity of €61,118 million.

Chart III.1 Spread between the 3-month Euribor and the 3-month fixed rate on overnight index swaps (January 2007-September 2010)

(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 (15 September 2008).

In October 2008 a number of debt instruments were added to the list of eligible assets for the first time.[17] With this measure, the collateral framework was expanded to enable dealing with the deepening financial crisis. In April 2010, it was decided that this measure will cease to be in force at the end of 2010.

Another measure that further expanded the collateral framework was the lowering, since October 2008, of the minimum credit threshold for eligible collateral, from A- to BBB- (on Fitch and Standard & Poor's rating scale), or its equivalent Baa3 (on Moody's rating scale). In April 2010, the Governing Council of the ECB decided that this measure will remain in force beyond the end of 2010.

Moreover, the Governing Council of the ECB decided in May 2010 to suspend the application of the minimum credit rating threshold in collateral eligibility requirements for all marketable debt instruments issued or guaranteed by the Greek government. Such instruments will be accepted by the Eurosystem for the provision of liquidity irrespective of their rating by rating agencies. This decision was based on (i) an assessment by the ECB Governing Council that the Greek economic and financial adjustment programme was appropriate, and (ii) on the strong commitment of the Greek government to fully implement the programme.

Before that, in April 2010, the Governing Council of the ECB had announced that a schedule of graduated valuation haircuts will apply to the assets rated in the BBB+ to BBB- range, with the exception of government bonds.[18]

The schedule, which was fine-tuned in July 2010, graduates haircuts according to the residual maturity and the liquidity of the assets concerned and is due to enter into force on 1 January 2011. Until then, the valuation haircut levels applied by the current schedule to assets rated AAA to A on the basis of criteria other than the credit rating (namely liquidity, residual maturity and coupon type),[19] will also apply to assets rated BBB+ to BBB-, plus an extra haircut of 5%. For government paper or central bank-issued debt in the BBB+ to BBB- range, this method of calculation of valuation haircut levels will be used both before and after that date.

The 3-month Euribor, which is representative of euro area interbank rates, declined further in the first quarter of 2010 (see Chart III.1). In April 2010, however, a rebound began to show and continued until early August 2010. In the

17 These comprised: (i) marketable bonds issued in the euro area but denominated in US dollars, pound sterling and Japanese yen; (ii) deposit certificates and other debt instruments issued by credit institutions and traded on non-regulated markets acceptable by the Eurosystem; and (iii) subordinated debt instruments with acceptable guarantee.
18 It should be recalled that a valuation haircut is the percentage which the Eurosystem deducts from the market value of an asset in order to estimate the amount of credit that a credit institution is entitled to receive, if it deposits this asset as collateral.
19 Namely zero coupon or discount bond, fixed or variable rate coupon or inverse floater.
20 The 3-month Euribor averaged 0.881 in September 2010 before rising to 0.958% in the first week of October – after the start of the EMU this rate fell lower (on a monthly average basis) only in the August 2009-July 2010 period.

two months August and September 2010, the 3-month Euribor edged down slightly but rose again from late September through to the first week of October 2010. Despite this latest rise, the 3-month Euribor is still at historically low levels[20] and falls short of inflation expectations. In early May 2010, the spread[21] between the 3-month Euribor and the "fixed rate" on overnight index swaps of comparable maturity began to increase. The spread fluctuated strongly but overall stayed on an upward path until late August. In September 2010, it started to decrease but rebounded again in the first week of October.

The evolution of this spread (particularly in the four months from May to August 2010) indicates that interbank market participants perceive that the risk associated with investment in the interbank market has increased somewhat, probably on account of higher counterparty risk,[22] an assessment which may also be linked to the earlier mentioned concerns regarding the fiscal position of some Member States. The decline in the interbank market liquidity surplus since end-June 2010 also put upward pressure on the Euribor rate. In early October this rate rose sharply, as a result of three LTROs maturing on the same day (30 September 2010), which contributed to a further decline in the liquidity surplus.

The funding of credit institutions through Eurosystem's open market operations was steadily increasing in January-June 2010 and became particularly pronounced in the period from late April to late June. In greater detail, funding through the Eurosystem's MROs and LTROs rose to about €870 billion (or 9.6% of the GDP projected for 2010 in European Commission forecasts) on 25 June 2010, from approximately €749 billion (or 8.4% of GDP for 2009) in late December 2009. Since the beginning of July 2010, funding through the Eurosystem appears to have declined somewhat, as a direct result of the expiration of the first one-year LTRO.[23] By the end of the first week of October the funding obtained by credit institutions through the Eurosystem's MROs and LTROs had dropped to around €714 billion (or 5.6% of the GDP projected for 2010).

The upswing in Eurosystem funding in the first half of 2010 suggests that the interbank market had difficulty in reallocating liquidity from credit institutions with liquidity surpluses to those that needed additional liquidity. In particular, in countries where fiscal sustainability was dubious in the market's perception, credit institutions found it difficult to attract interbank deposits in order to meet their liquidity needs and hence had to recourse to the Eurosystem to obtain the necessary funds.

Credit institutions' outstanding balances in the context of the Eurosystem's deposit facility also went up.[24] This is attributable to the fact that credit institutions with liquidity surpluses tend to be reluctant to place these funds in the interbank market —probably because they think it would be too risky— preferring to place them in the Eurosystem's deposit facility instead. In late June 2010, outstanding balances in the context of this facility began to decline, owing to a reduction in the liquidity surplus after the expiration of the first LTRO with one-year maturity.

21 See Bank of Greece, *Annual Report* 2008, p. 49, footnote 6, discussing, among other things, the significance of this spread as a measure of the risk premium incorporated in the Euribor rate, in addition to the expectations on the evolution of the EONIA rate.
22 Counterparty risk: the risk that an interbank borrower will default.
23 By the end of June 2009 credit institutions had raised significant funds through this operation, which were paid back in full on 1 July 2010.
24 Credit institutions' outstanding balances in the context of the Eurosystem's deposit facility tend to vary occasionally in the course of a maintenance period. Consequently, the upward trend described here becomes more evident when using the average outstanding balance of successive maintenance periods. Indeed, the per maintenance period outstanding balances in the context of this facility rose from approximately €66 billion in the maintenance period from 11 November to 7 December 2009 to approximately €289 billion in the maintenance period from 12 May to 15 June 2010 and decreased to approximately €69 billion in the maintenance period from 8 September to 12 October 2010.

IV MACROECONOMIC DEVELOPMENTS AND PROSPECTS IN GREECE

1 ECONOMIC ACTIVITY: DEVELOPMENTS AND PROSPECTS

1.1 THE EVOLUTION OF DOMESTIC DEMAND

National accounts data for the first half of 2010 show the anticipated short-term impact of the current conjuncture on economic aggregates. Domestic business and consumer confidence indicators, aggregated under the Economic Sentiment Indicator, suggested heightened uncertainty from November 2009 until May 2010, and still remain subdued. Along with the need for fiscal consolidation, this had a bearing on private and public consumption, as well as on investment, leading to lower economic activity. In fact, short-term economic activity indicators for the third quarter, combined with the planned reduction of expenses, lead to the assumption that growth will decelerate even more in the second half of the year.

In greater detail, according to ELSTAT provisional national accounts data, GDP declined by 3.7% in the second quarter of 2010 year-on-year. This change, which comes after the deceleration of GDP by 2.3% on an annual basis in the first quarter of 2010 and by 2.3% in 2009, shows that the downward course of GDP, which had started at end-2008, accelerated in 2010 (see Table IV.1).

The deterioration of the macroeconomic environment in the first half of 2010 is also confirmed by the **coincident indicator of economic activity** compiled by the Bank of Greece (see Chart IV.1). Furthermore, as mentioned earlier, the **Economic Sentiment Indicator**[1] has been dropping since November 2009 and reached its second lowest (61.9) in

1 This index is compiled by the European Commission based on IOBE business and consumer surveys.

Table IV.1 Demand and gross domestic product: 2008-2010

(constant market prices of 2000; annual percentage changes)

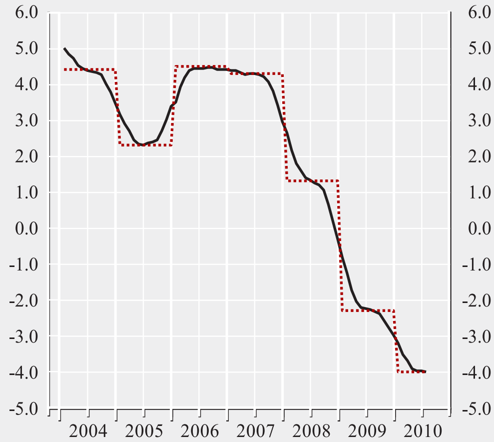
	2008	2009	2010 (Jan.-June)
Private consumption	3.2	-1.8	-1.3
Public consumption	1.0	7.6	-9.1
Gross fixed capital formation:	-7.6	-11.4	-16.5
Housing	-29.1	-25.1	-17.9
Other construction	2.1	5.5	-28.3
Equipment	6.2	-12.2	-8.9
Other investment	-10.8	16.0	-18.7
Final domestic demand	**0.7**	**-2.1**	**-5.3**
Change in inventories and statistical discrepancy (% of GDP)	1.9	-0.5	3.4
Domestic demand	**1.4**	**-4.2**	**-5.1**
Exports of goods and services	4.0	-20.1	-2.8
Exports of goods	3.8	-18.0	-3.1
Exports of services	4.1	-21.5	-2.6
Imports of goods and services	4.0	-18.6	-9.9
Imports of goods	2.1	-18.5	-15.9
Imports of services	13.7	-19.0	11.1
Gross domestic product at market prices	**1.3**	**-2.3**	**-3.0**

Source: ELSTAT, 15 October 2010, revised data for 2008 and 2009. Provisional ELSTAT data for the January-June 2010 period.
For Bank of Greece estimates on 2010 as a whole see main text.

Chart IV.1 Economic activity indicators

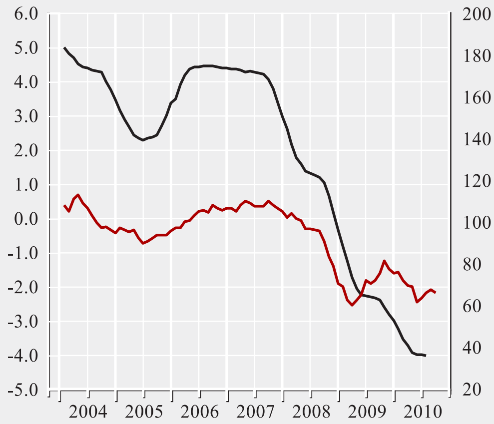
A. The coincident indicator of economic activity compiled by the Bank of Greece
(January 2004 - July 2010)

coincident indicator[1]
GDP[2]



B. The coincident indicator of economic activity compiled by the Bank of Greece and European Commission's economic sentiment indicator for Greece
(January 2004 - September 2010)

coincident indicator (left-hand scale)[1]
economic sentiment indicator (right-hand scale)[3]



Sources: Bank of Greece (coincident indicator and 2010 GDP), ELSTAT (GDP for 2004-2009) and European Commission (economic sentiment indicator).
1 Annualised monthly percentage changes.
2 Annual rate.
3 Monthly data.

May.[2] After that, it recorded a small, though steady, recovery up to August and dropped again in September (see Chart IV.1).

The deceleration of GDP in the first and the second quarter of the year reflects lower **domestic demand** (by 4.1% and 6.2% respectively), which was only partly offset by the decrease in the external balance deficit. However, base effects and the early timing of Easter (which means that consumers carried out their purchases in March and not in April, as was the case in 2009) led to higher **private consumption** in the first quarter. In the second quarter, private consumption decreased markedly (by 4.2% year-on-year and by 6.2% quarter-on-quarter).

The deceleration of private consumption is attributed to lower incomes (cutting down of regular benefits, of the holiday and the Easter allowance for public servants, of pensions, lower remuneration in the private sector and lower income from other sources – e.g. rents), to the increased direct and indirect taxation, the decrease in the number of employed person, the climate of uncertainty and the containment of credit expansion. In particular, national accounts data show that **wages paid** (at current prices) decreased by 4.1% in the first half of 2010 against the first half of 2009 (first quarter: -4.3%, second quarter: -3.9%), reflecting both the decrease in earnings and in the number of employed persons (first quarter: -2.2%, second quarter: -2.3%, on the basis of national accounts estimates). During the same period, the **gross operating surplus** of the economy declined by 1.2%.

The increase in the **volume of retail sales** (excluding fuel and lubricants) recorded in the first quarter (annual rate: +5.7%) was reversed in the second quarter (-5.9%). The index recorded further deceleration on an annual basis (-9.7%) in July and in the seven months January-July it dropped by 1.6% on average. Second quarter and July data show that the deceleration mainly stemmed from lower purchases of consumer durables, clothing and footwear, while food purchases were

2 Starting from 1985, the index had reached its lowest (60.4) in March 2009.

Tables IV.2 Indicators of consumer demand (2008-2010)

(annual percentage changes)

	2008	2009	2010 (available period)
Volume of retail sales	-1.4	-9.3	-1.6 (Jan.-July)
Food-beverages-tobacco[1]	-0.1	-6.1	-0.8 (» »)
Clothing-footwear	-5.5	1.4	-7.1 (» »)
Furniture-electrical appliances-household equipment	-4.3	-15.3	-4.9 (» »)
Books-stationery-other	-1.3	-24.0	-1.5 (» »)
Revenue from VAT (constant prices)	0.8	-10.2	-2.7 (Jan.-Aug.)
Retail trade business expectations index	-15.3	-21.4	-22.2 (Jan.-Sept.)
New passenger car registrations	-7.0	-17.4	-34.0 (» »)
Tax revenue from mobile telephony[2]	5.3	13.2	61.6 (Jan.-Aug.)
Outstanding balance of consumer credit[3]	16.0 (Dec.)	2.0 (Dec.)	-1.5 (Aug.)

Sources: ELSTAT (retail sales, cars), Ministry of Finance (VAT revenue, tax revenue from mobile telephony), IOBE (expectations), Bank of Greece (consumer credit).
1 Including big food stores and specialised food-beverages-tobacco stores.
2 Monthly service fee per connection until July 2009. A new tiered fee on mobile subscriptions and a fee on prepaid phone cards have been levied as of August 2009.
3 Including bank loans and securitised loans. The rates of change are adjusted for loan write-offs/write downs, foreign exchange valuation differences and a transfer of loans by one bank to a subsidiary domestic credit company in 2009.

also reduced, though to a lower degree. The **number of new passenger cars** rose in the first quarter (by 17.2% on an annual basis, which shows that consumers rushed to buy cars before the increase in indirect taxes), but then dropped dramatically (at an annual rate of 41.1% in the second quarter and 64.0% in the third quarter – see Table IV.2 and Chart IV.2).[3]

Data on outstanding **consumer loans** show that the annual rate of credit expansion remained positive up to April, dropped to zero in May and June and then entered negative territory (July: -1.1%, August: -1.5%). This seems to reflect contracting consumer demand and tighter financing conditions.

Taking into account the above, and if the current trends continue in the near future, it is reasonable to expect a decrease in private consumption by around 4% for the year as a whole.

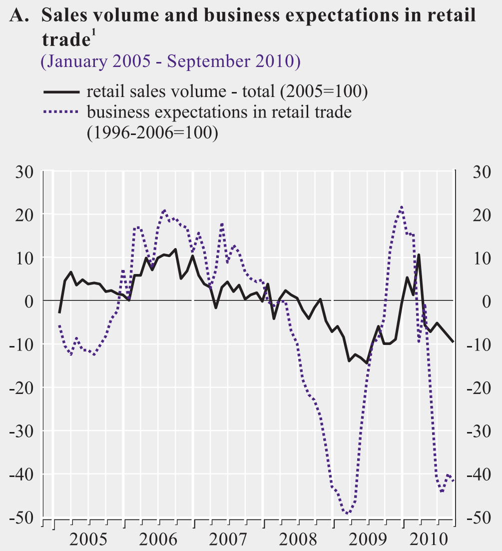
As a consequence of the fiscal consolidation measures described in detail in Chapter V, **public consumption** decelerated in the first and the second quarter of 2010 against the corresponding quarters of 2009 (by 9.8% and 8.4% respectively).

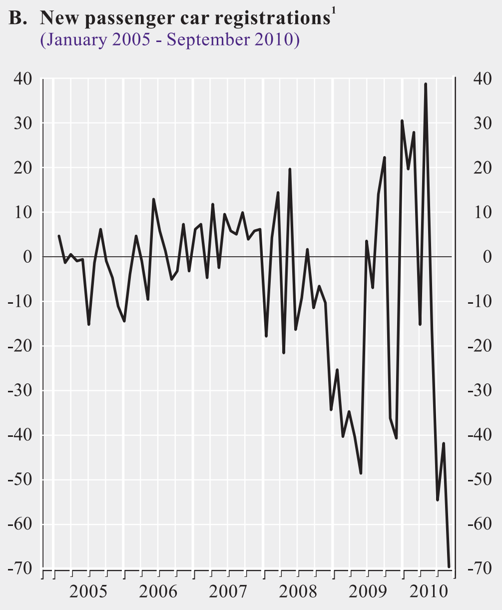
The deceleration of GDP in the first half of 2010 was chiefly driven by the large decrease in **gross fixed capital formation**, which reached 14.6% in the first and 18.6% in the second quarter (see also Table IV.3 and Chart IV.3). In greater detail:

– **Investment in public infrastructure and private non-residential buildings** ("other construction") declined by an annual rate of 28.3% in the first half of the year, reflecting lower Public Investment Budget (PIP) disbursements (-39.8%). This indicates a continuation of the downward path that had started at end-2003, and was only temporarily halted in the first quarter of 2009. In the third quarter of 2010, payments out of the Public Investment Programme rose

3 Lower household spending is also reflected in Hellenic Transmission System Operator data, according to which total demand for electricity dropped by 0.7% in the January-August 2010 period. This is attributable to lower sales in the low- and medium-voltage categories for household consumption as well as to commercial and small industrial enterprises (-0.8%). By contrast, Eligible High Voltage Customers (metallurgical firms and large industries) consumed more electricity (+3.6%) during the same period.

Chart IV.2 Consumer demand indicators

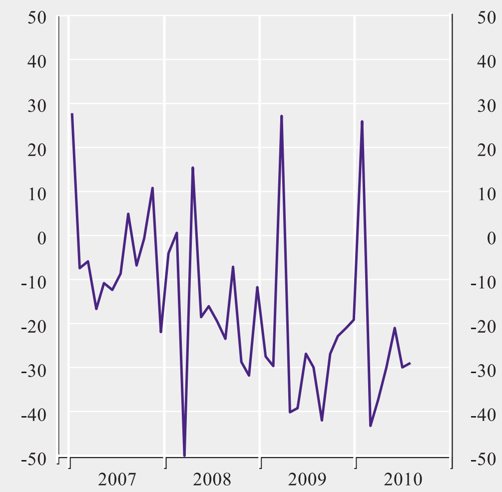




Sources: ELSTAT (retail trade and cars) and IOBE (expectations). The index of business expectations is based on firms' estimates of sales and stocks as well as on their forecasts of business activity over the next quarter.
1 Percentage changes over same month of previous year.

Chart IV.3 Volume of new buildings and extensions on the basis of permits issued (January 2007-July 2010)

(percentage change over same month of previous year)



Source: ELSTAT.

slightly compared to the corresponding period of 2009 (+4.7%), but it was not enough to reverse the negative six-month rate. Thus, in the January-September 2010 period the decrease came to 30.3% year-on-year.

– **Investment in equipment** dropped in the first half of 2010 (by 8.9% compared to the first half of 2009). Investment in equipment has been following a downward course since end-2008 and, in the second quarter of 2010, it corresponded to around 2/3rds of its eight-year peak in the third quarter of 2008. In the first half of 2010 investment in equipment came to 8.1% of GDP, against 9.0% in the 2000-2008 period.

– **Residential investment** declined by an annual 17.9% in the first half of the year. This decline started after the high level of end-2006. In the first half of 2010, residential investment corresponded to only 3.9% of GDP against 7.7% in the 2000-2006 period. Since the number of building permits, which constitutes a leading indicator of residential investment, has been falling throughout 2009, it is estimated that residential investment will not rebound in 2010.

The **Greek real estate market** is characterised by a relative degree of cautiousness (on the part of demand) and excess supply, with a considerably high stock of unsold properties. However, this excess stock seems to be gradually

Table IV.3 Indicators of investment demand (2008-2010)

(annual percentage changes[1])

	2008	2009	2010 (available period)
Capital goods output	-7.4	-22.5	-24.9 (Jan.-Aug.)
Capacity utilisation rate in the capital goods industry	77.5	73.4	67.0 (Jan.-Sept.)
Bank credit to domestic enterprises[2]	18.7 (Dec.)	5.0 (Dec.)	2.3 (Aug.)
Disbursements under the Public Investment Programme	9.3	-2.8	-30.3 (Jan.-Sept.)
Volume of private construction activity (on the basis of permits issued)	-17.3	-26.5	-24.8 (Jan.-July)
Cement production	-3.1	-21.4	-10.1 (Jan.-Aug.)
Construction business expectations index	3.0	-31.4	-26.4 (Jan.-Sept.)
Outstanding balance of total bank credit to housing[3]	11.5 (Dec.)	3.7 (Dec.)	1.6 (Aug.)

Sources: ELSTAT (capital goods output, volume of private construction activity, cement production), IOBE (capacity utilisation rate, business expectations index), Bank of Greece (loans to non-financial corporations, disbursements under the Public Investment Programme, housing loans).
1 Except for the capacity utilisation rate in the capital goods industry, which is measured in percentages.
2 Including loans and corporate bonds, securitised loans and securitised corporate bonds, but excluding (as of June 2010) loans to sole proprietors and unincorporated partnerships. The rates of change are adjusted for loan write-offs/write-downs, 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 credit company in 2009.
3 Including loans and securitised loans and taking into account loan write-offs/write-downs, foreign exchange valuation differences and a transfer of loans to a subsidiary domestic credit company in 2009.

absorbed. The decrease in private building activity in 2007 and 2008 was much faster than the corresponding decrease in the number of real estate transactions. Private building activity kept decelerating fast in 2009 (-26.5%), while the average annual decrease in the first seven months of 2010 came to 24.8%.

The slowdown of the positive rates of change in apartment prices observed in the beginning of 2007 continued throughout 2008, while negative rates of change were registered in the course of 2009 and the first half of 2010 for both “new” and “old” apartments. In greater detail, on the basis of data collected by the Bank of Greece, apartment prices (in nominal terms) in the first quarter of 2010 are estimated to have fallen by an average 1.8% against the first quarter of 2009, and by a further 5.7% in the second quarter of the year. For 2009 as a whole, apartment prices fell by an average of 3.7% against a 1.7% increase in 2008 (see Table IV.4). These data suggest that prices in the Greek housing market are rather resilient.

It should be reminded that the annual rate of increase in outstanding housing loans to households, after dropping to 3.7% at end-2009 (against 11.5% and 21.9% at end-2008 and end-2007 respectively), kept on decelerating in the course of 2010 and reached 1.6% in August (see also Chapter VI). This deceleration is attributed to factors on the side of the banking system (e.g. the small increase in interest rates on bank loans and tighter lending standards) and the cautiousness of households (because of increased uncertainty about future employment and income). Furthermore, households may be holding back on buying real estate, expecting further decreases in the quarters to come.

Housing loans in arrears amounted to 7.4% of the total at end-2009, against 5.3% at end-2008 and 3.6% at end-2007. At end-June 2010 housing loans in arrears had reached 8.7% of the total.

A further small correction in residential market prices is expected in the next quarters, while the risk of an abrupt change in prices is expected to

Table IV.4 Summary table of key short-term indicators for the real estate market

Indicators	Average annual percentage changes 2004	2005	2006	2007	2008	2009	2010
1. Indices of prices of dwellings (BoG) and rents (ELSTAT)							
1.1 Indices of prices of dwellings (new series)							
a. All apartments (Greece)	-	-	-	5.9	1.7	-3.7	-5.7 (Q2)
a1. New (up to 5 years)	-	-	-	7.2	2.3	-2.0	-6.3 (Q2)
a2. Old (over 5 years)	-	-	-	5.2	1.3	-4.8	-5.3 (Q2)
b1. Athens	-	-	-	6.2	0.9	-4.6	-3.0 (Q2)
b2. Thessaloniki	-	-	-	7.0	1.5	-6.0	-6.3 (Q2)
b3. Other cities	-	-	-	6.3	1.8	-2.7	-5.4 (Q2)
b4. Other areas	-	-	-	4.6	3.3	-1.9	-10.9 (Q2)
1.2 Indices of prices of dwellings (historical series)							
a. Urban areas	2.3	10.9	12.4	5.1	1.7	-4.3	-4.5 (Q2)
a1. Athens	0.3	8.6	11.7	6.2	0.9	-4.6	-3.0 (Q2)
b1. Other urban areas[1]	4.7	13.4	13.0	3.8	2.6	-2.1	-1.4 (Q1)
1.3 Price index of rents	5.3	4.2	4.4	4.5	3.9	3.6	2.7 (9 months)
1.4 House price-to-rent ratio (2007=100)[2]	85.5	90.9	98.7	100.0	97.9	91.0	84.7 (Q2)
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	-1.0 (Q2)
b. Volume of transactions (in square metres)	-	-	-	36.6	-23.5	-38.9	-3.2 (Q2)
c. Value of transactions	-	-	-	41.1	-20.0	-40.0	-13.1 (Q2)
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	8.4 (5 months)
b. Value of contracts	-	-	-2.9	12.5	-2.3	-28.3	6.1 (5 months)
3. Construction cost indices of (new) residential buildings (ELSTAT)							
3.1 Total cost	3.2	3.4	4.3	4.6	5.1	-0.3	2.1 (Q2)
3.2 Price index of work categories	2.4	2.6	2.9	2.8	4.2	-0.2	0.3 (Q2)
3.3 Labour cost	2.3	3.1	2.6	2.4	3.3	0.3	0.1 (Q2)
3.4 Material cost	3.9	3.6	5.6	6.3	6.4	-0.7	2.9 (8 months)
4. Private building activity (ELSTAT)							
4.1 Greece, total							
a. Number of building permits	-2.3	22.0	-14.9	-7.2	-17.6	-16.1	-10.6 (7 months)
b. Floor space (in square metres)	-4.4	43.0	-23.9	-7.8	-19.0	-24.4	-20.4 (7 months)
c. Volume (in cubic metres)	-4.3	36.9	-19.2	-5.8	-17.3	-26.5	-24.8 (7 months)
4.2 Athens							
a. Number of building permits	-11.2	35.9	-15.3	-13.8	-28.7	-15.3	-12.5 (7 months)
b. Floor space (in square metres)	-12.4	58.2	-24.6	-14.0	-26.1	-18.6	-34.0 (7 months)
c. Volume (in cubic metres)	-12.5	51.9	-20.6	-13.3	-25.2	-19.4	-35.6 (7 months)

Sources: Bank of Greece (BoG), Hellenic Statistical Authority (ELSTAT), Athens Bar Association (DSA), Technical Chamber of Greece (TCG), Foundation for Economic & Industrial Research (IOBE).
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.

Table IV.4 Summary table of key short-term indicators for the real estate market *(continue)*

	Average annual percentage changes						
Indicators	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
5. Construction activity							
5.1 Cement production (volume, ELSTAT)	-2.3	2.4	3.1	-9.2	-3.1	-21.4	-10.1 (8 months)
5.2 Public investment programme disbursements (BoG)	11.7	-21.0	8.9	7.6	9.3	-2.8	-30.3 (9 months)
5.3 Production indices in construction (ELSTAT)							
a. Overall index	-15.8	-38.8	3.9	15.1	2.8	-20.4	-18.3 (Q2)
b. Building construction	-16.5	-15.3	-9.2	6.9	0.0	-26.1	-20.2 (Q2)
c. Civil engineering construction	-15.5	-49.9	18.1	21.8	4.8	-16.8	-17.3 (Q2)
5.4 Civil engineer fees (TCG)							
a. Total	-	-	-5.3	23.5	6.2	-16.2	-8.5 (8 months)
b. Building permit issuance fees	-	-	-8.4	19.0	11.0	-14.5	-11.0 (8 months)
c. Construction supervision fees	-	-	1.5	32.5	-2.4	-19.6	-2.8 (8 months)
6. Business expectations (IOBE)							
6.1 Business confidence in the construction sector	-29.1	-22.7	44.6	1.5	3.0	-31.4	-26.4 (9 months)
a. Total private construction	-16.4	-11.7	12.8	1.9	-8.4	-43.2	21.3 (9 months)
b. Residential	-3.2	-9.0	27.6	-14.0	-28.4	-32.4	-37.9 (9 months)
c. Non-residential	-20.2	-12.5	2.9	13.4	0.9	-46.8	43.9 (9 months)
d. Public works	-34.1	-30.2	68.4	0.8	9.5	-24.6	-42.6 (9 months)
6.2 Months of assured production in construction[2]							
a. Total construction	12.6	13.9	15.7	16.8	17.3	15.9	12.0 (Sept.)
b. Residential	12.0	11.3	14.7	15.4	11.7	11.0	9.4 (Sept.)
c. Non-residential	10.0	8.7	9.3	10.1	9.8	8.4	5.8 (Sept.)
d. Public works	13.4	15.9	18.4	19.5	21.1	19.8	14.0 (Sept.)
6.3 Activity relative to previous quarter[4]							
a. Total construction	8.0	-27.3	11.8	10.2	10.0	-16.1	-46.1 (Sept.)
b. Residential	6.0	-2.0	24.0	-11.0	-22.0	-30.7	-62.9 (Sept.)
c. Non-residential	12.3	-13.5	13.2	16.4	25.6	-28.8	-65.0 (Sept.)
d. Public works	6.8	-35.9	9.0	11.3	8.1	-8.2	-39.3 (Sept.)
6.4 Planned future activity[4]							
a. Total construction	-24.7	-57.8	-44.9	-33.2	-28.8	-42.8	-72.7 (Sept.)
b. Residential	-17.0	-40.6	-22.3	-22.1	-38.9	-52.3	-92.9 (Sept.)
c. Non-residential	-32.7	-41.9	-45.6	-30.3	-22.7	-56.3	-47.0 (Sept.)
d. Public works	-23.5	-65.9	-49.9	-36.5	-30.0	-36.5	-77.9 (Sept.)
6.5 Prospects of employment over the next 3-4 months[4]							
a. Total construction	-20.3	-22.1	18.7	9.6	10.4	-32.1	-59.7 (Sept.)
b. Residential	-3.1	4.3	31.0	1.5	-32.6	-60.9	-56.7 (Sept.)
c. Non-residential	11.4	-1.7	6.6	12.8	6.9	-45.8	-39.7 (Sept.)
d. Public works	-30.8	-32.4	21.0	9.0	18.8	-21.2	-65.5 (Sept.)

Sources: Bank of Greece (BoG), Hellenic Statistical Authority (ELSTAT), Athens Bar Association (DSA), Technical Chamber of Greece (TCG), Foundation for Economic & Industrial Research (IOBE).
2 In absolute terms.
4 Weighted percentage balances of positive and negative answers.

Table IV.4 Summary table of key short-term indicators for the real estate market *(continue)*

Indicators	Average annual percentage changes						
	2004	2005	2006	2007	2008	2009	2010
7. Investment in construction (ELSTAT) and capital inflows (BoG)							
7.1 Investment in construction[5]							
a. Total construction	-2.9	-6.2	14.3	-5.3	-19.1	-11.3	-23.1 (Q2)
b. Residential	-0.9	-0.7	29.6	-8.6	-29.1	-21.7	-19.4 (Q2)
7.2 Net capital inflows from abroad for the purchase of real estate property in Greece	73.0	48.0	55.4	66.5	-58.2	-24.4	-35.0 (8 months)
8. Domestic MFI credit to households (BoG)[6]							
8.1 Total (stock)	30.4	31.0	25.7	22.4	12.8	3.1	0.6 (Aug.)
8.2 Housing loans (stock)	27.6	33.0	26.3	21.9	11.5	3.7	1.6 (Aug.)
9. Housing loan rates (BoG)[2]							
9.1 Interest rates on new housing loans[7]	4.8	4.3	4.7	4.9	5.3	4.1	4.0 (Aug.)
9.2 Interest rates on outstanding housing loans with an initial maturity of over 5 years	5.1	4.8	4.9	5.1	5.1	4.3	3.6 (Aug.)
10. Financial stress indicators							
10.1 Non-performing loan ratio (BoG)[2]							
a. Total	7.0	6.3	5.4	4.5	5.0	7.7	9.0 (6 months)
b. Housing loans	4.6	3.6	3.4	3.6	5.3	7.4	8.7 (6 months)
c. Corporate loans	7.8	7.1	6.0	4.6	4.3	6.7	7.6 (6 months)
d. Consumer loans	7.2	7.8	6.9	6.0	8.2	13.4	16.7 (6 months)
10.2 Credit to households as a percentage of GDP[2,6]							
a. Total	28.4	35.4	40.9	46.2	49.7	51.3	57.7 (Q2)
b. Housing loans	18.4	23.3	27.2	30.8	33.0	34.6	35.1 (Q2)

Sources: Bank of Greece (BoG), Hellenic Statistical Authority (ELSTAT), Athens Bar Association (DSA), Technical Chamber of Greece (TCG), Foundation for Economic & Industrial Research (IOBE).
2 In absolute terms.
5 At constant prices.
6 End-of-period balances. Comprising loans and securitised loans.
7 Including non-interest charges (handling fees, mortgage registration fees, etc.).

remain low. It should also be noted that the recovery of the real estate market is directly linked with the improvement of household confidence in future employment and income, as well as with the financing of the housing market by the banking system and the wider economic recovery prospects. Clear messages signalling the effective dealing with the fiscal and structural problems of the Greek economy would certainly play a role in heating up the housing market.

1.2 THE EVOLUTION OF IMPORTS AND EXPORTS

Lower consumption and investment led to a shrinking of **imports of goods and services** (on a national accounts basis); in the first half of 2010 they were 9.9% less than in the first half of 2009. This decrease came exclusively from the decline in the imports of goods (-15.9%), while imports of services grew by 11.1%. Because of this drop, imports of goods corresponded to 29.1% of private consumption in the first half of 2010, against 39.9% in the 2000-2008 period.[4]

Exports of goods and services (on a national accounts basis), after a significant decrease (by

4 The ratio of imports of goods to private consumption serves only as an indication, given that a large part of imports relates to investment (e.g. machinery, transport equipment) and not consumption. In the first half of 2010, the ratio of imports of goods to the sum of private consumption and investment in equipment was 26.2%, against 35.5% in the 2000-2008 period.

Table IV.5 Indicators of industrial activity (2008-2010)

(annual percentage changes)

	2008	2009	2010 (available period)	
1. Industrial production index (overall)	**-4.0**	**-9.4**	**-5.8**	**(Jan.-Aug.)**
Manufacturing	-4.7	-11.2	-5.3	(» »)
Mining-quarrying	-4.5	-11.8	-4.0	(» »)
Electricity	-2.8	-4.2	-8.6	(» »)
Main industrial groupings				
Energy	-2.4	-2.9	-5.6	(» »)
Indermediate goods	-6.7	-18.4	-0.1	(» »)
Capital goods	-7.4	-22.5	-24.9	(» »)
Consumer durables	-5.7	-20.7	-9.2	(» »)
Consumer non-durables	-2.0	-4.1	-6.4	(» »)
2. Industrial turnover index[1]	**6.9**	**-23.1**	**5.6**	**(Jan.-July)**
Domestic market	7.7	-22.1	0.1	(» »)
External market	4.9	-25.6	20.5	(» »)
3. Industrial new orders index[2]	**-1.9**	**-27.7**	**2.6**	**(» »)**
Domestic market	-0.3	-23.0	-9.4	(» »)
External market	-3.8	-34.4	23.8	(» »)
4. Index of business expectations in industry	**-10.6**	**-21.5**	**7.1**	**(Jan.-Sept.)**
5. Industrial capacity utilisation rate	**75.9**	**70.5**	**68.5**	**(» »)**
6. Purchasing Managers' Index (PMI)[3]	**50.4**	**45.3**	**44.7**	**(Sept.)**

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

20.1%) in 2009 due to the collapse of international trade, decelerated by only 2.8% on an annual basis in the first half of 2010 (goods: -3.9% in the first quarter, -2.3% in the second quarter; services: +1.9% in the first quarter, -7.0% in the second quarter).

Because of the limited slowdown of exports and the large decrease in imports, the **external sector** made a positive contribution to the change in GDP the first half of 2010.[5]

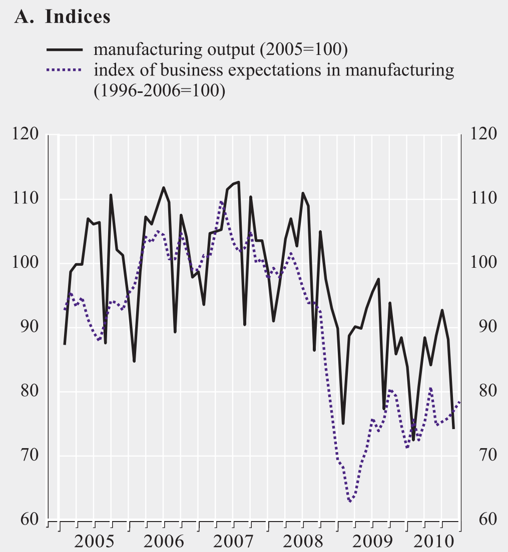
1.3 THE EVOLUTION OF SUPPLY

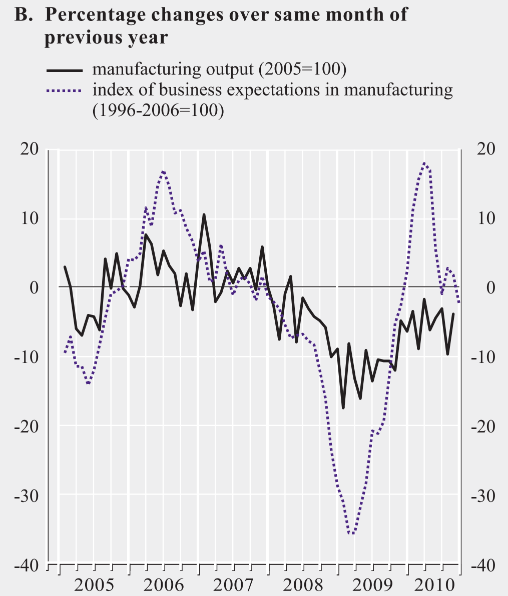
The substantial increase in indirect taxation led to a 10.3% increase in net indirect taxes (at constant prices) in the first half of 2010. This means that there was a considerable discrepancy between GDP at market prices (which includes indirect taxes) and gross value added at basic prices (which does not include them). In the second quarter of 2010, **value added at constant (2000) prices** dropped by 6.3% against the second quarter of 2009 and by 3.9% against the first quarter of 2010. Overall, in the first half of 2010, the value added was 4.6% less than in the first half of 2009, while the decrease in GDP at market prices was lower (-3.0%).

Value added declined in most sectors in the first half of 2010. The most notable exceptions are: (i) agriculture-forestry-fisheries, where

5 Despite higher rates of decrease in imports than in exports, the value of imported goods and services is about 50% higher than the value of exported goods and services.

Chart IV.4 Output and business expectations in manufacturing (January 2005 - September 2010)

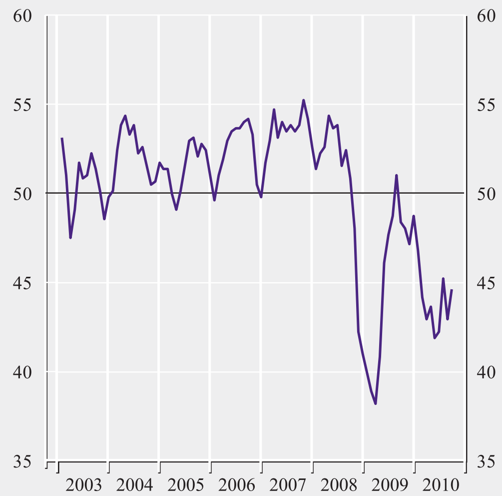




Sources: ELSTAT (output) and IOBE (expectations). The index of business expectations is based on business firms' estimates of total demand and stocks and on output forecasts for the next 3-4 months.

Chart IV.5 Purchasing Managers' Index (PMI) for manufacturing (January 2003 - September 2010)

(seasonally adjusted index; values over 50 indicate growth)



Sources: Markit Economics and Hellenic Purchasing Institute.

value added rose by 1.8%, in line with the increase in the number of people working in the primary sector, (ii) the sectors of financial-real estate-leasing and business services, where value added rose by 0.5% because of positive developments in the first quarter, while in the second quarter there was a decrease (-2.7%) for the first time since the first quarter of 2006. The construction sector recorded a large decline (-24.6%), followed by industry including energy (-7.1%) and the sectors of commerce-hotels-restaurants and transport-communications (-7.0%). Turning to **manufacturing** (see Table IV.5), the relevant index suggests that the decrease is milder than last year (2009: -11.2%, first quarter of 2010: -4.8%, second quarter: -4.6%, July: -9.7%, but August: -3.9%). The same picture —that of a less intense decrease— is also painted for the period up to September 2010 by the Purchasing Managers' Index (PMI) and IOBE estimates for industrial production (see Charts IV.4 and IV.5).[6] Besides, turnover and new orders in industry rose in the January-July 2010 period, exclusively because of increased external demand. As evidenced by IOBE surveys,

6 The decrease in manufacturing production is mainly attributed to the ongoing large decrease in the production of the key branches: food-beverages, textiles, clothing-footwear, as well as of branches related to construction (non-metal minerals, production of metal products). However, production rose in six branches, among which that of basic metals, pharmaceuticals, petroleum products and chemicals.

Table IV.6 Activity indicators in the services sector (2008-2010)

(annual percentage changes)

	2008	2009	2010 (available period)	
Services turnover indicators				
Car retail sales	-7.9	-15.7	-23.1	(Jan.-June)
Wholesale trade	9.4	-8.9	1.4	(» »)
Telecommunications	-1.0	-8.9	-7.4	(» »)
Land transport	5.1	-31.5	-13.4	(» »)
Sea transport	10.2	-22.8	-4.7	(» »)
Air transport	6.5	-12.6	-4.3	(» »)
Storage and transport supporting activities	3.1	-33.3	-6.2	(» »)
Travel agencies and related activities	3.5	-15.8	-6.6	(» »)
Tourism (hotels and restaurants)	3.2	-9.1	-5.6	(» »)
Legal, accounting and management consulting services	10.9	-12.4	-7.1	(» »)
Architectural and engineering services	9.0	-18.6	-22.6	(» »)
Advertising and market research	2.6	-18.4	-11.3	(» »)
Passenger traffic				
Athens International Airport	-0.4	-1.5	-3.1	(Jan.-Aug.)
Aegean Airlines[1]	14.4	9.9	0.4	(Jan.-June)
Piraeus port (OLP)	0.7	-3.8	-5.7	(» »)
Business expectations index in the services sector	**-8.3**	**-28.3**	**-8.4**	**(Jan.-Sept.)**

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

business expectations indices in **trade** and **other services (excluding banks)** are very low, though there are signs of stabilisation since June, possibly indicating that there will be no further decline (see Tables IV.2 and IV.6).

The broad-based decrease in output was accompanied by a decrease in **employment** (see Section 2 below), though at a lower degree, leading to lower labour **productivity**. As regards *manufacturing*, it is quite positive that labour productivity in the first half of 2010 has remained unchanged compared to the first half of 2009.

1.4 ESTIMATES FOR THE YEAR AS A WHOLE

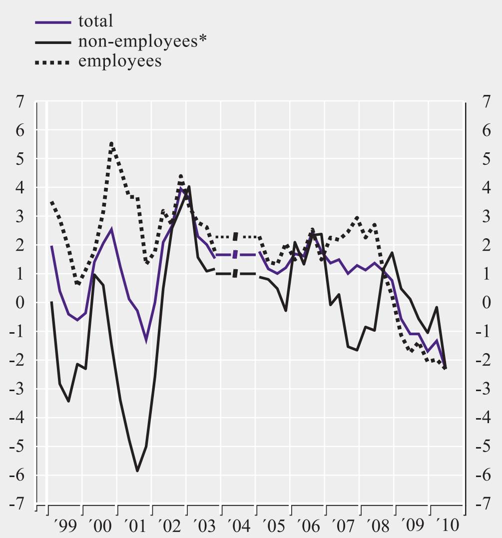
It is estimated that GDP will drop by about 4% in 2010 against 2009. This decrease reflects lower consumption (private and public) and investment and – turning to the supply side – it is expected to come mainly from consumer services and construction. In the second half of the year, industry is expected to make a positive contribution, as evidenced by ELSTAT data on new orders from abroad and by IOBE surveys.

2 EMPLOYMENT AND UNEMPLOYMENT: DEVELOPMENTS AND PROSPECTS

The slowdown of economic activity led to a decrease in the number of employed persons, both through the abolition of jobs and the drastic cuts in job creation. At the same time, the number of inactive persons seeking employment rose in 2010. These developments led to a significant increase in the rate of unemployment. Given that the rate of decrease in

Chart IV.6 Employment (1999-2010)

(percentage changes over corresponding quarter of previous year)



Source: ELSTAT, Labour Force Surveys (LFS). New revised data for 1999-2003, released in January 2005. No changes are shown for 2004, as data are not fully comparable due to a change in the survey sample.
* Non-employees = self-employed with staff (employers) + self-employed without staff + family workers.

employment is lower than the rate of decrease in output, **labour productivity** has declined. This will affect the pace of recovery in employment, once output starts increasing again.

In the first half of 2010, the average number of employed persons, according to the Labour Force Surveys conducted by ELSTAT, dropped by 82,500 people (-1.8%) compared to the first half of 2009. The decrease was faster in the second quarter (first quarter: 60,200 people or -1.3%, second quarter: 104,900 people or -2.3%), showing that the decrease in employment intensified at end-2009 and that the usual seasonal increase in employment between the first and the second quarter did not occur in 2010 (see Chart IV.6).

The number of employed persons in the first half of 2010 was 2.6% lower than the average for the first half of 2008, i.e. when activity started decelerating, and equal to the level of 2006. The **rate of employment** for those aged 15-64 was 60.1% in the first half of 2010, from 61.3% in the first half of 2009.

There exist some differences though between the first half of 2010 and the first half of 2009 as to the groups that have been hit by the slowdown of economic activity. While in the first half of 2009 the decrease concerned only the number of **employed** persons, in the first half of 2010 many **self-employed (employers)**, along with their staff, stopped being employed (first quarter: -25,200 people or -6.5%, second quarter: -30,000 people or -7.8%). The number of employed persons also dropped, though at a lower rate (first quarter: -57.400 people or -2.0%, second quarter: -68.200 people or -2.3%) and the same applies to **family workers** (first quarter: -2,000 people or -0.8%, second quarter: -20,800 people or -7.9%), probably because of lower activity in these enterprises. By contrast, the number of **self-employed (non-employers)** rose (first quarter: 24.300 people or 2.5%, second quarter: 14,100 people or 1.5%) because of higher employment in agriculture.

Sectoral developments in employment tend to follow those in sectoral output (which is analysed in the previous section). The number of people employed in agriculture rose by 6.1% (32,300 people) in the first half of the year (first quarter: 42,400, second quarter: 22,100), thereby continuing a trend that had started in 2008. This development reflects the increased number of newcomers in the labour market, the lower number of pension applicants and the shift of people employed in other sectors (e.g. construction and tourism) towards agriculture. Furthermore, a considerable increase in employment is also recorded in services related to health and welfare (first half: 8%). By contrast the number of people employed in manufacturing kept decreasing (first half: -7.7%), a trend that had started in 1998 and became stronger after the end of 2007.[7] How-

7 Intertemporal sectoral analyses should be treated with caution due to the change in the statistical classification of sectors (from STAKOD-93 to STAKOD-08). However, the key trends are not distorted in the present sectoral analysis.

ever, the annual rate of decrease in the number of people employed in manufacturing seems to be decelerating (-6.4%) in the second quarter of 2010. The deceleration of employment in construction, which had started at end-2008, intensified in 2010 – it is estimated that about 70,000 jobs have been lost. In the first quarter of 2010, employment in construction (335,200 people) was at about end-2002 levels. Turning to retail and wholesale trade, the increase in employment up to the beginning of 2009 was followed by a decrease in the number of employed persons (first half: -4.7%), especially self-employed, who account for a large share (about 40%) of total employment in the sector.[8] Professional, scientific and technical activities are also recording significantly lower employment rates.

In some sectors (construction, retail trade, manufacturing), the decrease in employment was coupled with a decrease, though to a lower degree, in **average weekly working hours**. In other sectors (mining, energy, professional-scientific-technical activities), the decrease was accompanied by an increase in the average weekly working hours. Those sectors that registered an increase in employment (health, education, agriculture) also recorded higher average weekly working hours. Average weekly working hours in total economy rose by 0.6%.[9] This change, which took place despite the higher share of part-time employment, reflects changes in the composition of economic activity as well as an increase in the percentage of self-employed (non-employers), the average weekly working hours of which exceed the general average.

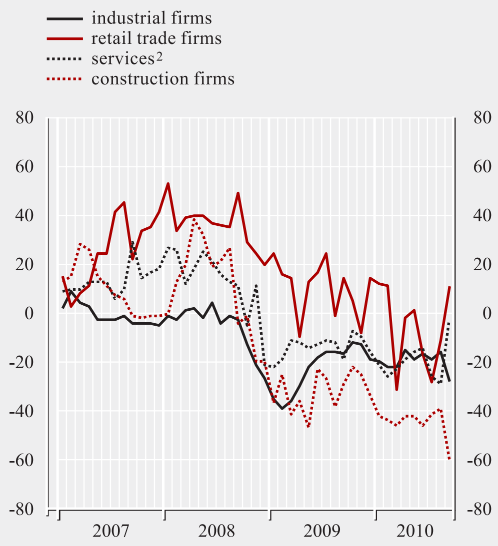
Both the absolute number and the share of **employed persons with a second job** decreased between the first half of 2009 (155,100 people or 3.4%) and the first half of 2010 (140,200 people or 3.2%).

According to IOBE business surveys, enterprises estimated that the outlook as regards the number of their employees was negative in September in all sectors except retail trade (see Chart IV.7). In spite of the fact that the forecast is marginally negative in services (with the exception of retail trade and banks) and that the rate of decrease in manufacturing has been decelerating during the past months, it is expected that overall employment will decrease in 2011 as well.[10] This is also corroborated by the decision to reduce new recruitments in the public sector, which absorbed a substantial amount of newcomers.[11] Employment in construction is expected to decline further in 2011.

Quite indicative of this climate of uncertainty is the increase in the number of people

Chart IV.7 Business expectations[1] for employment (January 2007-September 2010)

(percentage balances)

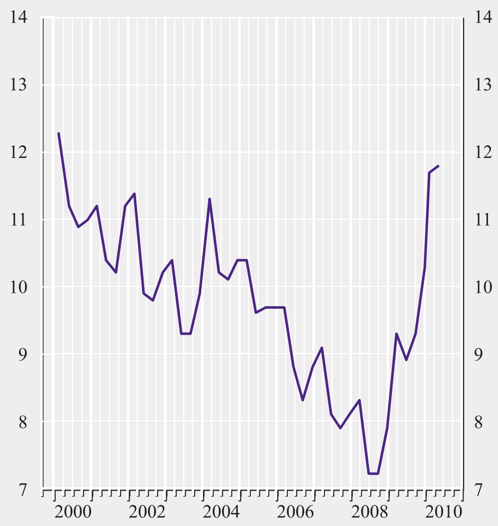


Source: IOBE, Business Surveys.
1 Firms are asked to assess the prospect of an increase in the number of their employees over the coming period.
2 Excluding banks and retail trade firms.

8 According to a survey conducted by ELSTAT among retail trade firms (excluding those selling fuel), the number of employed persons dropped by an annual 1.7% in the first quarter of 2010 and rose by 0.7% in the second quarter. These data are in contrast to those of the Labour Force Survey as well as those on the volume of retail sales.
9 Over the same period average weekly working hours of people employed in the non-agricultural private sector decreased by 0.2%.
10 An estimated increase in employment in retail trade is probably explained by seasonal factors, i.e. the forthcoming Christmas season.
11 According to LFS data, from 2006 to 2009, about 15% of newcomers were recruited in the public sector.

Chart IV.8 Total unemployment rate (1999-2010)

(percentage of labour force)



Source: ELSTAT, Labour Force Surveys.

employed under **fixed-term contracts** (firth half of 2009: 340,100 people or 7.5%, first half of 2010: 343,900 people or 7.8%) and of those employed by **temporary employment agencies**. An increasing share of those working under fixed-term contracts opted for this solution because they could not find permanent employment.

The **number of the unemployed** rose considerably between the first half of 2009 and the first half of 2010, as there was an increase in both the number of people who lost their jobs and the number of newcomers – either because they just finished their studies or because they decided to start working in order to contribute to the family budget.[12] For comparability purposes, in the first half of 2008, 22.5% of the persons who had completed their studies two years earlier had found a job, while in the first half of 2010 this percentage had fallen to 20%.

In greater detail, while employment decreased by 82,500 people, the number of the unemployed rose by 138,000. In the first half of 2010, the **rate of unemployment** reached 11.8%, against 9.1% in the corresponding period of 2009. On an annual basis, this increase became more apparent in the course of the year (see Chart IV.8), from 2.4 percentage points in the first quarter to 2.9 percentage points in the second quarter of 2010 (year-on-year).

Since the crisis broke out, the rate of male unemployment has been lower than the female one, but is growing faster. This mainly reflects the different consequences of the crisis to different economic sectors. But recently, i.e. between the first half of 2009 and the first half of 2010, the increase in the rate of unemployment has been similar for both sexes.[13] This reflects the spill-over of the crisis in other sectors, as well as the increased participation of women in the labour force.[14]

Despite the fact that the rate of male unemployment (9.2%) is much lower than the female one (15.4%), it exceeds the historically high 7.7% (recorded in the first half of 1999) for the first time.

It should also be noted that there are differences in the rate of unemployment depending on **nationality**. In particular, unemployment has risen more for immigrants than for Greeks. This is explained by the concentration of immigrants in those sectors that were hit by the crisis the most (construction, manufacturing), as well as by the continuously higher increase in their participation compared to that of Greeks.[15] Due to the above, the unemployment rate of immigrants (first half of 2010: 14.4%) exceeds that of Greeks by 2.9 percentage points.

12 In the first half of 2010, the number of people not previously employed and seeking employment was 6.4% higher than in the first half of 2009.

13 In the first half of 2009, the rate of unemployment was 6.6% for men and 12.8% for women. In the first half of 2010 the two rates came to 9.2% and 15.4% respectively - i.e. both rates rose by about 2.5 percentage points.

14 The participation of women (15-64 years old) in the labour market rose from 56.1% in the first half of 2009 to 57.4% in the first half of 2010.

15 The participation rate of Greeks (all ages) was 52.2% in the first half of 2009 and 52.4% in the first half of 2010 (i.e. it remained almost unchanged). For immigrants, the respective shares were 72.6% and 73.8%.

Apart from the number of the unemployed that fall under the official definition of the International Labour Office (ILO), an increase has also been recorded in the number of people who do not seek employment because they believe that they will not find one, of those who do not seek employment for any other reason, as well as of those working part-time because they cannot find a full-time job. If these categories are also taken into consideration, the rate of unemployment-underemployment came to 16.3% in the first half of 2010 (and the rate of unemployment to 11.8%).[16]

Because of the above developments, the number of people aged 18-59, who live in households where no-one is working, rose from 8.1% in the first half of 2009 to 9.8% in the first half of 2010.

Finally, it is quite worrisome that the share of long-term unemployed in the total number of unemployed rose (from 42.1% in the first half of 2009 to 46.2% in the first half of 2010). This stems from the fact that the chances of an unemployed person to find employment diminish as the period of unemployment increases. In order to deal with this risk, Law 3845 has introduced "rehabilitation cheques", whereby unemployment benefits can become employment benefits. This is also the spirit governing the individual projects under the "active policy for employment" now implemented by the Manpower Employment Organisation. The measures aiming at supporting flexibility in the labour market (Law 3863/2010, see also Box IV.1) will also contribute to this direction.

16 A similar divergence between the two aggregates had also been registered in the first half of 2009 (9.1% against 13.5%).

Box IV.1

RECENT LEGISLATIVE REFORMS IN THE LABOUR MARKET

1 The need for structural changes in the labour market

The Greek labour market is characterised by high and persistent unemployment, especially among young people and women, who also have the lowest participation rates. The small chances of transition from unemployment or non-active economic status to employment are another expression of the same problem. High unemployment rates are attributed to high labour costs, which are almost double the net salary earned by employees, and to low labour mobility between sectors, due to structural rigidities and the inadequate differentiation of wage changes between sectors. The heavy burden of social security contributions leads to the creation of a dual labour market, where the black market unfairly competes with the official market, thereby suspending the business growth process.

Young people prefer to find employment in the public sector, because of the —until recently— better working conditions (earnings, pensions, other terms of employment); this creates a second duality, also leading to irregularities in the functioning of the labour market.

In addition, labour productivity is low, reflecting inefficient organisation, the small size of enterprises, mismatches between the skills of secondary vocational and tertiary education graduates and those required by the market, as well as the lack of vocational training programmes by enterprises.

From the above it becomes obvious that there is a need for structural interventions in the institutional framework of the labour market. Naturally, these interventions will not lead to the creation of jobs by themselves, as they have to be combined with an overall growth strategy (e.g. growth plan, structural reforms in product markets etc.).

2 Recent legislative changes

The recent legislative changes may be divided into three categories: institutional changes, aiming at reinforcing labour market flexibility and increasing productivity; changes directly affecting labour costs and, therefore, the competitiveness of the economy; and changes aiming at addressing the effect of the economic crisis, which heighten the problems in the labour market and pose threats to social cohesion. These changes are described below, but it should be noted that several of the arrangements introduced by laws require further decisions of the Minister of Labour and Social Security for their implementation.

Most legislative changes are introduced by Law 3845, "Measures for the application of the support mechanism for the Greek economy by euro area countries and the International Monetary Fund", Law 3846, "Guarantees for employment security and other provisions", and Law 3863 "New social security system and relevant provisions, labour relations arrangements". However, the functioning of the labour market is also affected by other structural measures taken in the past few months. These include measures facilitating the establishment of enterprises and opening "closed" professions, because they will lead, inter alia, to the creation of new jobs. The arrangements that will rationalise the functioning and hiring in the public sector will also contribute, to containing the duality between the public and the private sector.

The new social security system will contain early retirement. Moreover, fiscal consolidation and the elimination of contribution evasion will ultimately enable the reduction of the rates of employer and employee social security contributions.

2.1 Institutional changes reinforcing flexibility and increasing productivity

(a) Relationships between collective labour agreements: Law 3845 overturns the hierarchical relationship between collective agreements that was in force until recently. Specifically, while pursuant to Law 1876/1990 working agreements at profession, sector or enterprise level cannot lay down terms that are more unfavourable than those of national general collective agreements, Law 3845 stipulates that this restriction will no longer apply. Whether further clarification is needed or not for the implementation of this arrangement is a matter that seems to divide legal circles.[1]

(b) Increase in the ceiling over which dismissals are considered group layoffs[2]: In enterprises employing 20-150 persons, dismissals are considered to be group layoffs when more than 6 persons are dismissed in one month (against 4, as previously applied). In enterprises employing up to 600 persons, the relevant percentage of dismissed persons per month now comes to 5% (compared with 2% until now[3] for enterprises employing 200-1,500 persons). In enterprises employing over 600 persons, the ceiling comes to 30 persons (as was previously applicable for enterprises employing over 1,500 persons). This change will mostly affect enterprises employing 600 persons, where dismissals become group layoffs when they involve more 30 persons (against 12).

1 See e.g. K. Bakopoulos, "Labour legislation reforms by Law 3845/2010" (in Greek) and S. Goudrololos, "Collective contracts after the new Law 3845" (in Greek) (*Labour Law Bulletin* 1561/2010), who argue that Law 3845 does not change the previous status, given that it does not directly abolish the provisions of the previous law.
2 Group dismissals require special authorisation by the Prefect or the Minister of Employment and Social Security.
3 Law 2874/2000 provided for a percentage ranging from 2% to 3%, which was specified twice a year by the Minister of Labour and Social Security. Most of the times, the percentage was set at 2% (including the first half of 2010).

(c) Flexible work time arrangements: Law 3846 (article 7, para. 8) enables the determination, via enterprise-level or sectoral agreements, of systems for arranging work time that are different from those explicitly provided for by law (e.g. calculation of average work on a four- or eight-month basis),[4] depending on the peculiarities of the sector or the enterprise.

(d) The matter of arbitration: The institutional changes that are under way (but have not been completed yet) include the procedure of recourse to the Organisation for Mediation and Arbitration (OMED). According to the framework voted in 1990, in case of failure of negotiations between employers and employees for the conclusion of a collective agreement, both sides may seek the services of a mediator or have recourse to arbitration. The terms of recourse to mediation and arbitration are stipulated either in the collective agreements themselves or by Law 1876/1990, which provides that any of the concerned parties may request the appointment of a mediator. If the concerned parties accept the recommendation of the mediator, then it becomes equivalent to a collective agreement. If, however, the employer rejects the recommendation of the mediator while employees accept it, then the latter are entitled to have recourse to arbitration.[5] Employers do not, however, have the same right if the employees reject the recommendation of the mediator, with the exception of enterprise-level agreements and collective agreements in public utilities. In case of recourse to arbitration, the arbitrator's award is equivalent to a collective agreement and applies retroactively from the date following the submission of the request for arbitration. The arbitrator is selected by consent or lot (if consent is not reached).[6]

The foregoing show that, in the case of sectoral and occupational labour agreements, there is an asymmetry in the procedure of recourse to arbitration, as employers may not have recourse to arbitration if employees reject the decision of the mediator. Moreover, it has been observed that there are arbitration awards that lack adequate justification.[7] In order to address these shortcomings, Law 3863 stipulates that a Presidential Decree will be issued within three months of the publication of the law (i.e. by 15 October 2010) or by the end of the year at the latest. The Ministry of Labour forwarded a draft Presidential Decree to social partners in early October.

2.2 Changes directly affecting labour costs and competitiveness

(a) Reduction in the cost of employing newly-hired persons through OAED subsidies: the law stipulates that newly-hired persons up to 25 years old will not pay social security contributions, while employer contributions will be calculated on the net salary, i.e. salary excluding employee contributions.

(b) Apprenticeship: the institution of apprenticeship is not new; apprenticeship programmes were organised by the schools of OAED and the relevant remuneration was determined by ministerial decisions. According to Law 3864, all enterprises employing persons aged 15-18 may conclude special one-year apprenticeship agreements. Persons employed under such agreements receive 70% of the minimum wage or salary provided for in the National General Collective Agreement.

4 See, in this regard, Law 3846/10, article 7, as well as Bank of Greece, *Monetary Policy–Interim Report*, October 2005, Box V.1., pp. 103-105, explaining in detail how work time arrangement functioned to date.
5 Parties are also entitled to have recourse to arbitration at any stage of the negotiations by consent or by initiative of one party, if the other party does not accept the recourse to mediation.
6 The association of mediators and arbitrators is a special unit performing public function and comes under the Organisation for Mediation and Arbitration (OMED). OMED was established in 1990 and is an independent body governed by an 11-member board of directors with the participation of representatives of social partners, a representative of the Ministry of Labour, scientists and members of the academia.
7 See, in this regard, http://www.esee.gr/page.asp?id=3233, for the positions of the National Confederation of Hellenic Commerce (ESEE) on the draft Presidential Decree establishing the Organisation for Mediation and Arbitration (OMED), which was forwarded by the Minister of Labour to social partners in early October.

(c) Lower cost of overtime work: the overtime premium is lowered by 20% compared with what has been applicable since 2005.[8]

(d) Cost of dismissals: There has been a decrease in the period of notice afforded by law to enterprises, thus allowing the payment of lower compensation to dismissed staff. For a person working for 28 years with the same employer, compensation without notice comes to 24 months worth of salaries. Under Law 3863, this compensation drops to 12 months worth of salaries, provided that notice in writing has been given 6 months before the termination of the contract. In the past, the period of notice in writing was 2 years. Because of this long period of notice, notice in writing was not utilised and 24 months worth of salaries were paid as compensation.

2.3 Measures ensuring social cohesion due to the crisis

With a view to protecting workers aged 55-64 from losing their employment to younger people, Law 3863 stipulates that, in the event of a dismissal, the employer will participate in the cost of self-insurance of dismissed workers for three years.[9] Specifically, persons aged 55-64 years who are dismissed from their work are entitled to self-insurance. The employer will participate for three years in the cost of self-insurance by 50% in the case of persons up to 60 years of age and by 80% in the case of persons aged 60-64. The balance of the cost of self-insurance will possibly be covered by OAED (LAEK branch). Alternatively, OAED will protect the jobs of these persons by including them in subsidised employment programmes.

8 The overtime premium for the first 5 hours over the 40-hour contractual 5-day working week is lowered to 20% from 25%. The overtime premium for overtime hours up to 120 (on an annual basis) – excluding the first five overtime hours per week – is lowered to 40% from 50%. The overtime premium for overtime hours over 120 (on an annual basis) – excluding the first five overtime hours per week – which have been approved by the Ministry of Labour – is lowered to 60% from 75%. The overtime premium for "exceptional" overtime hours, i.e. hours for which no approval has been obtained by the Ministry of Labour, is lowered to 80% from 100%.

9 Pursuant to article 74, para. 7 of Law 3863, the cost of self-insurance will be covered by the employer when the number of dismissed persons aged 55-64 years does not exceed 10% of total dismissed persons.

3 INFLATION: DEVELOPMENTS AND PROSPECTS

3.1 SUMMARY OF DEVELOPMENTS AND PROSPECTS FOR 2010

The cost related to the implementation of the measures aimed at pulling the economy out of the crisis is reflected, among others, in the temporary hike of inflation, which is the result of:

– mainly the large increase in indirect taxation,

– the increase in the price of crude oil in the world market, which was on average 30-34% in euro terms in 2010 against a 32-33% decrease in 2009 (see Charts IV.9 and IV.10),[17]

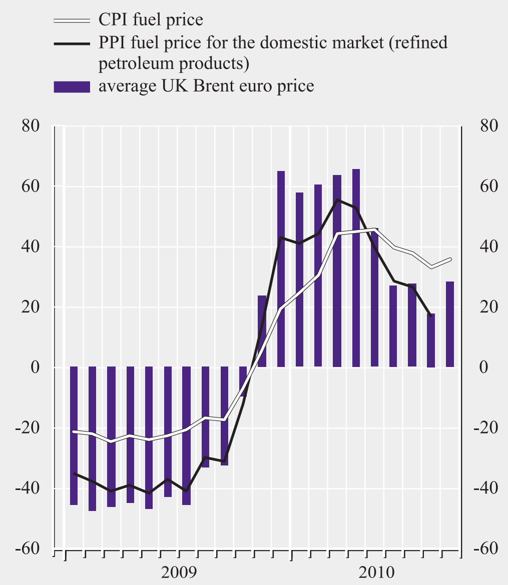
– the recovery of the prices of other imported goods (to a much lesser extent, see Chart IV.11), which is also supported by the drop in the effective exchange rate of the euro against the currencies of Greece's trading partners (namely, non-energy import prices for industrial use were increasing at an annual rate of 1.4% in August 2010, against -0.1% in August 2009, while the average annual drop in the exchange rate in 2010 is estimated to be almost 3%, according to current trends).

By contrast, lower demand helped contain inflation, as reflected on lower profit margins as well as on the fact that, because of the policy pursued, unit labour cost has been decreasing in total economy and its rate of increase is decelerating in the business sector (it may even

17 See ECB staff macroeconomic projections, *Monthly Bulletin*, September 2010 and IMF, *World Economic Outlook*, October 2010.

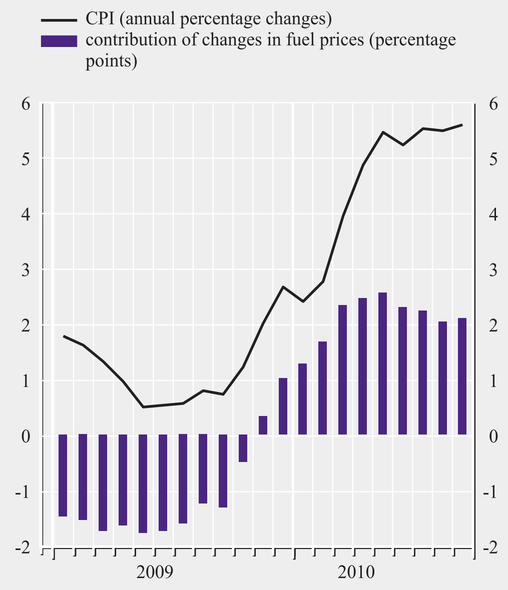
Chart IV.9 Evolution of CPI/PPI fuel prices and of the euro price of Brent crude oil (January 2009 - September 2010)

(percentage changes over same month of previous year)



Sources: Calculations based on ELSTAT data and, for crude oil prices, on ECB data.

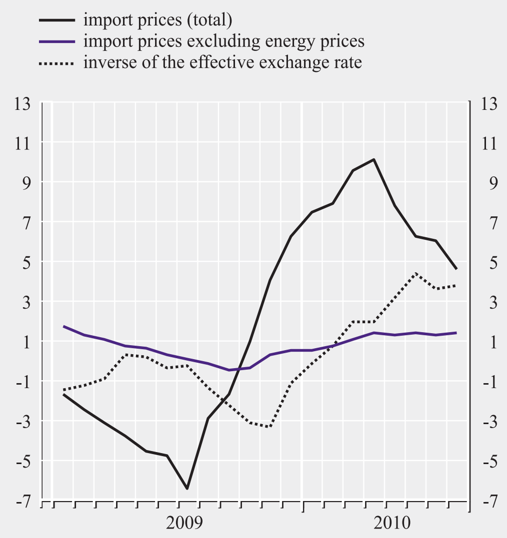
Chart IV.10 Inflationary contribution of changes in fuel prices (January 2009 - September 2010)



Source: Calculations based on ELSTAT data.

Chart IV.11 Import price index in industry and the inverse of the effective exchange rate of the euro, weighted on the basis of Greece's external trade (January 2009 - August 2010)

(percentage changes over same month of previous year)



Sources: ELSTAT and Bank of Greece.

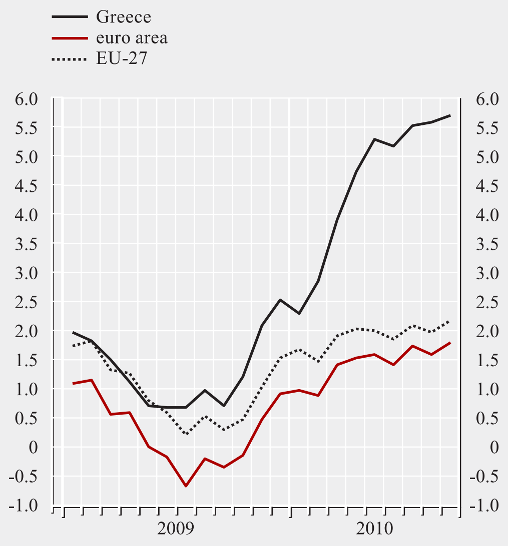
remain unchanged there). In fact, the increase is indirect taxation is not passing through to consumer prices as enterprises absorb part of the increase, by reducing their profit margins in order to deal with lower demand. It is estimated that about 50% of the increase in VAT rates were passed through to the retail prices of goods included in core inflation (it is estimated that after the 2005 increase in VAT rates the respective share was 95%). It should of course be noted that the dampening effect of lower demand would be larger if competition worked effectively.

***

The annual rate of increase in the Harmonised Index of Consumer Prices (HICP) accelerated from 2.3% in January to 5.7% in September 2010 (see Chart IV.12), reaching its highest level since 1997. Core inflation (which does not include energy and unprocessed food prices) also rose substantially, from 1.4% in January to 3.9% in August and 3.8% in September 2010 (see Chart IV.13).

Chart IV.12 Harmonised index of consumer prices in Greece, the euro area and the European Union (January 2009 - September 2010)

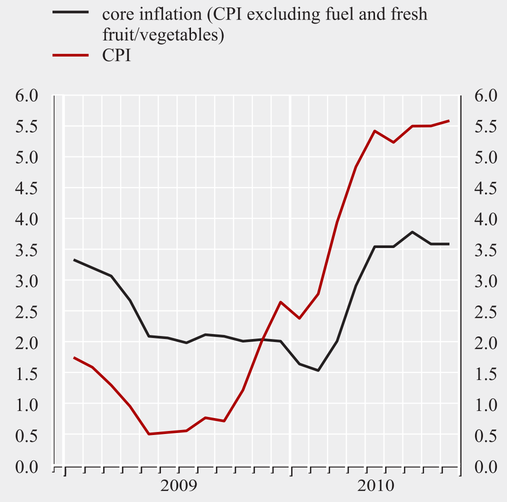
(percentage changes over same month of previous year)



Sources: ELSTAT and Eurostat.

Chart IV.14 Consumer Price Index and core inflation in Greece (January 2009 - September 2010)

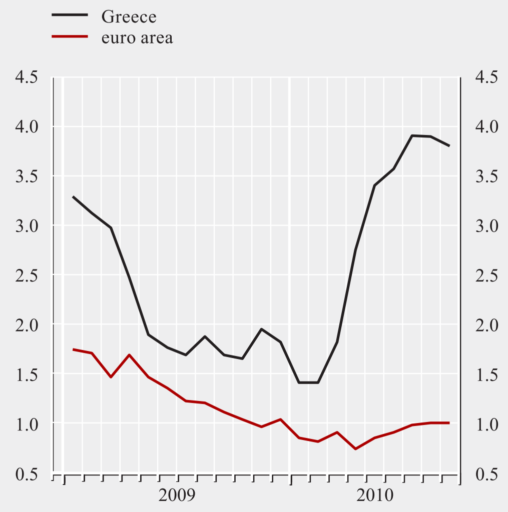
(percentage changes over same month of previous year)



Source: Calculations based on ELSTAT data.

Chart IV.13 Core inflation in Greece and the euro area on the basis of the HICP excluding energy and unprocessed food (January 2009 - September 2010)

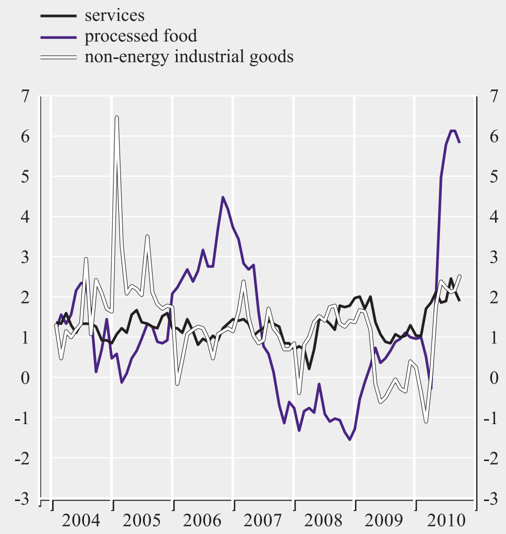
(percentage changes over same month of previous year)



Sources: ELSTAT and Eurostat.

Chart IV.15 Annual inflation differentials between Greece and the euro area (2004 - 2010)

(selected indices; differentials in percentage points)



Source: Calculations based on Eurostat and ECB data.

For 2010 as a whole, it is estimated that the average annual rate of increase in HICP will be around 4.8%, against 1.3% in 2009, while the average level of core inflation will be slightly

Table IV.7 Harmonised index of consumer prices: Greece and the EU (2008-2010)

(annual percentage changes)

Country	2008 (year average)	2009 (year average)	August 2009	August 2010
Austria	3.2	0.4	0.2	1.6
Belgium	4.5	0.0	-0.7	2.4
Bulgaria	12.0	2.5	1.3	3.2
Cyprus	4.4	0.2	-0.9	3.4
Czech Republic	6.3	0.6	0.0	1.5
Denmark	3.6	1.1	0.7	2.3
Estonia	10.6	0.2	-0.7	2.8
Finland	3.9	1.6	1.3	1.3
France	3.2	0.1	-0.2	1.6
Germany	2.8	0.2	-0.1	1.0
Greece	**4.2**	**1.3**	**1.0**	**5.6**
Hungary	6.0	4.0	5.0	3.6
Ireland	3.1	-1.7	-2.4	-1.2
Italy	3.5	0.8	0.1	1.8
Latvia	15.3	3.3	1.5	-0.4
Lithuania	11.1	4.2	2.2	1.8
Luxembourg	4.1	0.0	-0.2	2.5
Malta	4.7	1.8	1.0	3.0
Netherlands	2.2	1.0	-0.1	1.2
Poland	4.2	4.0	4.3	1.9
Portugal	2.7	-0.9	-1.2	2.0
Romania	7.9	5.6	4.9	7.6
Slovakia	3.9	0.9	0.5	1.1
Slovenia	5.5	0.9	0.1	2.4
Spain	4.1	-0.2	-0.7	1.8
Sweden	3.3	1.9	1.9	1.1
United Kingdom	3.6	2.2	1.6	3.1
European Union - 27	3.7	1.0	0.6	2.0
Euro area	**3.3**	**0.3**	**-0.2**	**1.6**

Source: Eurostat.

Table IV.8 Contributions to the inflation differential between Greece and the euro area (2005-2010)

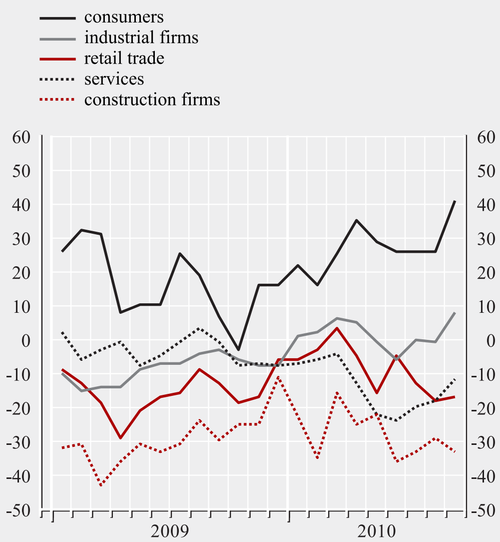
(percentage points)

	2005	2006	2007	2008	2009	2010 (Jan.-Aug.)
Differential of average annual rates of HICP change	**1.3**	**1.1**	**0.9**	**1.0**	**1.1**	**3.0**
Contributions:						
Core inflation	1.40	1.15	1.00	0.77	0.91	1.43
of which						
Services	0.51	0.43	0.50	0.56	0.64	0.77
Processed food	0.10	0.44	0.13	-0.14	0.14	0.38
Non-energy industrial goods	0.79	0.28	0.35	0.35	0.13	0.28
Unprocessed food	-0.30	-0.12	-0.06	0.03	0.39	-0.14
Energy	0.20	0.11	-0.03	0.24	-0.25	1,75

Source: Calculations based on Eurostat and ECB data.

Chart IV.16 Inflation expectations[1] of consumers and business firms (January 2009-September 2010)

(percentage balances)



Sources: IOBE and European Commission, *Business and consumer survey results.*

1 The responses of business firms concern the prospect of price increases for the goods they produce over the next 3-4 months, while consumers' responses concern the prospect of a faster increase in consumer prices over the next 12 months. Seasonally adjusted data for consumers.

higher than 3%, from 2.2% in 2009. It should be recalled that the average annual rate of inflation in the euro area was 0.3% in 2009, and it is expected to reach 1.5-1.7% this year (see Tables IV.7 and IV.8 and Chart IV.15).

Of course as the impact of the increase in indirect taxation on the annual rate of increase in prices will gradually fade in 2011, so will inflation. Stronger competition in the goods and services markets —as a result of the implementation of structural reforms— will also contribute towards containing inflation.

3.2 MAIN DETERMINANTS OF INFLATION

• As regards the impact of the increase in indirect taxation on inflation, it should be noted that:

– Up to now, the largest contribution to the annual rate of increase in inflation (on the basis of HICP) was recorded in August and September (4.4 and 4.2 percentage points respectively, with inflation being at 5.6-5.7%). For 2010 as a whole, it is estimated that the average annual contribution will be around 3.2 percentage points (with an annual inflation of 4.8%). If the contribution of the *increases in administrative prices* is taken into consideration, the overall contribution reaches 4.8 percentage points in August and 4.6 in September, and it is estimated that it will average 3.6 percentage points in 2010.

– Turning to core inflation, the largest contribution was also recorded in August and September (3.2 and 3.1 percentage points respectively, when core inflation stood at 3.8-3.9%). For 2010 as a whole, it is estimated that the average annual contribution will be around 2.3 percentage points (with core inflation at 3.1%). If the contribution of *increases in administrative prices* is taken into consideration, the *overall* contribution reaches 3.65 percentage points in August and 3.5 percentage points in September (92-95% of core inflation) and it is estimated that it will average 2.6 percentage points in 2010 (86% of core inflation).

• As regards the evolution and outlook for **unit labour costs**, the following have to be taken into consideration (see Table IV.9):

(a) According to laws 3833/2010[18] and 3845/2010, the basic pay will be frozen and benefits will be cut in the central and the general government,[19] while Law 3847/2010 provides for similar measures for civil servant pensions. It is estimated that these measures (in nominal terms) will lead to a 12.8% decrease in civil servants' average gross earnings, 9.3%

18 See also Bank of Greece, *Governor's Annual Report* 2009, April 2010.

19 The measures include a 10% cut in most benefits for the period 1 January – 31 May 2010, and a 20% cut thereafter, a 30% decrease in the Easter bonus (it will be abolished in 2011 while low- and average-income civil servants will receive a 250 euro allowance) and the abolishment of the holiday allowance and the Christmas bonus (low- and average-income civil servants will be receiving allowances of 250 and 500 euro respectively). Similar measures are taken for Legal Persons in Private Law which belong to the state or are regularly financed by the state budget, or constitute public enterprises in the sense of paragraphs 1, 2 and 3 or article 1 of Law 3429/2005.

Table IV.9 Earnings and labour costs (2003-2010)

(annual percentage changes)

	2003	2004	2005	2006	2007	2008	2009	2010 (estimate)
Greece								
Average gross earnings (nominal):								
– total economy	5.6	7.2	4.4	5.7	5.2	6.2	4.6	-3.7
– central government[1]	5.9	9.7	2.3	3.1	3.8	7.1	5.2	-12.8
– public utilities	10.9	9.9	7.6	7.0	7.1	8.2	7.7	-5.7
– banks	3.1[2]	8.0	1.5[2]	10.8	8.9	0.0	3.7	1.9
– non-bank private sector	5.8	5.8	5.6	6.8	6.1	6.5	2.8	1.2
Minimum earnings	**5.1**	**4.8**	**4.9**	**6.2**	**5.4**	**6.2**	**5.7**	**1.7**
Average gross earnings (real)	**2.0**	**4.2**	**0.9**	**2.4**	**2.2**	**1.9**	**3.3**	**-8.1**
Total compensation of employees	**8.3[3]**	**8.9**	**5.8**	**7.8**	**8.2**	**8.5**	**3.2**	**-5.7**
Compensation per employee	**5.5**	**7.6**	**3.9**	**5.9**	**5.6**	**6.8**	**4.9**	**-2.9**
Unit labour costs:								
– total economy[4]	2.3[3]	4.3	3.4	3.2	3.8	7.1	5.6	-1.6
– business sector[5]	2.6[3]	3.0	3.8	3.8	4.5	6.3	3.7	1.8

Sources: ELSTAT (GDP 2003-2009), Bank of Greece estimates (for the 2010 GDP and the other annual aggregates in 2003-2010).
1 Average compensation per employee.
2 The relatively low growth rate of bank employees' average earnings mainly reflects changes in staff structure.
3 Taking into account the increase (of 0.1% of gross earnings) in employees' and employers' contributions to the Workers' Fund.
4 Calculations based on revised GDP data, October 2010.
5 The business sector includes private and public enterprises and banks.

in public sector pensioners' earnings and 5.7% in the earnings of those working in public utilities. The pre tax decrease in civil servants' gross earnings (in real terms) is close to 17%.

(b) In the private sector, the social partners signed the new 3-year National General Collective Labour Agreement on 15 July. According to the Agreement, it is stipulated that lower earnings will remain unchanged in 2010 and will rise as from 1 July 2011 in line with the annual average inflation of the euro area in 2010 and as from 1 July 2012 in line with the average annual inflation of the euro area in 2011. On the basis of the Agreement, the average annual increase in minimum earnings for 2010 will be 1.7% (exclusively because of the carry-over effect from 2009), while the average annual increase will be 0.9% in 2011 and 1.6% in 2012. Furthermore, according to article 51 of Law 3871/2010, up to end-2012 all arbitration decisions issued and collective agreements concluded *after a proposal* by OMED (Organisation for Mediation and Arbitration) can not diverge from the percentage rates of increase provided for in the Agreement. Furthermore, Law 3863 reduces lay-off compensations in practice (through the reduction of the period of notice), increases the limit over which lay-offs are considered "mass lay-offs", reduces the remuneration for overtime employment and facilitates the recruitment of young people (less than 25 years old) who will receive gross earnings below the minimum (but their net earnings will be equal to the minimum net earnings). Finally, Law 3845 leaves room for deviation from sectoral and national general collective agreements. Thus, while *contractual* earnings in the private sector (including banks) show an average annual increase of 1.7-1.9% (exclusively because of the carry-over effect), when all of the above are taken into consideration (on the basis of rather conservative estimates), *actually* paid earnings are estimated to increase less – namely 1.2% in the private non-bank sector. Besides, the average annual increase in the per capita wage bill in the *busi-*

Table IV.10 Average earnings and unit labour costs in total economy: Greece and the euro area (2001-2010)

(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	2.6	3.2	1.1
2007	5.2	2.6	3.8	1.6
2008	6.2	3.1	7.1	3.4
2009	4.6	1.5	5.6	3.8
2010 (estimate)	-3.7	1.5	-1.6	-0.6

Sources: For Greece, Bank of Greece estimates. For the euro area: European Commission, *Economic Forecasts*, Spring 2010 and ECB, *Monthly Bulletin*, September 2010.

ness sector (which includes *public enterprises*) does not exceed 0.4%.

Because of the above, average gross pre tax earnings in total economy will decrease by 3.7% in nominal terms[20] (after a 4.6% increase in 2009) or by around 8% in real terms (after a 3.3% increase in 2009). Combined with the forecast decrease in productivity, it is estimated that unit labour cost in total economy will decrease by 1.6% (against a 5.6% increase in 2009) and will decelerate to 1.8% in the business sector, from 3.7% in 2009. At the end, however, this rate could be lower or even zero, (a) if enterprises reduce average working hours more than in 2009 and (b) if the impact of labour market conditions and of the legislative measures mentioned above proves greater than currently assumed. According to the latest European Commission forecasts (May 2010), the average wage bill in the euro area will increase by 1.3% this year (it rose by an annual rate of 1.5% in the first quarter), while unit labour cost in total economy will decrease by 0.6% (the same as in the first quarter – see Table IV.10).

– Finally, **profit margins** declined as, according to the available results for the first half of 2010 of 207 non-financial enterprises[21] listed in the Athens Exchange, gross profits decreased by 9.1% year-on-year and net profits (before tax) decreased by 40.4%. At the same time, nominal sales rose by 6.9%, but that was exclusively due to higher sales by the two refineries included in the sample (about 33%). Excluding these two refineries, the remaining 205 enterprises recorded 2.6% lower sales, which is smaller than the decrease in profits (gross profits drop by 6.2% and net pre tax profits by 39.6%). This picture is compatible with other available indices. In greater detail, the industrial producer price index (excluding energy)

20 The per capita wage bill, which also includes expenses for the pensions of civil servants, will decrease by 2.9% in nominal terms, after a 4.9% increase in 2009.

21 Not including the Public Power Corporation and the Hellenic Telecommunications Organisation.

for the domestic market, which is not influenced by the change in indirect taxation, recorded a lower average annual increase (1.0%) in the first eight months of 2010 (against an average decrease of 0.2% in the corresponding period of 2009). This reflects the increase in the cost of imported inputs (oil and other raw material and intermediate goods). At the same time, profit margins narrow and the rate of increase in unit labour costs in the business sector decelerates (and even tends to zero).

4 EXTERNAL BALANCE AND COMPETITIVENESS: DEVELOPMENTS AND PROSPECTS

4.1 CURRENT ACCOUNT

Having reached 14.8% of GDP in 2008, the current account deficit shrank to 11.1% of GDP in 2009 reflecting a decline —of a merely conjectural nature— in the trade deficit, as the contraction in goods imports overshot the fall in goods exports on account of the recession.

The implementation of the Economic Adjustment Programme has had a significant dampening effect this year on consumption and investment, which is expected to cause a further, albeit limited, narrowing of the current account deficit as a percentage of GDP (for 2010 as a whole). In greater detail, considering the current trends and the available information on the prospects of certain items of the current account balance, it is estimated that the current account deficit will fall slightly below 11% of GDP this year.

Much of the anticipated decline will come from the impact of economic recession on imports. At the same time, although the market share of Greek exports is probably still shrinking, goods exports are beginning to pick up slowly, reflecting, on the one hand, the recovering global economy and, on the other, the deceleration, or even the halt, of the downward trend in the cost/price competitiveness of Greek products. This is due to the depreciation in the effective exchange rate of the euro combined with moderating or declining unit labour costs.

Indeed Greece's competitiveness vis-à-vis its trading partners in the euro area, measured in terms of relative consumer prices, continues to decline owning to the strong increase in the Greek HICP on account of the reasons set out in Section 3 of this Chapter, while the depreciation of the euro has no effect on intra-euro area trade. As regards, however, Greece's price competitiveness relative to the average of its (euro area and non-euro area) trading partners —and considering that the effective exchange rate of the euro, weighted on the basis of Greece's external trade, is likely to decrease at an average annual rate of almost 3% in 2010— it is assumed that a decline could be avoided if average inflation in trading partners exceeds 1.8%. Lastly, competitiveness, measured in terms of relative unit labour costs, is expected to improve or —at least— not to deteriorate (see Table IV.11 and Box IV.2).

Developments in the eight months through to August 2010

Having increased by 0.4% on average in the first half of 2010, the current account deficit declined by 11.6% in July and a further 44.5% in August (year-on-year), thereby recording an overall decrease of 2.1% in the eight months to August, compared with the corresponding period of 2009 (see Statistical Appendix, Table 6). This mainly reflected a narrowing of the trade deficit and a widening of the services surplus and, to a lesser extent, a slightly lower income account deficit. By contrast, the current transfers surplus narrowed.

The decline in the overall **trade** deficit (€606 million) was the result of a fall (by €1,728 million) in the **trade deficit excluding oil and ships**. In greater detail, payments for the import of goods excluding fuels and ships were reduced by €1,998 million or 9.7%. The corresponding export receipts fell by €270 million or 3.6% in the eight-month period under review (much less than in 2009), but then edged up margin-

Table IV.11 Greece: revised nominal and real effective exchange rate (EER) indices[1]

(annual percentage changes in year averages)

	Nominal EER	Real EER	
		On the basis of relative consumer prices	On the basis of relative unit labour costs in total economy
2001	1.9	1.1	0.5
2002	2.3	2.6	4.2
2003	5.0	5.4	3.9
2004	1.7	1.9	4.2
2005	-1.0	-0.2	0.4
2006	0.1	0.8	1.7
2007	1.3	1.6	2.3
2008	2.5	2.5	4.9
2009	1.2	1.5	2.4
2010*	-3.2	-0.6	-4.4
Cumulative percentage change between 2001 and 2010	12.0	17.8	21.4

Sources: Exchange rates: ECB, euro reference exchange rates. CPI: ECB, Harmonised Index of Consumer Prices where available. Unit labour costs in total economy: Bank of Greece estimates for Greece, ECB for the other countries.
* Provisional data and estimates.
1 Revised (on 1 January 2010) indices (compiled by the Bank of Greece) comprise Greece's 28 main trading partners. The weights used reflect the share of each partner country in Greece's manufacturing trade (SITC 5-8) during 2004-2006 and take into account competition in third markets.

ally by 0.3% year-on-year in July and August, for the first time this year.[22] By contrast, the net oil import bill grew by €1,060 million or 20.7%, whereas net payments for ship purchases rose by a marginal €62 million or 2.5%.

In its most part, the €268 million increase in the surplus of the **services balance** came from a rise in net receipts from transport services. Gross receipts from **transport services** – mostly from merchant shipping – rose by 15.2%, compared with the 19.5% increase in corresponding payments. As a result, net receipts grew by €479 million. The recovering global economy, rapidly-growing emerging Asia (see Chapter II.1) and increased oil consumption,[23] all pushed freight rates upwards.[24]

By contrast, according to revised data, net receipts from **travel services** declined by €409 million, as non-residents' travel spending in Greece dropped by €554 million or 7.3% and residents' travel spending abroad decreased by €144 million or 8.8%. Travel receipts declined year-on-year in July and August (-4.7% and -6.3% respectively), but this was only a moderate decrease compared with June (-12.1% year-on-year). The fall in gross travel receipts was due to a decrease in average expenditure and in the average duration of stay and a slight increase (of 1.5%) in arrivals compared to last year.

Net payments for **"other" services** were reduced by €198 million.

22 According to ELSTAT data, the value of goods imports excluding oil and ships fell by 9.6% in the seven months January-July, compared with the 2.8% *rise* in corresponding exports. It should be recalled that discrepancies between Bank of Greece and ELSTAT data on trade are largely attributable to the fact that Bank of Greece data refer to receipts and payments mainly through the domestic banking system, whereas ELSTAT data are based, on the one hand, on customs data on trade with non-EU countries and, on the other hand, on tax data (INTRASTAT) on intra-EU trade.
23 The year-on-year increase in oil demand for the first half of 2010 amounted to 2.7%, while for the year as whole it is expected to stand at 2.2% (International Energy Agency, *Oil Market Report*, September 2010).
24 The Baltic Dry Index (BDI) rose by 22.5% and the Baltic Dirty Tanker Index (BDTI) by 62.8%, year-on-year in January-September 2010.

The **income account** deficit recorded a year-on-year decline of €52 million, reflecting lower net interest, dividend and profit payments. At the same time, however, Greece's *negative international investment position*, i.e. the difference between residents' assets and liabilities vis-à-vis non-residents', rose to 94.1% of estimated annual GDP at end-June 2010, from 85.6% at end-2009. The total *gross external debt* of both the public and the private sector —which is fed by current account deficits— surged to around 187.5% of estimated annual GDP at end-June 2010, from 175.0% at end-2009.[25]

Finally, the **current transfers balance** recorded a €584 million smaller surplus year-on-year, as a result primarily of lower receipts from "other sectors" (emigrants' remittances, etc.) and, to a lesser extent, a decrease in EU transfers to general government, whereas general government payments to the EU, as well as payments in "other sectors" remained almost unchanged.[26] In greater detail, net receipts from "other sectors" (emigrants' remittances, etc.) shrank by €395 million, and net transfers from the EU to general government by €189 million.

4.2 CAPITAL TRANSFERS BALANCE

In the eight months through August 2010, the surplus of the capital transfers surplus narrowed to €0.8 billion 2010, from €1.5 billion in the corresponding period of 2009.[27] Thus, the overall transfers balance (current transfers plus capital transfers) recorded a lower surplus, of €1.7 billion, compared with €3.0 billion in the January-August 2009 period. The reduction in the capital transfers surplus is primarily due to the fact that 98% of the envisaged Community funding from the Structural Funds (CSF III) has already been absorbed.[28] Turning, however, to the National Strategic Reference Framework (NSRF) 2007-2013, disbursements from the Structural Funds (which now also include the Cohesion Fund) remained subdued[29] in the first three years, on account of delays in the implementation of projects and programmes, also linked to the introduction of a new, stricter management and control framework.[30]

In the eight months from January to August 2010, **total net EU transfers (current transfers plus capital transfers less payments to the Community Budget)** fell to €1.8 billion, from €2.7 billion in the corresponding period of 2009.

As regards the outlook for EU transfers to Greece in 2010 as whole, it is expected that payments for projects and programmes under the NSRF will be expedited and that resources will be utilised more effectively thanks to the revision of NSRF operational programmes and the simplification of administrative procedures.[31] The NSRF could thus become the prime tool for reinvigorating the economy in order to deal with the crisis. The aim is that the rate of NSRF fund absorption exceeds 15% by end-2010. The provision of funding under the NSRF will be facilitated by the contribution of the European Investment Bank (EIB)[32], the implementation of the law

25 At end-June 2010, 42.4% of the gross external debt was incurred by general government (end-2009: 53.8%) and the remainder was incurred mainly by the business sector (financial and non-financial corporations). The relevant data are available on Bank of Greece's website.

26 Current transfers from the EU mainly include direct financial assistance and subsidies in the context of the Common Agricultural Policy, which are not distributed evenly across the year, as well as receipts from the European Social Fund, while current transfers to the EU chiefly include Greece's contributions (payments) to the Community Budget.

27 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 (CSFs).

28 Though the absorption from the Cohesion Funds has not been equally satisfactory.

29 In greater detail, between the start of implementation of the National Strategic Reference Framework and end-October 2009, Greece had mainly received advance payments in the order of €1.5 billion (2007: €401 million, 2008: €614 million, 2009: €485 million), including an additional advance payment approved by the European Commission in view of the international financial crisis. Based on the progress of implementation of the NSRF programmes, until March 2010 Greece's rate of cohesion funds absorption was the lowest in the EU-27 (see European Commission, "Cohesion policy: Strategic report 2010 on the implementation of the programmes 2007-2013", COM (2010)110 final 31.3.2010). By August 2010, 12.6% of the envisaged Community funding had been absorbed, but this is including the abovementioned advance payments (Bank of Greece data).

30 European Commission, *Analysis of the budgetary implementation of the Structural and Cohesion Fund in 2008*, May 2009.

31 Law 3840/2010 on the revision and management of the NSRF was passed by Greek Parliament on 24 March 2010 (Government Gazette A 53/31.3.2010).

32 A favourable loan agreement (worth €2 billion) was signed with the EIB on 1.7.2010 to finance part of the national budget contribution to programmes and projects under the NSRF. EIB's audit procedures will provide an additional guarantee for the effective implementation of co-financed projects.

on public-private partnerships (PPPs) and the new development law.

Disbursements of bilateral financial assistance from euro area countries to Greece under the Memorandum of Understanding (MoU) of 3 May 2010 and its update of 6 August 2010 have now become directly dependent on the increase in the rate of absorption of Structural Funds. Against this backdrop, co-financed projects will be given priority as regards the allocation of resources under the Public Investment Programme. To achieve the six-month targets provided for in the MoU, a number of steps were taken including: (i) the establishment of a "fast-track project production"; (ii) the setting up of technical task force to ensure rapid implementation; and (iii) the creation of a special central account that cannot be used for any other purposes and which should be available to provide co-financing to all entities in the general government.

Reporting on the progress made in respect to the absorption of Community funds is effected on a biannual basis. The aim is not only to speed up the rate of absorption of Structural Funds, but also to enhance their developmental impact. A web-based open-access monitoring tool of procedures for the implementation of public projects must be introduced by the end of 2011, along with the certification of the managerial capacity of all Managing Authorities under the NSRF to ISO 9001:2008 (Quality Management).[33]

The European Commission in its first review for Greece acknowledged that progress had been made towards a better regulatory and organisational framework for the absorption of Community resources. In the first half of 2010, structural fund claims submitted by Greece to the European Commission amounted to €853.7 million, or 30% of the €2,750 million target set in the MoU for 2010. The Commission stressed however that further steps need to be taken so as to increase the number and quality of projects.[34]

Moreover, the rate of Community funds absorption will be improved by a set of recently adopted new measures for the management of Structural funds in the EU, which is expected to expedite the flow of Community resources. This is particularly pertinent at a time when most Member States are in fiscal distress.[35]

Meanwhile, direct financial assistance and subsidies under the Common Agricultural Policy will remain broadly unchanged until 2013, averaging some €2.5 billion annually. Based on the foregoing, total net EU transfers (current transfers plus capital transfers less payments to the Community Budget) should reach approximately €3.5 billion in 2010.

In the context of the broader coordination of Member States' economic policies it is being considered whether eligibility for the receipt of Community aid (namely structural funds and agricultural subsidies) should depend on the fulfilment of the Stability and Growth Pact requirements, as is the case for the Cohesion Fund.[36]

33 According to the Memorandum of Understanding of 3 May 2010 incorporated into Law 3845, and its Update of 6 August 2010, the targets for payment claims regarding the absorption of Community funds for each of the years 2010, 2011, 2012 and 2013 are as follows: 2010: €2,750 million, 2011: €3, 350 million, 2012: €3,730 million and 2013: €3,890 million. Compliance with the targets shall be measured by certified data. At least 10 major project applications shall be submitted to the Commission services each year. Moreover, appropriate legislation will be put in place to tackle delays in the implementation of public works and investment projects in general, including provisions to shorten and simplify procedures relative to the handling of environmental, archaeological and expropriation issues.

34 See *European Economy*, "The Economic Adjustment Programme for Greece – First review – Summer 2010", Occasional Papers 68/August 2010, pp. 51-52. Also, the IMF *First Review Under the Stand-By Arrangement* (September 2010) notes (p. 16) that a task force has been established with authority to ensure a timely and qualitative delivery of projects and that legislation will be introduced to tackle delays. State aid to inefficient companies will be gradually cut.

35 Regulation (EU) No 539/2010 of the European Parliament and of the Council of 16 June 2010 amending Council Regulation (EC) No 1083/2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund regarding the simplification of certain requirements as well as a number of provisions relating to financial management.

36 See European Council Conclusions, 17 June 2010; European Commission, Enhancing economic policy coordination for stability, growth and jobs – Tools for stronger EU economic governance, COM (2010) 367 final, 30 June 2010; Ecofin Council of 13 July 2010, press conference of the Minister of Finance of 13 July 2010; and recent draft legislation by the European Commission (press release, 29 September 2010).

As regards the post-2013 outlook for transfers, the European Commission is going to review all spending under the Community Budget, including the Common Agricultural Policy, in the negotiations about the "financial perspectives for 2014-2020".[37] The broad policy guidelines are going to be formulated under the EU strategy for 2020 (the "Europe 2020" strategy), which is the successor of the Lisbon Strategy. All EU policies, including the Common Agricultural Policy and the common Cohesion Policy, will need to support this successor strategy.[38]

All of the foregoing lead to the conclusion that the NSRF is the last transfer of such high amounts of EU structural funds to Greece. After 2013, there will be new measures for the implementation of the Common Agricultural Policy, which will change the amount and composition of payments, and how each payment is to be made.[39]

4.3 COMBINED CURRENT ACCOUNT AND CAPITAL TRANSFERS BALANCE

In the eight months from January to August 2010, the deficit of the combined current account and the capital transfers balance widened by 2.8% to €15.0 billion, from €14.6 billion in the corresponding period of 2009.

4.4 FINANCIAL ACCOUNT

In the financial account, combined direct and portfolio transactions (investment) recorded net inflows of €16.4 billion in 2010, compared with €15.5 billion the year before. This was accounted for by net inflows of €0.5 billion in direct investment and of €33.9 billion in "other" investment, while portfolio investment recorded a net outflow of €18.1 billion.

Net inflows of non-residents' funds for direct investment in Greece declined to €1.1 billion, compared with a net inflow of €1.8 billion in the corresponding period of 2009. The most important transaction concerned an inflow of €939 million for the participation of Crédit Agricole SA in the capital increase of Emporiki Bank of Greece SA. As a result, Crédit Agricole's stake in Emporiki Bank of Greece SA rose from 87.9% to 91%.[40] Residents' direct investment abroad recorded an outflow of €0.65 billion, mainly related to investments made in Balkans countries and Poland.[41] The comparatively low level of foreign direct investment in Greece reflects the structural problems of the economy, particularly product and labour market rigidities, infrastructure weaknesses, as well as complex and time-consuming red tape.

Under portfolio investment, a net outflow of €18.1 billion was recorded in the same period, as opposed to a net inflow of €21.1 billion in the corresponding period of 2009, reflecting, on the one hand, a €26.5 billion decline (outflow) in non-residents' investment in bonds and Treasury bills and a €1.2 billion decline (outflow) in non-residents' holdings of domestic firms' shares and, on the other, a €1.2 billion increase (outflow) in residents' holdings of foreign shares. These outflows were only partly offset by a €10.4 billion decrease (inflow) in domes-

37 See European Council Conclusions, EUCO 13/10 Brussels, 17 June 2010.

38 See Communication from the European Commission "Europe 2020: a strategy for smart, sustainable and inclusive growth", COM (2010)2020 final, 3 March 2010.

39 For the prospects of the CAP, see Bank of Greece, *Annual Report 2009*, Box VIII.3. Processes on the future of the CAP after 2013 have long started: discussions are being held in the relevant institutional fora of the EU on the various policy aspects and different options are being put under consideration. For recent developments, see European Council "The future of the CAP in the European Parliament", 13 April 2010; Agriculture and Fisheries Council, 17 May 2010; Speech by Commissioner Dacian Ciolo "The CAP and the EU2020 strategy"; Informal council of AGRI ministers, 1 June 2010; and European Commission, Enlarged Advisory Group on "CAP post-2013", 3 June 2010; European Commission Conference "CAP post-2013", Brussels 19-20 July 2010; and press release of 16 July 2010. In November 2010, the EU will issue a communication on the future of the CAP, to be followed by legislation propositions in mid-2011.

40 An inflow of €348 million was also recorded for the acquisition of the bakery division of Vivartia- Industrial & Commercial Company of Food Products & Catering Services (former Chipita), part of the Marfin Investment Group (MIG), by the Cyprus-based special purpose vehicle UFIB, led by the Saudi-Arabian Olayan group.

41 The most important of these investments include: (i) a €99 million outflow as Eurobank's capital injection to its Polish branch EFG Eurobank Ergasias SA Polka A.K; (ii) a €27 million outflow as the Marfin Investment Group's (MIG's) participation in the capital increase of MIG Real Estate Serbia B.V.; (iii) a €15 million outflow as MIG's participation in the capital increase of MIG Leisure and Real Estate Croatia B.V.; iv) a €44 million outflow for the acquisition of shares in the Turkey-based Finans Leasing by the National Bank of Greece; and v) a €35 million outflow for the acquisition of shares in FYROM-based Stopanska Banka AD by the National Bank of Greece.

tic credit institutions' and institutional investors' holdings of foreign bonds and Treasury bills.

"Other" investment recorded a net inflow of €33.9 billion (compared with a net outflow of €6.8 billion in the corresponding period of 2009), mainly as a result of general government net borrowing of €18.5 billion under the support mechanism, as well as an upswing (inflow) of €18.8 billion in non-residents' holdings of domestic deposits and repos. These inflows were only partly offset by the €4.2 billion increase (outflow) in domestic credit institutions' and institutional investors' holdings of deposits and repos abroad.

Finally, Greece's reserve assets amounted to 4.6 billion at end-August 2010.

Box IV.2

ALTERNATIVE PRICE AND COST COMPETITIVENESS INDICATORS

The considerable loss of Greece's international competitiveness is reflected in the current account deficit, which has been widening since 1998. The large cumulative loss of international competitiveness (which is registered by all common Real Effective Exchange Rate – REER indices for the period after Greece's entry in the euro area) has given rise to heated debate on the extent of the "internal" deflation and "internal depreciation" required in order to restore balance in the country's current account. The key issues that have to be examined are:

a. What is the cumulative loss of international price and cost competitiveness in the 2000-2009 period and why have international organisations given so different estimates?

b. Do common REER indices underestimate or overestimate the real evolution of Greece's international price competitiveness of Greece? Would the compilation and monitoring of more representative indices for Greece be feasible and reliable?

c. Does international competitiveness depend solely on relative prices? What is the role of international competitiveness vis-à-vis other, non-price, factors? Would an improvement of the REER alone restore the external balance? How much does the international price competitiveness affect the individual items of the balance of payments in Greece – especially the goods and services balance excluding fuel and ships?

1. International competitiveness: definition and measurement

International competitiveness is a broad and multifaceted concept, for which no single or full definition can exist. International competitiveness is usually examined in terms of prices and labour costs (price and cost competitiveness), but also in the context of other economic, structural, institutional and qualitative factors (non-price competitiveness). Various quantitative and qualitative indices are used, alternatively or additionally, to measure and evaluate international competitiveness at both macroeconomic and sectoral or microeconomic level.

The international competitiveness of a country does not affect its export performance and the balance of payments alone; it is generally connected with the sustainable increase in the per capita income and the broader social welfare of a country compared to other countries.[1]

1 For definitions of international competitiveness, see for instance: National Council for Competitiveness and Development (2008), European Commission (2009a) and Bennett et al. (2008).

The evolution of a country's international competitiveness may be examined in four ways:

(a) at *macroeconomic level*, on the basis of the effective exchange rate indicators;

(b) on the basis of indices registering the evolution of the market shares of total economy or sectors or branches;

(c) at *microeconomic level*, on the basis of indices concerning specific enterprises and economic branches and not the national economies as a whole (for instance, the European Commission performs this type of analysis on an annual basis[2]) and

(d) overall, *on the basis of composite indices on global competitiveness*, which summarise the evolution of a series of economic, social, institutional, technological and other parameters.

2. REER indicators: compilation methodology and disadvantages

Among the indicators measuring international price and cost competitiveness, the most commonly used are the real effective exchange rates (REER), which reflect changes in an economy's international price and production cost competitiveness over time vis-à-vis its trade partners. A rise in the REER index reflects a decline in international competitiveness and, reversely, a fall in the indicator reflects an improvement in international competitiveness.

The REER index is compiled by adjusting the Nominal Effective Exchange Rate (NEER) index using one of the various indicators of relative prices or relative labour costs. The REER index is the weighted geometric mean of bilateral (with each trading partner) developments in exchange rates and relative prices or costs. The weight coefficient for each partner country is the percentage share of this country in the foreign trade of the reference country for a specific year or period.

Although this methodology for compiling REER indices is uniform, the relevant assessments may differ, even substantially, depending on (i) the composition of the sample of trading partners and their number, (ii) the method of calculation of the weights for these partners, (iii) the year or period on the basis of which weight coefficients are calculated, and (iv) the selected indicators of change in prices or labour costs.

According to common practice, the weight coefficients of all indicators are calculated on the basis of imports and exports of goods only, specifically manufacturing products (SITC categories 5-8). Exports are double-weighted so that third-market effects are also taken into account. They do not, however, include trade in agricultural products and services (transport, travel services, financial activities etc.), although it is very important in some countries (such as Greece, Cyprus and Malta).

There are six indicators of price and cost change that are more commonly used for the calculation of REER: (i) prices of exported products, (ii) the Consumer Price Index (CPI), (iii) the Producer Price Index (PPI), (iv) the unit labour costs in manufacturing (ULCM), (v) the unit labour costs in total economy (ULC) and (vi) the GDP deflator.

2 An analysis of microeconomic international competitiveness indicators measuring firms' "ability to grow" and a concise picture of developments by country are published annually in the *European Competitiveness Report* compiled by European Commission staff since 2004 (see European Commission, 2009a).

A detailed comparison and assessment of these indicators does not seem to document the dominance of any of them, given that each indicator has both advantages and shortcomings either at the theoretical or the empirical level.[3] This is why it is useful to monitor the development of all available indicators. Crosschecking the findings allows safer conclusions. The most appropriate and representative price indicator – and, therefore, REER index – is usually selected on the basis of (i) the purpose of the analysis and (ii) the quality, availability (timely provision of data and length of time series) and comparability of data.

The most commonly used REER indices are constructed according to the methodology of the Bank of International Settlements (BIS) (Turner and Van't dack, 1993; Klau and Fung, 2006) and the ECB (Buldorini et al., 2002). **The evolution of REER indices, however, provides only an indication of the real development of competitiveness**, as the compilation of these indicators is based on two theoretical assumptions: (a) that each country exports only one good (this is why uniform weights are used for all exported goods), and (b) that the elasticity of substitution between goods from various countries is constant. These two assumptions are simplistic and rejected empirically (see e.g. Spilimbergo and Vamvakidis, 2000; Klau and Fung, 2006). Therefore, these indices must be interpreted with caution, taking into account the degree to which such assumptions reflect reality.

As regards the weights used in REER indices, the main methodological problem is that they do not take account of (i) the world trade in services, (ii) the structure by sector and branch, i.e. world trade weights by branch of activity (triple-weighting scheme), since countries do not usually compete with each other in the same branches (Esteves and Reis, 2006; Bennett and Zarnic, 2008), (iii) the different import content of exports[4] for each country, which the higher it gets, the more it diminishes the interpretative power of changes in REER for the evolution of the trade balance (ECB, 2005).

Trade in agricultural products is not included in common REER indices, given that, in advanced economies, the share of these products in the total external trade in goods is usually small. Moreover, agricultural product prices are subject to strong fluctuations because of the seasonality of agricultural production and weather conditions. Apart from that, agricultural prices in the EU-27 are largely shaped in the context of the Common Agricultural Policy (CAP) (Buldorini et al., 2002).

That the world trade in services is included in REER weights is desirable, but there are problems both at the theoretical and the measurement level. The ECB, which publishes national harmonised competitiveness indicators (HCI), examined the available data, in view of the increasing importance of the world trade in services. On account of problems with the availability, comparability and reliability of data, mainly in respect to export prices, the compilation of such REER indices was postponed. Moreover, the view was expressed that, even if it is feasible, it is not advisable to construct a single index for goods and services; it is rather preferable to construct REER indices that will measure price competitiveness in goods and services separately.

Common REER indicators may *underestimate* losses in international competitiveness, especially in the past ten years, given that they calculate changes only *and not the general level of prices or*

3 For a concise review of the features of various REER indices and empirical findings on their interpretative power, see *inter alia* A. Manassaki, Ch. Catiforis and M. Vasardani (2010), "Greece's international competitiveness and the current account" (in Greek) in Bank of Greece, *Greece's current account: causes of imbalances and policy recommendations* (in Greek).

4 The ECB (2005) has estimated that the degree of the import content of exports increases over time and is significantly different for each country. In 2000, for instance, it was from 35% (Italy) to 59% (Netherlands).

labour costs (Esteves, 2007). The level of prices, if it diverges significantly among countries, may best interpret the observed changes in the geographical structure and external trade shares. The surge in the share of emerging economies (that are characterised by low production costs) in world trade over the past ten years and the subsequent decline in the market shares of advanced economies, even the most "competitive" ones, according to the evolution of REER indices (European Commission, 2009b), underlines this shortcoming of REER indices.

3. REER indices for Greece and alternative calculations

Notwithstanding divergences in the sample and the weights of trade partners or the deflators used, the evolution of all REER indices compiled by the Bank of Greece, the ECB, the European Commission, the OECD, the IMF and the BIS shows almost constant losses in international competitiveness **long before Greece's entry in the euro area, already since 1987**. The only exception was the period 1997-2000, when competitiveness improved temporarily, due to the drachma's entry in the ERM-II in 1998 and its concurrent depreciation, the significant decline in Greek inflation in the context of fulfilling the Maastricht criteria for entry in the EMU and the large drop in the ecu/euro exchange rate.

In the period after Greece's entry in the euro area (2000-2009), the cumulative deterioration of international competitiveness, as measured by the average of all available broader REER indices, ranged **from 11.0% to 19.5%, depending on the index used**: 19.5% on the basis of price indicators (CPI and exports), 16.2% on the basis of the GDP deflator, 17.7% on the basis of the ULCM and 11.0% on the basis of ULC. The cumulative deterioration of international price competitiveness vis-à-vis euro area countries on the basis of the relevant indicator compiled by the Bank of Greece ranges from 9.2% (on the basis of CPIs) to 17.5% (on the basis of ULC) (see the table).

A large cumulative overvaluation of the REER can be observed not only relative to 2000, but also relative to its deviation from a number of estimates on its "equilibrium" level in 2008: (a) against the long-term average of almost five decades – deviation of 9% (based on the CPIs) to 36% (based

Cumulative change between 2000 and 2009 of available broad REER indicators for Greece

(percentages)

REER indicators based on:	Bank of Greece	ECB	European Commission	OECD	IMF	BIS	Arithmetic means
CPI	18.6 (28) 9.2 (15)	20.6 (56)	15.0 (40) 17.6 (35)	20.3 (41)	21.4 (32)*	18.8 (57) 22.0 (26)	19.5
Export prices			19.3 (35)				19.3
ULCM			5.3 (35)	18.8 (41)	8.8 rel (26)** (-2.4 reu)		11.0
ULCT or ULCE	27.0 (28) 17.5 (15)	20.8 (36)	14.7 (35)				17.7
GDP deflator		17.9 (36)	14.5 (35)				16.2

Sources: Bank of Greece, ECB, European Commission, OECD, IMF-IFS, BIS.
* According to the IMF-IFS, this indicator also takes into account trade in services (e.g. tourism), when feasible.
** New IMF-IFS indicator (rel) since March 2010, replacing the previous indicator (reu) in all countries.
Note: The number in parenthesis is the number of trading partners against which every available REER indicator is calculated. The indicator designated with (15) is calculated against the other euro area countries. A positive (negative) change in the REER reflects deterioration (improvement) in international competitiveness.

on labour costs); (b) against its level in 1994, when Greece's current account deficit came close to zero – deviation of 14% (based on the CPIs) to 28% (based on labour costs) and (c) against the estimates of international organisations on the "equilibrium exchange rate" – overvaluation of the REER by 13%-34% (IMF, 2007 and 2009 and European Commission, 2009b).

Differences between the various published REER indices as regards the amount of cumulative appreciation for the period 2000-2009 *mainly stem from the deflators used and not from differences in the weights*. Greater differences are usually characteristic of REER calculations that are based on unit labour costs (see the table), especially after the significant revision in the summer of 2009 of the unit labour cost series used by the European Commission and the IMF. These series are the ratio of average compensation in manufacturing to average productivity in manufacturing.

Common REER indices may overstate the cumulative appreciation in countries such as Greece, which imports mainly goods (77% of total imports during 200-2009) and exports mainly services (65% of total exports during 2000-2009). In fact, Greece has the largest proportion of services exports to total exports among OECD countries. In most countries, services imports and exports are no higher than 1/3 of industrial products imports and exports. In more detail, in Greece's services bill during 2000-2009, transport (mainly shipping) and travel receipts amounted to 48% and 42% of total receipts, respectively (Bank of Greece data). However, receipts from shipping are affected not only by relative prices, but also by other international factors.

The inclusion, by the IMF, of the international trade in services (tourism etc.) in the weights of the trading partners for the REER-CPI index (the only index of this type) did not yield different results regarding Greece's cumulative loss in competitiveness (21.4% over the period 2000-2009) compared to the results of common indices. In a former empirical study, IMF had estimated that a REER index based on the major trading partners in international trade in services alone[5] (and not in manufacturing) yielded a cumulative loss in international competitiveness of 35.2% for the period 2000-2006. This calculation however was based on the ULCM and not the ULC or the CPI (Bennett and Zarnic, 2008). According to other papers, the cumulative loss in international competitiveness is smaller, when the REER is calculated on the basis of trade weights in services only and using the CPI as a deflator, i.e. around 5% for the period 2000-2009 (Malliaropoulos, 2010).[6]

If *the heterogeneity of traded products is included in the weights of the trading partners, Greece's international price competitiveness after 2000 seems to be rather improving*. The fact that two countries export to the same third country does not necessarily mean that they compete each other, because they may be exporting entirely different products. In the calculation of trading partner weights that take into consideration the breakdown by product (triple-weighting scheme) for euro area countries, Greece's weighting is lower than that of advanced countries and higher than that of emerging economies (Esteves and Reis, 2006). In a relevant IMF study, where heterogeneity of traded products is included in the weights, a smaller cumulative loss in the REER-ULCM (by 7%) is estimated for the period 2000-2006 (Bennet and Zarnic, 2008).

5 The weighting of major economies (such as United States, United Kingdom and Japan) in Greece's external trade increases when Greece's major international competitors in services (and not in manufacturing) are included, but the weighting of emerging economies decreases.
6 In this paper, calculations are based on equal weights, estimated for 6 trading partners only and their selection criteria is the tourist destination alone. Moreover, exports are not double-weighted, i.e. competition from third countries (e.g. in banking or telecommunication services in Bulgaria from US or German enterprises) is not taken into consideration.

4. How much does international competitiveness affect the balance of goods and services?

Greece's export performance has been better and the loss in market shares less over 1998-2008 compared to what was expected considering the unfavourable evolution of available REER indices (European Commission, 2009b and 2010a). Moreover, despite the constant deterioration of price competitiveness indicators, the goods balance excluding fuel and ships,[7] albeit highly in deficit, did not deteriorate during the 2000s as a percentage of GDP. In more detail, this deficit, from 13.9% of GDP in 2000, gradually improved to 10.3% in 2005 and then deteriorated marginally, reaching 11.4% of GDP in 2008. In 2009, however, it dropped to 8.3% of GDP. Respectively, the services surplus, notwithstanding the constant deterioration of REER indices, did not decrease during the 2000s. From 6.8% of GDP in 2000, it gradually improved to 8.3% in 2004; then, it deteriorated marginally, reaching 7.2% of GDP in 2008. In 2009, it dropped to 5.3% of GDP.

These observations lead to the conclusion that, in the case of Greece and of other economies, there are permanent or temporary factors, besides international price competitiveness, which play an equally important role in the development of the trade balance. These factors may include:

(a) Different country elasticities of net exports relative to the REER, which may reflect the development of (1) the breakdown of trade by sector or product and/or (2) the geographical breakdown of external trade. In the case of Greece, factors identified as significant include *the orientation of the external trade towards SE European countries* (OECD, 2009) *and the improved content of exports in terms of products* (IMF, 2008). The long-term elasticity of the current account deficit relative to the REER, however, has recently been estimated at -0.19 for Greece (Brissimis et al., 2010).

(b) The significant impact of non-price competitiveness on international competitiveness. According to the New Trade Theory, increased differentiation of products supplied worldwide, both in terms of quality (vertical differentiation) and in terms of variety (horizontal differentiation), is an important determinant for enhancing the competitiveness and export performance of an economy (Krugman, 1989). In this context, it has been observed that the importance of international price and cost competitiveness in the interpretation of the goods and services balance for Greece and for a number of other EU Member States is declining over time, whilst the importance of structural competitiveness and of other factors that affect a country's export performance is constantly increasing (see e.g. Di Mauro and Forster, 2008).

According to constant market shares analysis (CMSA), there were losses both in price and non-price competitiveness for Greece during 1996-2007, which were partly offset by the favourable impact of developments in the content of exports in terms of product and destination (see Cafiso, 2009).[8]

Various indicators related to the development of non-price international competitiveness often lead to contradictory or inter-temporally non-comparable conclusions (e.g. due to the increase in the number of reviewed countries) and are highly dependent on the reference period. They pro-

7 REER indices are commonly associated, especially after 2004, only with the current account or with the goods balance including fuel and ships, but this may lead to false conclusions. The fuel and ships balances (the latter being separately calculated from 2002 onwards) played an important role in the deterioration of the goods balance during 2005-2008, but for reasons that are foreign to the decline in price competitiveness. In more detail, the deficit of the fuel and ships balances together has widened gradually, from 2.2% of the GDP in 2000 and 2.3% in 2004 to 7.1% in 2008 and 4.6% of the GDP in 2009.

8 These papers, however, do not distinguish between the effect of international competitiveness and the effect of structural competitiveness in respect to market shares.

vide useful indications nonetheless. Such indicators are e.g. global competitiveness indicators compiled by international organisations taking into consideration wider economic, social, institutional and technological factors, which contribute to the evolution of structural competitiveness. The comparative and inter-temporal development of two well-known indicators (those compiled by the Institute of Management of Development – IMD and the World Economic Forum – WEF) for Greece and its major trading partners over the period 1995-2009 leads to the conclusion that Greece's structural competitiveness is comparatively lower both within the euro area and globally.[9]

International competitiveness should be examined at the enterprise level too. Some of the key determinants of international competitiveness at the macroeconomic level are: easy access to the market, the size of the market, the technological level and the institutional framework. Of importance are also: the increase in domestic competitiveness, technological progress and export-orientation (also through the increase in foreign direct investment) with concurrent improvement in the administrative, institutional and tax framework. The improvement in relative prices and the remuneration of producers of international exportable goods to the expense of others (especially the wider public sector) are of great significance.

5. Conclusions

Common REER indices have disadvantages as well as limited interpretative and predictive power. Their comparison and evaluation does not yield a specific prevailing REER index, due to theoretical/analytical or empirical shortcomings. In the case of Greece, the inclusion in the compilation of REER indices of other data, such as the world trade in services, the breakdown by product and the general price level, affect the estimation of the cumulative loss in international competitiveness, albeit not in the same direction. Thus far, however, no other more consistent and reliable indicator has been adopted, mainly on account of the lack of adequate and comparable data for services. Despite their weaknesses, common REER indices give a general but clear picture of the development of Greek products' competitiveness in the domestic and the external market. Monitoring the evolution of REER indices, along with the development of other qualitative and quantitative factors of broader significance, is deemed necessary and useful, as it can provide strong indication of the development of macroeconomic, structural, institutional and other problems faced by Greece.

The narrowing of the current account deficit at a sustainable level dictates a goods and services balance not just in equilibrium, but in surplus. To achieve this, it is necessary to reduce the loss of international competitiveness in connection to prices and labour costs, which has been increasing almost non-stop for more than two decades now. At the same time, however, emphasis must be given to structural competitiveness, whose importance is growing with time because of the high and increasing degree of differentiation of the products exported worldwide. The fact that structural competitiveness is currently low means that domestic supply cannot efficiently meet the growth rate and the composition of both external and domestic demand, mainly for goods, whereby the trade deficit is created. The improvement in relative prices and a remuneration scheme in favour of sectors that produce competitive and internationally tradable goods, which began in 2010 with the reduction of the average earnings of the public sector, may contribute to reversing this situation.

9 According to the IMD indicator, Greece ranked 39th among 44 countries in 1995, 36th among 55 countries in 2007 and 52nd among 57 countries in 2009. According to the WEF indicator, Greece ranked 41st among 59 countries in 1999, 47th among 125 countries in 2006, 71st among 133 countries in 2009 and in 2010 it went further down, 83rd among 139 countries.

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V FISCAL DEVELOPMENTS AND PROSPECTS

1 SUMMARY OF DEVELOPMENTS AND PROSPECTS – RECENT DATA

According to the 2010 budget, which was adopted at end-2009, the general government deficit would decrease to 9.1% of GDP from the (then) estimated 12.7% of GDP for 2009 (subsequently the 2009 deficit was revised three times – initially to 12.9%, due to the bigger than expected shrinking of GDP, then to 13.6% by Eurostat on 22 April 2010 and to an even higher level on 22 October, as a result of a more comprehensive registering of deficit components). Due to adverse economic developments and the negative international environment, the government adopted more ambitious fiscal adjustment targets. According to the updated Stability and Growth Programme of January 2010, the general government deficit would decrease to 8.7% of GDP in 2010 and below 3% by 2012.[1] To this end, a package of fiscal measures was adopted on 3 March, which included new measures for revenue and expenditure.[2]

Due to escalating pressures in the bond market and the dramatic increase in borrowing costs,[3] on 23 April 2010 the Greek authorities addressed a formal request for financial aid to the euro area countries and the International Monetary Fund (IMF). On 2 May 2010, in the context of the Economic and Financial Policy Memorandum that was agreed upon with the European Commission, in cooperation with the ECB and the IMF, as well as in the context of the Economic Adjustment Programme (EAP)[4] adopted, fiscal adjustment was decided to become more frontloaded. Thus, the target for the general government deficit for 2010 came to 8.1% of GDP, against a revised (on the basis of the data back then) deficit of 13.6% of GDP in 2009. At the same time, the timeframe for fiscal consolidation was extended and the new target was to bring the deficit below 3% in 2014 (instead of 2013).

In order to attain the fiscal targets set in the EAP, an additional package of measures was adopted with the aim to directly reduce public sector expenditure and increase revenue.

At end-July/early August experts from the European Commission, the ECB and the IMF examined the realisation of the programme in order to evaluate the course of the Greek economy. According to a press release of 5 August and the relevant Ecofin Council decision, Greece made impressive progress[5] in promoting fiscal adjustment in the first half of 2010 and a series of structural reforms that will help reshape the Greek economy.

According to the Updated Memorandum (August 2010) and the recent evaluations of the European Commission and the International Monetary Fund, the general government deficit target for 2010 was reduced to 7.8% of GDP, due to the smaller than expected decrease in nominal GDP as a result of higher inflation. It must be pointed out that the Updated Memorandum provides for a specific quantitative target for the reduction of the general government deficit on a national accounts basis (according to the European system of accounts ESA 95) to around €18.5 billion, compared with €22.2 billion that was the target of the 2010 budget and 18.7 billion that was the original target of the EAP. This target (7.8%) for this year is also included in the Draft Budget of 2010.

However, latest data must be taken into account. Specifically:

1 It had initially been announced that fiscal adjustment in 2010 would be around 4 percentage points. However, because of the larger than expected shrink of GDP in 2009 (2% against 1.2%, as announced by NSSG on 12 February 2010) and the rise in the 2009 deficit to 12.9%, the targeted adjustment came to 4.2 percentage points of GDP.

2 For more information on the measures see *Annual Report 2009*, Chapter VIII, p. 106-107. On 25 March 2010, the Heads of State or Government of the euro area countries confirmed that they fully support the efforts of the Greek government and welcomed the additional measures that had been announced on 3 March, which they deemed sufficient for the attainment of the fiscal targets for 2010.

3 On 8 April 2010, the two-year bond spread reached 652 basis points and that of ten-year bonds came to 430 basis points.

4 The EAP was ratified by the Greek Parliament by virtue of Law 3845/2010 ("Measures for the application of the support mechanism for the Greek economy by euro area Member States and the International Monetary Fund").

5 In June the adjusted primary deficit of the general government on a cash basis was €4.26 billion against a ceiling of €5.0 billion, primary expenditure of the State Budget stood at €28.4 billion against a ceiling of €34 billion, the general government debt came to €316.7 billion against a ceiling of €342 billion and new central government guarantees amounted to €0.3 billion against a ceiling of €2 billion.

(a) The downward revision of real and nominal GDP: according to provisional data, real GDP of 2009 is 1.9% lower (compared with the previous estimate) and the deficit/GDP ratio, which was estimated at 13.6%, comes to 13.9%.

(b) The upward revision of the general government deficit of 2009 (it was expected to be announced by Eurostat on 22 October), which is the result of two changes: (i) the inclusion of certain deficit-running public enterprises in general government (mainly public transport and defence firms), together with other entities of the wider public sector, which were previously not considered such, according to the definitions of the European Accounts System, and (ii) the reassessment, on the basis of ELSTAT survey data, of the result of Social Security Organisations, which belong to general government and now record a small deficit, while on the basis of previous estimates they had a notable surplus. These changes increase the general government deficit of 2009.

(c) Because of the above, the *deficit/GDP* ratio of 2009 is revised upwards considerably.

Based on the new data:

- The revision of GDP itself implies that the quantitative target for the deficit in 2010 now corresponds to 8.0% of GDP (instead of 7.8%).

- What is most important, however, is that:

– (a) the general government deficit will rise because of the deficit of public enterprises and other entities that were added to this sector, but it will no longer be burdened with the forfeitures of loans taken by these enterprises (while amortisation payments *are not included* in the deficit) and,

– (b) it is questionable whether social security organisations will be able to record a surplus equal to the level mentioned in the Draft Budget, as they eventually recorded a small deficit last year (not a surplus of the order of 0.5% of GDP, as previously calculated).

Certain early approximate calculations suggest, on the basis of the above, that the GDP/deficit ratio could overshoot the target. As regards 2011, the target of the Draft Budget to reduce the general government deficit to 7.0% of GDP now corresponds to 7.2% of revised GDP. *It is possible, however, to prevent the deficit from reaching a higher level in 2011*, as:

- the implementation of the bill regarding the restructuring of OSE (Hellenic Railways Organisation) and its subsidiary TRAINOSE and the rationalisation of the operation of other deficit-running public enterprises is expected to lead to a reduction in their deficits, and consequently in the general government deficit, and

- the application of Law 3863 on the insurance system and the measures taken to deal with contribution evasion and on the reduction of pharmaceutical expenditure (provisions of Law 3840, Law 3846 and the bill on electronic prescribing) will noticeably improve the result of social security organisations.

In any case, in view of the revision of data on the deficit, it is self-evident that efforts to curtail public expenditure and increase revenue according to the Economic Adjustment Programme must be intensified, among others, by cutting down on discretionary expenditure and enhancing the performance of the tax-collection mechanism. Furthermore, there is a more imperative need to step up fiscal adjustment and promote institutional fiscal reforms, the crucial importance of which is underlined in Chapter I.

2 FISCAL DEVELOPMENTS DURING JANUARY-SEPTEMBER 2010 ACCORDING TO FISCAL DATA

Fiscal adjustment efforts are also evident in the results of the first nine months. Specifically, during January-September 2010 the state budget deficit (on an administrative basis, according to provisional data) reached €16,234 million, i.e. it was reduced by 31.2% against the first nine months of 2009, and declined to 7.0% of the revised GDP, from 10.1% in the corresponding period of 2009. In the same period, the primary deficit of the state budget was reduced to 2.0% of GDP from 5.5% in January-September 2009, i.e. by 64.2% (see Table V.1).

The reduction of the budget deficit in the first nine months of the year stemmed by 2/3 from the ordinary budget and by 1/3 from the public investment budget (PIB). This improvement is mainly attributable to the expenditure side of the state budget, which was reduced by 10.1%, against a targeted reduction of 7.6%. Specifically, primary expenditure came to €42.4 billion. It should be noted that primary expenditure amounted to €28.2 billion in the first half of the year, notably lower than the budgeted €32.4 billion and the performance criterion[6] for the ceiling on primary expenditure set in the state budget (€34 billion, also for the same period). In the first nine months of the year, state budget revenue increased by 3.4%, against an annual target of 10.3% in the draft budget.

The tax measures that have been announced and have gradually been applied are expected to yield full results in the next months. They are expected to lead to an increase in tax revenue by the end of the year. However, the deceleration of economic activity and the ongoing tax evasion will not allow attainment of the targeted increase in revenue for the entire year. This was one of the reasons that led the Ministry of Finance to initiate a settlement of pending tax cases and overdue debts (Law 3888/2010) expected to lead to an increase in tax revenue in 2010 and in the ensuing years (see also Section I.3).

The overall better than expected course of expenditure, together with the commitment of the government to reduce it by another €4 billion by end-2010 (through the curtailment of military, investment and operating expenses) in principle constitute the prerequisites for the achievement of the target regarding the deficit, even if revenue deviate from the target. Nevertheless, data suggest that there is no room for complacency and efforts should continue also on the side of expenditure, particularly in relation to the entities not included in central government (social security organisations, local government, public enterprises, educational institutions). Furthermore, as mentioned in the previous section, the revision of the deficit of 2009 implies that, in the remaining months of the year, additional efforts are required for the attainment of the targets for 2010.

It should be noted that, although progress in fiscal adjustment is being recognised by the international financial press and bank and international rating houses analyses, uncertainty in markets continues to be exceptionally high. Also, despite the recent positive evaluation by the IMF and the EU in their first progress reports of the Programme, Greek government bond spreads still remain high. Specifically, in mid-October the spread on ten-year bonds was below 700 basis points.[7]

Ordinary Budget Revenue

In the first nine months of the year, ordinary budget revenue (after tax refunds) rose by 3.7%, against an annual target of 8.7% in the draft budget. Detailed fiscal data for January-August show a shortfall in the growth rate of revenue from both direct and indirect taxes. However their growth rate is expected to accelerate in the last four months of the year, as it is estimated that about €2 billion or 0.9% of GDP will be collected from measures that have not been fully implemented yet. Non-tax revenue rose by 33% in January-August, a development mainly attributable to extraordinary revenue of €350 million from the programme

6 For more information on performance criteria see footnote 20.
7 Spreads remain high also because Moody's cut Greek credit rating by four notches on 14 June. As also stipulated in the economic adjustment programme, the Greek government raised €2,057 million on 13 July by selling Treasury bills with a maturity of 26 weeks and €2,498 million on 20 July by selling Treasury bills with a maturity of 13 weeks. However, the borrowing cost was much higher compared to previous issues.

Table V.1 State budget balance

(million euro)

	January-September			Percentage changes		Annual data					Draft		Percentage changes			
	2008	2009	2010*	2009/08	2010*/09	2007	2008	2009*	Budget 2010	Economic Policy Programme 2010**	Estimates 2010	Forecasts 2011	2008/07	2009*/08	Estimates 2010/09*	Forecasts/ Estimates 2011/10
I. Revenue	**39,931**	**36,609**	**37,867**	**-8.3**	**3.4**	**56,647**	**56,698**	**50,532**	**57,560**	**58,382**	**55,715**	**60,262**	**0.1**	**-10.9**	**10.3**	**8.2**
1. Ordinary budget – net income[1]	36,388	35,214	36,518	-3.2	3.7	49,152	51,680	48,491	53,700	55,124	52,700	56,340	5.1	-6.2	8.7	6.9
(of which extraordinary revenue)						-	-	1,128	280	280						
Revenue before tax refunds	*39,170*	*38,676*	*39,777*	*-1.3*	*2.8*	*51,775*	*55,334*	*53,443*	*58,350*	*60,224*	*57,800*	*61,140*	*6.9*	*-3.4*	*8.2*	*5.8*
Tax refunds	*2,782*	*3,462*	*3,259*	*24.4*	*-5.9*	*2,623*	*3,654*	*4,952*	*4,650*	*5,100*	*5,100*	*4,800*	*39.3*	*35.5*	*3.0*	*-5.9*
2. Public investment budget	3,543	1,395	1,349	-60.6	-3.3	4,872	5,018	2,041	3,860	3,258	3,015	3,922	3.0	-59.3	47.7	30.1
– Own revenue	3,307	111		-96.6		64	350	183	150	149	161	200	446.9	-47.7	-12.0	24.2
– Revenue from the EU	236	1,284		444.1		4,811	4,668	1,858	3,710	3,109	2,854	3,722	-3.0	-60.2	53.6	30.4
II. Expenditure	**52,157**	**60,188**	**54,101**	**15.4**	**-10.1**	**67,168**	**71,266**	**81,398**	**80,096**	**77,073**	**75,188**	**76,351**	**6.1**	**14.2**	**-7.6**	**1.5**
1. Ordinary budget[2]	45,607	52,383	48,663	14.9	-7.1	55,742	61,642	71,810	69,796	67,873	66,188	67,651	10.6	16.5	-7.8	2.2
– Interest payments	10,134	10,793	11,652	6.5	8.0	9,791	11,207	12,325	12,950	13,017	13,209	15,800	14.5	10.0	7.2	19.6
– Ordinary budget primary expenditure	35,473	41,590	37,011	17.2	-11.0	48,574	50,435	59,485	56,846	54,856	52,979	51,851	3.8	17.9	-10.9	-2.1
2. Public investment budget	6,550	7,805	5,438	19.2	-30.3	8,803	9,624	9,588	10,300	9,200	9,000	8,700	9.3	-0.4	-6.1	-3.3
III. State budget balance	**-12,226**	**-23,579**	**-16,234**	**92.9**	**-31.2**	**-10,521**	**-14,568**	**-30,866**	**-22,536**	**-18,691**	**-19,473**	**-16,089**	**38.5**	**111.9**	**-36.9**	**-17.4**
% of GDP	-5.2	-10.1	-7.0			-4.7	-6.2	-13.2	-9.2	-7.9	-8.4	-6.9				
1. Ordinary budget	-9,219	-17,169	-12,145			-6,590	-9,962	-23,319	-16,096	-12,749	-13,488	-11,311				
2. Public investment budget	-3,007	-6,410	-4,089			-3,931	-4,606	-7,547	-6,440	-5,942	-5,985	-4,778				
IV. State budget primary surplus	**-2,092**	**-12,786**	**-4,582**	**511.2**	**-64.2**	**-730**	**-3,361**	**-18,541**	**-9,586**	**-5,674**	**-6,264**	**-289**	**360.4**	**451.7**	**-66.2**	**-95.4**
% of GDP	-0.9	-5.5	-2.0			-0.3	-1.4	-8.0	-3.9	-2.4	-2.7	-0.1				
Amortisation payments	24,883	28,676	18,616	15.2	-35.1	22,544	26,246	29,135	19,510	22,375	19,504	27,625	16.4	11.0	-33.1	41.6
Ministry of National Defence programmes for the procurement of military equipment	1,291	1,402	246	8.6	-82.5	2,129	2,596	2,175	2,000	1,800	1,500	1,600	21.9	-16.2	-31.0	6.7

Source: Ministry of Finance.
* Provisional data.
** Updated Stability and Growth Programme published in January 2010, revised on the basis of additional measures announced by the Greek government within the framework of the financial support mechanism for the Greek economy by the International Monetary Fund and the European Union.
1 Including: **2007**: "notional" revenue of €437 million from the settlement of positions vis-à-vis Olympic Airlines;
2009: revenue from special accounts (now abolished), amounting to €1,088 million, as well as revenue from the liquidity support package, amounting to €47 million;
2010: revenue from the liquidity support package, amounting to €485 million.
2 Including: **2007**: "notional" expenditure of €840 million from the settlement of positions vis-à-vis Olympic Airlines, as well as additional contributions to the Community Budget (€1,108 million) due to the upward revision of past GDP figures;
2008: payment of €710 million to the Insurance Funds of DEH's personnel in exchange for property;
2009: payments out of special accounts (now abolished), amounting to €827 million, expenditure of €522 million for the Intergenerational Solidarity Fund, an amount of €311 million paid to the National Fund for Social Cohesion (home heating subsidies to pensioners entitled to the Social Solidarity Allowance (EKAS), unemployed and disabled persons), an extraordinary social solidarity aid amounting to €358 million, payments of €294 million to Olympic Airlines following an arbitration decision, of €1,498 million to hospitals, as well as election expenditure amounting to €266 million.

for the support of bank liquidity due to the financial crisis.

Revenue from direct taxation decreased by 6.8% in the first eight months of the year, thereby recording a shortfall against the targeted decrease of 0.1%. All direct tax categories recorded a decrease, with the exception of extraordinary taxes due to receipts from the extraordinary contribution imposed on the profits of large enterprises for accounting year 2008. Specifically:

- Revenue from personal income tax declined by 9.7%. Lower receipts in this category are attributable to lower earnings for public sector employees and pensioners as well as reduced employment. However, the reduction is partly due to delays observed in the dispatch of tax payment notifications by the Ministry of Finance; it is expected that this will be reversed in the next few months of the year. Revenue from the taxation of interest on deposits also decreased considerably (-12.0%), as a result of the reduction in deposits (see Chapter VI).

- Revenue from corporate income tax declined by 10.5% compared with the previous year, mainly owing to the reduced profitability of enterprises in 2009. This tax does not fall short of the targets of the Draft Budget.

Receipts from the taxation of inheritance, donations and parental gifts decreased because of the delayed dispatch of notifications for the payment of the Single Tax on Real Estate (ETAK) for 2010, which is expected to yield €400 million by the end of the year.

Receipts from direct taxation of previous years have recorded a large shortfall due, on the one hand, to the delayed dispatch of payment notifications for the collection of ETAK for 2009, and on the other, to the extended deadline (until end-June) for the submission of tax returns and the payment of overdue tax without penalty and of overdue debts with a 80% reduction in increments. This picture is expected to be reversed in the next few months, due to increased receipts from ETAK 2009 by €350 million (€220 million had already been collected up to August) and receipts from overdue debts. This category of revenue is expected to increase also because of the settlement of pending tax cases (Law 3888/2010).[8]

Other direct taxes do not display a shortfall, as €836 million has already been collected from the extraordinary contribution imposed on the profits of large enterprises. They are also expected to increase further by the one-off extraordinary contribution of those natural persons whose annual income in 2009 exceeded €100,000 and the collection of the extraordinary contribution of those natural persons whose real estate property exceeds €400,000. Consequently, in the last months of 2010 revenue from direct taxation is expected to increase significantly.

The significant increase (by 6.0%) in revenue from indirect taxation in the first eight months of the year largely reflects the effect of tax measures which were taken in the second half of 2009 and the first half of 2010. However, indirect taxes present a large shortfall in relation to the targets of the draft budget (increase by 11.8%). The course of this revenue is expected to improve in the last months of 2010, as many of the measures of 2010 have not yet yielded results. In any case though, continuing tax-evasion and reduced economic activity negatively affect the attainment of these targets.

In greater detail, VAT receipts in January-August have recorded a marginal increase by 1.6%. From the beginning of the year VAT rates have increased twice. The first increase, from 19% to 21% for the high rate and from 9% to 10% for the low rate, took effect on 15 March, while the second increase, from 21% to

8 Tax amnesty for unaudited accounting years was first activated as a mechanism for the increase in revenue in 1978. Since then this mechanism has been employed by many administrations in order to raise tax revenue. This is the tenth time that the measure is being activated and involves pending tax cases of the past ten years.

23% and from 10% to 11%, took effect on 1 July. Consequently, revenue of this category has been affected by the increase in tax rates. It should however be noted that the first increase yielded results for only 4.5 months, while the second for a very short period of time. Small enterprises and professionals pay VAT on a quarterly basis, hence the second increase has had no effect on revenue until now. On the other hand, revenue of this category has been positively affected by the measure of receipts. Consequently, in the rest of the year, VAT revenue is expected to rise because of the second increase in the tax rates (in September this revenue rose at an annual rate of about 17%, according to the Ministry of Finance). It is worth noting that, according to the draft budget, the double increase in the rates would raise annual VAT receipts by 5.8%.

Receipts from indirect taxation rose considerably after the increases in special consumption taxes on fuel, tobacco and alcohol. Specifically, revenue from the taxation of tobacco rose by 7.5%, while revenue from the taxation of alcohol rose by more than 30%, reflecting successive increases in the special consumption tax in January, March and May. It is noted that the third increase in the tobacco tax has not yet been passed on to consumers. Finally, revenue from the taxation of liquid fuel rose by 25.7%, a development associated with the three increases in the special consumption tax on fuel in 2010. In spite of their notable increase, revenue of this category recorded a shortfall in relation to the annual target of the draft budget (36.1%). The evolution of revenue from this tax for the rest of the year will depend to a large extent on the demand for heating oil and the course of economic activity.

Non-tax revenue has increased noticeably as a result of the collection of extraordinary revenue of €1.1 billion, €353 million of which stem from the liquidity support programme and €766 billion from the abolition of special accounts.

Finally, tax refunds decreased by 5.9% in January-September 2010 in relation to the corresponding period of 2009 (against a targeted increase of 3.0%), due to increased tax refunds in January-September 2009 aimed at enhancing economic activity (base effect).

On the basis of the above, it is estimated that the course of revenue will improve significantly in the remainder of the year, though the targeted increase in annual revenue will not be easy to attain. Lower economic activity and the risk that the so-called "receipts movement" may fall into disuse, make the enhancement of tax controls more imperative in order to address tax-evasion phenomena.

Ordinary Budget Expenditure

Ordinary budget[9] expenditure decreased in the first nine months of the year by 7.1%, against a 14.9% increase in the respective period of 2009, while the draft budget forecast a 7.8% decrease for the entire year. The containment stems mainly from primary expenditure, which was reduced by 11.0%,[10] against a targeted (in the draft budget) reduction of 10.9% in the whole of the year. By contrast, interest payments increased by 8.0% in January-September 2010, against a targeted annual increase of 7.2% (see Table V.I).

The containment of primary expenditure was the result of successive measures taken in January-September in order to address the fiscal crisis. Available detailed data for January-August show that this containment is mainly found in:

• Personnel outlays, which declined by 6.5%, against a 9.3% increase in the corresponding period of 2009. It is noted that it is the first time in decades that this category of expenditure has recorded a decrease. This develop-

9 Ordinary budget expenditure does not include tax refunds, which are deducted from revenue. This practice has been followed by the Ministry of Finance in recent years.

10 Ordinary budget primary expenditure also includes grants to hospitals for the repayment of part of their old debts.

ment is attributable to the measures regarding the freezing of recruitments, the non-renewal of fixed-term contracts, the freezing of increases in wages and pensions in 2010, a 20% curtailment in civil servants' allowances, a 30% curtailment of the Easter allowance and abolition of the holiday allowance for civil servants and pensioners (and its replacement with allowances only for employees and pensioners whose earnings are low and moderate), curtailment of payments for overtime employment and lower remuneration for participation in committees, and finally ceilings on remunerations in the public sector. The measures have not yet had full effect, as some of them were taken in May and have not affected the results of the reviewed period (such as the abolition of the Easter and the Christmas allowances and their replacement with allowances of €200-250 and €400-500 respectively,[11] and the lowering of higher pensions).[12]

- Outlays for grants (mainly to social security funds), which declined by 11.6% in January-August 2010 against the corresponding 2009 period, when they had recorded an increase by 27.3%. This development is attributable to the curtailment (by 10%) of grants to the social security funds of the Hellenic Telecommunications Organisation (OTE) and the Public Power Corporation (DEH), as well as the annulment of the largest part of the second installment of the extraordinary social solidarity aid.

- Consumption and other expenses, which decreased by 54% in January-August, against an increase of 34.9% in the corresponding period of 2009. This development is also attributable to the curtailment of expenses for procurements and travels, as well as the €100 million cut of the initial 2010 budget item, which concerned new programmes of the Ministry of Education.

Public Investment Budget

In the first nine months of the year the Public Investment Budget deficit stood at €4,089 million or 1.8% of GDP, against a deficit of 2.8% of GDP in the corresponding period of 2009 (see Table V.1). Given that Public Investment Budget revenue was reduced by 3.3%, the containment of the deficit is exclusively attributable to the reduction (by 30.3%) of investment outlays, against a 19.2% increase in the previous year. This development is attributable, on the one hand, to the fact that these outlays had recorded a large increase (40.1%) in the first half of 2009, due to the expiry in June 2009 of the deadline for the absorption of funds from the Third Community Support Framework and, on the other, to the curtailment of Public Investment Budget expenditure three times between January and September 2010 (by €600 million with the March measures, by a further €500 million with the Economic Adjustment Programme and then by another €200 million). As a result, the annual target for expenses under the Public Investment Budget came to €9,000 million (from the initial €10,300 million), while the Updated Memorandum points to a potential further reduction to €8,200 million.

3 NET BORROWING REQUIREMENTS ON A CASH BASIS DURING JANUARY-SEPTEMBER 2010

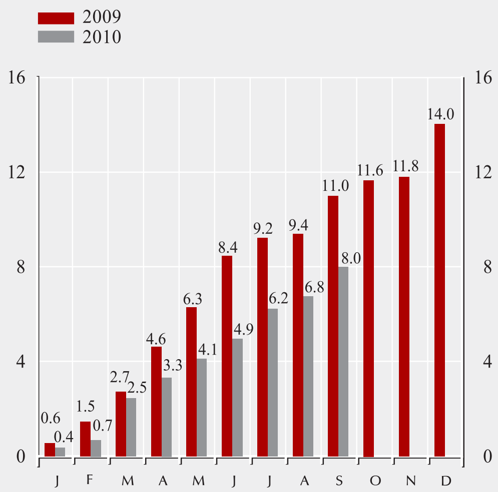
During January-September, the central government cash deficit excluding the OPEKEPE account was €18,504 million or 8.0% of the revised GDP, against 11.0% of GDP in the corresponding 2009 period, i.e. it narrowed by

11 Specifically, Law 3845/2010 provides for the payment of Christmas, Easter and holiday allowances of €500, €250 and €250 respectively to public sector employees whose earnings (including these allowances) do not exceed €3,000 per month (on a twelve-month basis), as well as the payment of Christmas, Easter and holiday allowances of €400, €200 and €200 respectively to general government and main insurance fund pensioners (excluding OGA) whose pensions do not exceed €2,500 per month (again, including these allowances and on a twelve-month basis). Law 3863/2010 adds that in the case in which the pensions paid (calculated on a twelve-month basis) fall short of €900 per month, the allowances are readjusted to €500, €250 and €250, respectively.. In case excesses of the above limits are observed, the allowances are paid up to the respective limits.

12 According to laws 3863/2010 and 3865/2010, the Pensioners Solidarity Contribution is introduced as from 1 August 2010. The Contribution is kept in financially and accounting-wise independent account with the Intergeneration Solidarity Fund. The Contribution is withheld monthly from main insurance pensions exceeding €1,400 on the basis of progressive rates varying from 3% to 10% (see Box V.2).

Chart V.1 Net borrowing requirement of central government on a cash basis (January 2009 - September 2010)

(percentage of GDP)



Source: Bank of Greece.
"Monthly" data refer to the cumulative sum of the period from the beginning of the year up to the reference month. Not including the balance of the OPEKEPE account.

27.7% year-on-year (see Chart V.1 and Table V.2). Moreover, the primary cash deficit of the central government (i.e. the cash deficit excluding interest payments) was €6,858 million or 3.0% of GDP, against 6.4% of GDP in the corresponding 2009 period, i.e. it was reduced by 53.8% year-on-year.

The significant narrowing of the cash deficit in the first nine months of 2010 is in line with fiscal data; in other words, it is chiefly attributed to the curtailed public spending and the positive contribution of increased revenue. In particular, state budget expenditure decreased by 12.3% during January-September 2010, while in the corresponding 2009 period it had increased by 16.8%. Ordinary budget expenditure declined by 9.7%, having increased by 16.4% in the corresponding period of 2009, whereas public investment budget expenditure was reduced by 30.3%, having increased by 19.2% in the corresponding 2009 period. State budget revenue rose by 3.3% in the first nine months of 2010,

Table V.2 Net borrowing requirement of central government on a cash basis[1]

(million euro)

	Year		January-September		
	2008	2009	2008	2009	2010*
1. State budget	**17,361**	**32,622**	**13,911**	**25,603**	**18,504**
Percentage of GDP	7.4	14.0	5.9	11.0	8.0
– Ordinary budget[2]	12,585[4,5]	25,318[6]	10,834	19,236	14,477
– Public investment budget	4,776	7,304	3,077	6,367	4,027
2. ELEGEP – OPEKEPE[3]	**-254**	**-1,778**	**-2,258**	**-1,922**	**274**
3. Central government (1+2)	**17,107**	**30,844**	**11,653**	**23,681**	**18,778**
Percentage of GDP	7.3	13.2	4.9	10.2	8.1

Source: Bank of Greece.
* Provisional data.
1 As shown by the respective accounts with the Bank of Greece and other credit institutions.
2 Including movements in public debt management accounts.
3 Payment and Control Agency for Guidance and Guarantee Community Aid. It replaced DIDAGEP (Agricultural Markets Management Service) as from 3 September 2001.
4 Including proceeds of €430.8 million from the sale of OTE shares, as well as expenditure for a grant of €570.8 million to OGA, but excluding the payment of Greek government debt to the Social Insurance Fund (IKA) by the issuance of bonds (€1,172 million).
5 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 were interest payments not reflected in the cash data of the Bank of Greece. If the latter amount is included in interest payments, the net borrowing requirement of the State budget rises from 7.4% to 7.5% of GDP and the net borrowing requirement of central government from 7.3% to 7.4% of GDP.
6 Excluding expenditure of €3,769 million for the acquisition of preference shares of Greek banks pursuant to Law 3723/2008 providing for banks' capital support and of €1,500 million for the issuance of bonds to cover the capital increase of the Guarantee Fund for Small and Very Small Enterprises (TEMPME), but including revenue amounting to €673.6 million from the sale of OTE shares, of €72.3 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.

having fallen by 8.2% in the corresponding period one year before. This increase is due to the rise in ordinary budget revenue by 3.5%, against a 3.4% drop in the corresponding 2009 period. Public investment budget revenue in the first nine months of 2010 was reduced by 1.9%, compared to a 58.6% reduction in the corresponding period one year before.

4 PUBLIC DEBT AND NEW DATA FOR 2009

The evolution of public debt (as a percentage of GDP) over time reflects the chronic macroeconomic imbalances of the Greek economy. It provides an indicator of the macroeconomic outlook of a country, which is affected by (i) the fiscal policy as reflected in the evolution of its primary fiscal results, (ii) the pace of economic growth, and (iii) the country's standing in terms of the domestic and the international financial environment, as reflected in the evolution of borrowing rates that affect interest payments.

In Greece, public debt as a percentage of GDP stands at levels higher than 99.0% for the last 15 years. The rapid growth of the Greek economy (since 2000), low interest rates (up until 2005) combined with primary surpluses (up until 2002) and revenue from privatisations (mainly from 1996 onwards) were not enough to counterbalance the creation of non-general-government deficits in order to ensure the reduction of public debt over time.

The inherently high public debt levels are indicative of the serious structural problems of the Greek economy in general and of public finances in particular and are directly associated with fiscal management problems. These are related, on the one hand, with ineffective polices in respect to revenue and tax management[13] and, on the other, with the significant and uncontrolled increase in expenditure, which mainly reflects a lack of discipline and the inability to monitor and control the expenditure, resulting in the creation of new debt on top of the existing one.

These weaknesses have contributed heavily to the debt, which in 2009 reached 115.1% of GDP and in 2008, 99.2% of GDP, according to Eurostat estimates released in April 2010. As per these estimates, the contribution of primary deficit to the increased debt-to-GDP ratio was 8.5% of GDP in 2009, the effect from the change in GDP and in interest rates 5.4% and the "deficit-debt adjustment"[14] 2.0%. However, the same Eurostat news release[15] pointed out back then that the debt-to-GDP ratio might be revised upwards to 122%.

The Draft Budget takes into account a slightly revised estimate, according to which the debt-to-GDP ratio was 99.5% in 2008 and 115.4% in 2009. However, on the basis of the new figure for GDP, these ratios now have risen to 100.94% and 117.65% respectively. Moreover, according to new estimates that the Eurostat was expected to release on 22 October (i.e. after the publication of this Report), the debt-to-GDP ratio for these years has been revised significantly upwards, as debt now includes, *inter alia*, the debt of public enterprises and other entities which, as mentioned in Section 1 of this chapter, have been reclassified into the general government. It should be mentioned that the debt of these public enterprises relates to loans that have been obtained under state guarantee and have been included in the introductory reports to the state budget.

In 2010, the debt is also expected to increase on account of the funding of the Financial Stability Fund (an amount that is not part of the deficit) and the outstanding debts of hospitals for 2005-2008.[16]

13 Resulting in extensive tax evasion and problems with the collection of revenue.
14 "Deficit-debt adjustment" refers to public transactions which, although not recorded in the deficit, increase public debt.
15 See Eurostat news release 55/2010 of 22 April 2010.
16 As per Law 3867/2010, outstanding debts for the years 2007, 2008 and 2009, up to the amount of €200,000 will be paid up immediately. All other outstanding debts will be paid through the issuance of zero-coupon bonds. In particular, for the outstanding debts of 2007 (€1.1 billion), one-year bonds will be issued within 2010. For the outstanding debts of 2008 (€2.2 billion), 2-year bonds will be issued and for the outstanding debts of 2009 (€2.04 billion), 3-year bonds will be issued within 2010.

As regards debt dynamics, according to IMF's first review of the Economic Adjustment Programme, the public-debt-to-GDP ratio is expected to peak in 2013 and start declining gradually from 2014 onwards.[17] To begin with, the upward revision of the debt in 2009 would entail a substantial upward revision of these forecasts too. **However, it is possible and necessary to deter such an unfavourable outlook**, in three ways:

(i) by speeding up fiscal adjustment, i.e. narrowing the primary deficit more and achieving larger primary surpluses sooner;

(ii) by expediting privatisations (starting from the restructuring of OSE and TRAINOSE according to the draft law) and making more effective use of public sector real estate (see Chapter VII, Special Features 3 and 5);

(iii) by taking structural measures that will enhance growth in a co-ordinated way (without budgetary cost), accelerating economic recovery and creating the conditions for satisfactory and sustainable GDP growth.

It is therefore clear that in order for public debt to decrease, decisions addressing both the structural problems of the Greek economy and the problems that are associated with fiscal management are required.[18] In this way, the conditions for public and private sector productivity growth will be created.[19] This will be one of the main drivers of (i) economic growth and (ii) the control and improvement of public finances, which in turn is a prerequisite for the reversal of the upward trend of public debt.

5 THE ECONOMIC ADJUSTMENT PROGRAMME

On 2 May the European Union, the ECB, the IMF and the Greek authorities reached an agreement on a comprehensive package of economic policy measures for the period 2010-2013, in order to restore macroeconomic stability and achieve sustainable macroeconomic growth; formal financing will thus amount to €110 billion. A key aim of this programme is restoring confidence in the outlook of the Greek economy and achieving sustainable economic adjustment. This will be attained by immediate fiscal consolidation based on measures that (i) save on public expenditure and (ii) enhance the ability of the government to collect revenue. At the same time, the quantification and specification of measures for 2011 and 2012 is stipulated, with a view to ensuring continuation of fiscal adjustment, restoring confidence in the economic outlook and the credibility of the economic policy pursued.

Financing, according to the programme, will be provided by euro area countries and the IMF. The ECOFIN Council validated the programme and approved bilateral loans of €80 billion by euro area countries. The IMF Council approved a Stand-By Arrangement of €30 billion. The funds will be disbursed in 13 installments (from May 2010 up to April 2013) provided that implementation of the programme sticks to the schedule and the quantitative performance criteria are fulfilled.[20] The Memorandum of Understanding on Specific Economic Policy Conditionality mainly defines the structural policies included in the Memorandum of Economic and Financial Policies and sets the specific timetable for their implementation.

17 See IMF, *Greece – First Review under the Stand-By Arrangement*, 14 September 2010.

18 The new organic budget law that was passed by Parliament on 29 July 2010 is a first step in this direction, see Box V.1.

19 The increase in productivity is connected to any and all structural changes that aim at improving the business environment and creating motives for new investment. The Bank of Greece has repeatedly pointed to the necessity of such changes, related to e.g. the labour market and the opening up of closed-shop professions, with a view to creating a healthy and competitive business environment that will guarantee investment, lower prices, jobs and unhindered economic growth.

20 The progress of policy implementation in the framework of the programme will be monitored by setting quarterly (and continuous) quantitative performance criteria as well as indicative targets, structural points of reference, by revising the programme and making provisions. Quantitative targets up to December 2010 are considered such criteria. Targets for the period 2011-2013 are indicative and will be considered quantitative performance criteria for 2011 in the second revision of the programme, before the end of 2010. The criteria are: (1) the ceiling on the adjusted primary deficit of the general government on a cash basis (performance criterion), (2) the ceiling on primary expenditure of the State Budget (performance criterion), (3) the ceiling on the accrual of new general government overdue debt (continuous indicative target), (4) the ceiling on the general government debt stock (performance criterion), (5) the ceiling on new central government guarantees (performance criterion) and (6) the non-accrual of general government overdue external debt (continuous performance criterion).

On 6 May the Greek Parliament passed a package of fiscal and economic policy measures that are part of the economic and fiscal policy programme, among which the increase in VAT and special consumption taxes, as well as further cuts in public sector wages and pensions.[21] Moreover, a package of structural changes in support of fiscal adjustment is stipulated.

On 18 May, euro area countries disbursed the first installment, amounting to €14.5 billion, following the disbursement of €5.5 billion by the IMF. The next installment, amounting to €9 billion (€2.5 billion from the IMF and €6.5 billion from the euro area), according to the Economic Adjustment Programme, was disbursed at the beginning of September, after the assessment of the progress as to the actions that were to be taken by 30 June 2010 was made.

The third installment, of a corresponding amount (€2.5 billion from the IMF and €6.5 billion from the euro area) is expected by the beginning of December, after the assessment of the progress as to the actions that were to be taken up until 30 September is made. The fourth installment, amounting to €15 billion (€4.1 billion from the IMF and €10.9 billion from the euro area), will be disbursed by the beginning of March 2011, after the progress achieved up until 31 December 2010 is assessed.

5.1 FISCAL POLICY

The Economic Adjustment Programme requires very extensive fiscal adjustment. The fiscal deficit is expected to narrow from almost 14% of GDP in 2009 (according to first estimates) to below 3% of GDP in 2014. Reflecting international experience, the adjustment is based by 2/3rds on expenditure. Expenditure will be cut by an amount that equals about 7% of GDP until 2013 and revenue will increase by about 4% of GDP until 2013.

The extent of fiscal consolidation required during 2010-2013 exceeds by far the saving of resources from the required reduction in public deficit. Compared with a scenario of unchanged policies (in which the public deficit would increase, reflecting *inter alia* a decrease in real GDP, increased interest payments, unemployment benefits, subsidies to pension funds and ailing public utilities, public sector wages and pensions), this will require fiscal measures of 13% of GDP during 2010-2014, apart from those already in place in 2010 (which are estimated by the EU to 5.5% of GDP). Such a large-scale adjustment is necessary to set the debt-to-GDP ratio on a downward track from 2014 onwards (although it will still remain higher than its 2009 level by more than 30 percentage points) and keep it at this level after the programme expires, through the achievement of significant primary surpluses (at least 5% of GDP) until 2020.

Fiscal consolidation is intensely front-loaded. After the implementation, in 2010, of measures that correspond to 8% of GDP (including the ones announced up until March 2010), consolidation measures corresponding to 4% of GDP (including the balance carried forward) will be implemented in 2011. The adjustment will be smaller —between 2% and 2.5% of GDP— in 2012, 2013 and 2014.

The toughest measures will be passed and implemented first. The three most important, imminent measures are the cuts in public sector wage bill expenditure and public sector pension expenditure, as well as the further increase in VAT by 10%. These measures, combined with the ones that have been into force since the beginning of March, are yielding additional savings of around 2.5% of GDP, from 2010 already.

These are structural measures. From the total package, only a few (corresponding to about 1.5% of GDP) are one-off or temporary measures. Moreover, **the measures are fully outlined**. All the measures for 2010 and 2011 and almost

21 Furthermore, on 6 May 2010, the ECB approved of temporary measures on the eligibility criteria for marketable debt instruments issued or guaranteed by the Greek government (to be used as collateral in Eurosystem refinancing operations). Despite all these, on 7 May 2010 the spread of two-year bonds climbed to 1,739 basis points and of ten-year bonds to 1,287 basis points.

all measures for 2012 have been outlined in collaboration with the Greek authorities and have been carefully quantified.

More specifically, for 2010 the programme envisages measures that amount to almost 2.5% of GDP: revenue collection measures will produce 0.5% of GDP and the cuts in expenditure 1.9% of GDP. In 2011, revenue collection measures will provide 2.9% of GDP and the cutting of expenditure 1.2% of GDP, i.e. total saving will amount to 4.1% of GDP. In 2012 and 2013, revenue collection measures are expected to bring in amounts equivalent to 0.7% and 0.3% of GDP respectively and from the cutting of expenditure amounts equal to 1.7% and 2.3% of GDP are anticipated.

5.2 INSTITUTIONAL FISCAL REFORMS

The Economic Adjustment Programme targets a series of institutional reforms that will have a positive fiscal effect, supporting the fight against public fund squandering, tax evasion and corruption, such as:

- Significant reforms that will enhance the state budget management system and the fiscal framework (with the aid and technical support of the IMF – see Box V.1).

Box V.1

FISCAL MANAGEMENT AND RESPONSIBILITY

Law 3871/2010 on fiscal management and responsibility introduces modern fiscal rules and principles that will assist in reforming the fiscal system and contribute to fiscal consolidation through the control[1] and the targeted reallocation of public expenditure, leading to a reduction in the cost of government services and a rational utilisation of public resources.

The law aspires to lead to "top-down" budgeting, by clarifying the roles of the involved parties and attaching responsibility to those who manage public funds, thus facilitating the parliamentary audit function through transparent procedures.

Fiscal management must be governed by the principles of (i) prudent management, (ii) responsibility and accountability, (iii) transparency, and (iv) sincerity. Fiscal rules aim at maintaining and enhancing fiscal stability and relate to the efficient control of revenue and expenditure with the introduction of a double-entry system that will record public sector transactions better, among other things, dividing them into receipts and payments. More specifically, fiscal rules refer to the control of public debt and the setting of quantitative targets, such as (i) a minimum acceptable limit for the primary surplus and for revenue as a percentage of GDP, as well as (ii) the method and procedure for the adjustment of expenditure to revenue.

The law introduces a simplified, standardised accounting plan, which will be in line with international standards for the public sector and will record all cash movements. It also introduces the gradual recording of central government's fixed assets.

The Hellenic Parliament Budget Office is thus enabled to monitor the implementation of rules, providing the Parliament with the technical support required to complete the task of passing the budget.

1 All expenditure and revenue of the State, primary and secondary local authorities and other legal entities in public law shall be subject to audit by the Court of Audit, pursuant to international accounting standards.

Special emphasis is given to the powers and duties of the Minister of Finance and the State General Accounting Office (GAO): The Minister of Finance is vested with the power and authority to exercise the general management of central government finances, as well as to coordinate and supervise general government finances. This, of course, comes with a series of responsibilities (also falling within the responsibilities of the GAO), such as submitting to the Parliament a medium-term Fiscal Strategy Framework for every financial year. This will include both the time-schedule of general government's and its entities' medium-term goals as well as an evaluation and outline of fiscal and macroeconomic developments and prospects. It will also determine the compliance of annual budgets with the long-term Fiscal Strategy Framework.

Moreover, the Minister of Finance and the GAO are responsible for preparing and submitting to the Parliament the preliminary and the draft State Budget, annual budgets for the general government, supplementary budgets if so required, the Review, the Balance Sheet and other financial statements. The Minister of Finance must submit to Parliament a report[2] (which will be disclosed afterwards) on the fiscal developments of the general government, determine the standards, regulations and procedures governing fiscal management and supervise the programmes that are financed by the European Union and other international bodies, whose management comes under the GAO.

2 Similarly, the GAO must also prepare monthly, quarterly and biannual reports on the execution of annual budgets and general government entities.

- Further reforms to and simplification of the tax system, along with improvements in tax administration (with the aid and technical support of the IMF).

- The re-evaluation, with the aid and technical support of the IMF, of the operational framework and the risk management framework in respect to debt management, so as to increase transparency and predictability as regards public authorities' actions.

- Enhanced provision of information on the public sector, including statistical data.

- Materialisation of the ambitious plan for the reform of the pension system, with a view to ensuring the long-term sustainability of public finances (see Box V.2).

Box V.2

THE PENSION SYSTEM REFORM

- In line with the Economic Adjustment Programme, two laws were passed in July 2010.[1] The main changes brought about by these laws relate to the method of pension calculation and the retirement age limits.

- Specifically, as of 1 January 2015, a pension shall consist of two parts: (i) the main part, which will be independent of the history of social security contributions and shall also be paid to those with insufficient social security contributions, provided that they meet the age, income and residence in Greece criteria; (ii) the proportional part, which will be calculated (as from 1 January

1 "New social security system and relevant provisions, arrangements in work relations" (Law 3863/2010, passed on 12 July 2010) and "Reform of the public sector social security system and relevant provisions" (Law 3865/2010, passed on 15 July 2010).

2011) on the basis of the average pensionable earnings of the entire working life.[2] In addition, as from 2014, pensions will be adjusted annually using a co-efficient 50% determined by the change in GDP and 50% by the change in the Consumer Price Index of the preceding year.

- As to retirement age limits and recognised years of work, the new system determines that the minimum retirement age will be 60 years for all employees (both men and women), requires 40 years of social security contributions for a full pension and reduces pension by 6% per year for those retiring before 65 with less than 40 years of contributions. Moreover, the two age limits (60 and 65 years) will be adjusted in the future on the basis of life expectancy. According to estimates of the General Accounting Office of Greece, these measures will reduce expenditure by €331.4 million in 2011 and by €730 million from 2015 onwards.

- At the same time, other provisions introduce changes in many sectors, including:

As from **2010**:

- The social security system. Primary and secondary healthcare services of the NHS, social security bodies under the General Secretariat for Social Security and the Sailor's House become integrated and operate as a single system.

- Pension incomes. Introduction, as from 1 August 2010, of a special levy, the Pensioners' Solidarity Contribution, which is kept in an account with the Intergeneration Solidarity Fund and enjoys financial and accounting independence.

- Voluntary retirement schemes. They are abolished.

- Employed pensioners. Uniform rules now apply to employed pensioners, leading to a reduction in their pension – or even its suspension for those under 55 years of age.

- Widower's pensions. Stricter terms apply to widower's pensions and pensions to unmarried and divorced daughters are abolished.

- A labour ticket. A new method of payment (a labour ticket or "ergosimo" in the form of a cheque) is applied to the occasionally employed personnel (paid by the hour or day) and to the land workers of the Agricultural Insurance Fund (OGA), in order to reduce undeclared work and contribution evasion.

As from **2011**:

- Those who continue to work after the completion of 35 pensionable years (for those who establish retirement rights by 31 December 2010) will receive increased pension.

- The successive insurance regime will be amended with retroactive validity from 2006 or 2007.

- A new list of arduous and hazardous occupations will apply as from 1 July 2011.

2 The monthly pension is calculated for every full social security year on the basis of uniform percentages of pensionable earnings (average monthly earnings during the working life).

• A stricter institutional framework will apply to the award of disability pensions, while the numerous disability certification committees currently in operation will be abolished and a single Disability Certification Centre will be established within IKA-ETAM.

• Pensions, all benefits, wages and any other payments by social security funds will be made exclusively through the banking system and the Hellenic Post Office. The same applies to the collection of social security contributions.

• The healthcare branch of IKA will enjoy financial and accounting independence.

• It is worth noting that the Economic Adjustment Programme includes the following "safety valve": If an actuarial study shows that the anticipated results of the reform fall short of the target of increased pension expenditure up to 2.5% of GDP by 2060, *then a Ministerial Decision may further reduce the relevant expenditure by combined adjustments to parameters of the system, the basic pension and auxiliary pensions, in order to achieve the final goal.*

• Healthcare sector reform.

• Modernisation of the public administration, e.g. re-engineering recruitment processes, completing the single authority for the payment of wages (single payment authority), introducing a simplified wage system, improving procurement procedures so as to enhance efficiency and ensure transparency and restructuring local governments through the "Kallikratis Programme" with the purpose of reducing their number.

• Improved management and privatisation of public enterprises.

• Improved absorption of funds from the Structural Funds and the Cohesion Fund.

6 THE IMPLEMENTATION OF THE ECONOMIC ADJUSTMENT PROGRAMME AND THE UPDATED MEMORANDUM – AN EVALUATION

As already mentioned, according to the progress reports on the implementation of the Economic Adjustment Programme published by the European Commission at end-August and by the IMF at the beginning of September, Greece has made impressive progress in terms of fiscal adjustment in the first half of 2010 as well as in a series of structural reforms that will reshape the Greek economy.

Almost every fiscal performance criterion for the first half of 2010 has been met.[22] This is attributed to the fact that cuts in government expenditure have been larger than anticipated in the Programme, in order to counterbalance the deviation from the revenue target. In more detail, in the first half of the year, actual primary expenditure was by €5.6 billion smaller

22 In June the adjusted primary deficit of the general government on a cash basis amounted to -€4.26 billion compared with a ceiling of -€5.0 billion, the primary expenditure of the State Budget amounted to €28.4 billion compared with a ceiling of €34 billion, the central government debt stock amounted to €316.7 billion compared with a ceiling of €342 billion and central government new guarantees amounted to €0.3 billion compared with a ceiling of €2 billion. For September and December 2010, the ceiling on the adjusted primary deficit of the general government on a cash basis is -€4.0 billion and -€5.7 billion respectively and the ceiling on the primary deficit of the State Budget is €50 billion and €67 billion respectively. It is worth mentioning that the Updated Memorandum includes some discrepancies between the definitions of the aforementioned criteria, the most important of which are the following: According to the Updated Technical Memorandum of Understanding, the adjusted primary deficit of the general government on a cash basis includes the change in the net financial assets of off-budget items (besides the cash balance of the ordinary State Budget and the public investment budget, the change in the net financial assets of local governments and social security organisations). The change in the stock of public hospitals' accounts payable to the private sector is deducted from the change in net financial assets of social security organisations. Moreover, primary expenditure of the ordinary State Budget include capital transfers to social security funds through bonds and forfeitures of guarantees, with the public sector or the central government taking up payments on behalf of non-general government organisations. Moreover, TEMPME guarantees are now included in the ceiling on new guarantees issued by the central government.

than expected. It is worth mentioning that the government is committed under the Updated Memorandum to close the year with a margin of around €4 billion as coverage for risks from other general government sub-sectors. If there is a deviation from the targets of the programme or a larger than expected decline in revenue, then the government is committed to take corrective measures, which, as regards the containment of expenditure, will give emphasis on operational expenditure, expenditure for the procurement of military equipment and public investment expenditure.

Significant progress has also been made in relation to **institutional/structural fiscal reforms**, such as the new law on fiscal management and responsibility which introduces a medium-term fiscal framework (see Box V.1);[23] the new tax law; measures that aim at combating tax evasion; the establishment of a single payment authority; the completion of the public sector employment census; steps for strengthening the tax mechanism; and the reform of public administration.

It is particularly encouraging that the 2011 budget will be drafted in accordance with the provisions of the new law on fiscal management. As per this law, the budget will be part of a three-year moving medium-term framework. The Minister of Finance will be able to set a ceiling on the expenditure of ministries, local governments and social budgets, so as to efficiently implement fiscal management on the general government as well. The Draft Budget, along with the consolidated draft of local government budgets and social budgets, should be compatible with the general government deficit target.

The reform and modernisation of public administration is proceeding as planned with the passing of the law on "Kallikratis Programme" in early June and the completion of the public sector employment census in July. Of great significance is the continuation of reforms in public administration with the extension of the single payment authority's responsibility to include the general government by March 2011, the simplification of the wage system and the new uniform wage rule, not to mention the evaluation of the functioning of public administration, with the aim of rationalising and increasing its efficiency.

The completion of the paricularly ambitious reform of the pension system took place earlier than expected. *According to the Memorandum of Understanding, the implementation of the social security reform was expected by the end of the third quarter of 2010* (see Box V.2).

According to the Updated Memorandum, the National Actuarial Authority will conclude its evaluation of how recent pension reforms impacted on main pension funds until end-December 2010 and on major auxiliary pension funds until end-March 2011.[24] This evaluation will determine whether further adjustments are required in order to contain increases in pension expenditure to 2.5% of the GDP between 2009 and 2060. Any further adjustments, if necessary, will be completed by end-June 2011.

6.1 CHALLENGES AND RISKS – HOW REVISION OF THE 2009 DEFICIT IMPACTED ON THE OUTLOOK FOR 2010

According to available data, revenue falls short of the Draft Budget targets and there is a danger that lower-than-expected receipts, on account of the recession, will decline further. However, receipts from the increase in VAT may improve tax revenue in the last months of the year. Moreover, as noted in the European Commission progress report, low receipts from tax revenue do not correspond to the higher than expected nominal GDP growth. This points to the need for a reform in the tax mechanism and for combating tax evasion further.

23 It is worth mentioning that, according to the Memorandum of Understanding, it was expected that the new organic budget law would be passed until the fourth quarter of 2010.

24 According to the IMF progress report, there has been a delay in the completion of the actuarial study, which is however attributed to limitations related to the National Actuarial Authority available staff and available statistical data.

In accordance with the commitment it made in the initial Memorandum, the government will continue the effort to improve tax administration and combat tax evasion. In this direction, it was decided that five special task forces for improving tax compliance and combating tax evasion will be established, so as to allocate the burdens of fiscal adjustment equitably.[25]

As pointed out in IMF and EU progress reports, the performance criterion for the general government was met due to the better-than-expected performance of the SB. By contrast, the performance of other general government entities (local governments and social security organisations) is somewhat lower than expected. In other words, their financial result in the first half of the year was balanced, when initial estimates foresaw a surplus. This is due to the fact that local governments recorded smaller surpluses than expected and social security organisations a cash deficit rather than the surplus that was expected.

Moreover, the observed accumulation of public hospitals' accounts payable (in arrears) generates the risk of debt accumulation. There are similar problems with transfers and payments to other sectors of the general government.[26] Therefore, a stepping up of the efforts to implement an efficient system for the monitoring and control of expenditure and tax arrears is required, in accordance with the provisions of the Economic Adjustment Programme.

As per estimates, the programme for the privitisation and restructuring of public enterprises has to be expedited and become more ambitious. For example, as mentioned in the progress report, the proposal for the restructuring of OSE has been delayed, although it is under way (according to the Memorandum, the deadline was 30 June). The draft law is already being promoted. There is also a danger that the public sector will be called upon to take up the debt of public enterprises in the event of a deeper recession, resulting in the forfeiture of guarantees.

The implementation of measures that improve the absorption of Community funds is considered to observe the time schedule of the Economic Adjustment Programme. Notwithstanding that, the payment of receivables has to be expedited significantly in order for the targets to be met.

According to EU and IMF progress reports, the government should be prepared to proceed with corrective actions in the event of deviation from the fiscal targets. It is also pointed out that, in order to achieve the target for a general government deficit of about €18.5 billion (on a national accounts basis), the adjusted cash deficit of the *general government* should not exceed €17.2 billion.

Finally, let it be recalled that the revision of 2009 deficit and the recent revision of GDP have a bearing on the fiscal outlook for 2010. This bearing has been dealt with in brief in Section 1 of this chapter.

6.2 THE DRAFT BUDGET FOR 2011

According to the Draft Budget for 2011, the government is committed to continue the policy of containing SB primary expenditure, which is anticipated to decline by 2.3% (after an estimated decline by 10.3% this year). The

25 According to the announcement of the Ministry of Finance (31 August 2010), in order to combat tax evasion and increase tax revenue, through the broadening of the tax base and a fairer wealth tax system, five special tax forces have been established: (1) A special task force for the implementation of the tax reform. Its task is to study, formulate, develop and monitor the materialisation of proposals for the timely and effective implementation of the tax reform that was introduced with Law 3842/2010; (2) a special task force for the collection of overdue amounts. Its task is to study, formulate, develop and monitor the materialisation of proposals for the collection of tax arrears; (3) a special task force for high-income taxpayers. Its task is to study, formulate, develop and monitor the materialisation of proposals that ensure tax compliance of high-income taxpayers (the 1,000 top corporate taxpayers); (4) a special task force for the wealthy and high-income individuals. Its task is to study, formulate, develop and monitor the materialisation of proposals for combatting tax evasion by taxpayers with significant real estate holdings and high living expenses (mainly self-employed); (5) a special task force for the payment of withholding taxes and tax compliance. Its task is to study, formulate, develop and monitor the materialisation of proposals for the timely submission of tax returns and the payment of withholding taxes in full.

26 It is worth mentioning that the (constant) indicative target for deterring the accumulation of new arrears was not achieved and thus new debt amounted to €1.0 billion, a development attributed, according to the IMF progress report, to an inability to effectively control non-central government expenditure.

target for the general government deficit is mentioned in *Section 1 of this chapter, which also looks into the possible consequences of the revision of fiscal data for 2009.*

In more detail, according to the Draft Budget, the fiscal policy stance remains very restrictive, as the primary deficit of the state budget, despite the recession, is anticipated to narrow further by 2.6 percentage points of GDP and draw close to zero in the next year.

Of course, as also put forth in the Memorandum, the extent of fiscal adjustment will be smaller compared with 2010. According to the Draft Budget, the deficit of the SB will be reduced by 1.5 percentage points of GDP, to €16,089 million or 6.9% of GDP in 2011, against €19,473 million or 8.4% of GDP in 2010. This target (6.9% of the GDP) corresponds to a general government deficit in the area of 7.0% of GDP (7.2% of the revised GDP) for 2011, against a deficit of 8.0% in 2010.

According to the Draft Budget, in order to achieve the SB target, significant additional fiscal measures are required both on the revenue and expenditure sides. At the same time, part of the containment of the deficit is expected to be derived from measures taken in the course of 2010, which will bear fruit in full (i.e. for 12 months) in 2011. In more detail, from a total dampening effect of €9,150 million on the deficit, 15.3% (€1,400 million) is expected to come from the further containment of state budget expenditure, 58.0% (€5,310 million) from new tax or non-tax revenue and 26.7% from the measures taken in 2010. Whereas the dampening effect on the SB deficit for 2011 is estimated to €9,150 million, there are also counterbalancing, deficit-increasing effects (e.g. €2,591 million for interest payments). Thus, the anticipated reduction of the deficit is limited to €3,384 million in the end.

It becomes evident from the above that about 75% of the adjustment will come from increased taxes or other levies (in 2010 or 2011) and only 25% from reduced expenditure. Of course, for a sustainable fiscal adjustment, a larger and more permanent reduction of primary expenditure is required – i.e. the adjustment should be based by 2/3rds on the reduction of primary expenditure.

Ordinary budget revenue (before tax refunds) in 2011 is expected to increase by 5.8%, to €61,140 million, from €57,800 million in 2010. The ongoing recession will have a bearing on revenue for 2011. By contrast, revenue will be favourably affected by the extraordinary tax imposed on profitable companies, the settlement of building code violations, the gambling tax, as well as the broadening of the VAT base and the reclassification of goods between VAT rates. According to the Draft Budget, total revenue will increase on account of indirect taxes (by 9.4%) and non-tax revenue (by 14.6%). The good performance of revenue from indirect taxes is the result of the increase in VAT and special consumption taxes; most of the other categories will decrease. Non-tax revenue includes €670 million paid by banks participating in the credit institutions' liquidity and capital adequacy support programme.

By contrast, revenue from direct taxes is expected to drop by 1.4% compared to 2010. This development is mainly the result of a fall in legal entities' profits as well as of direct tax arrears, given that part of the single tax on real estate (ETAK) for 2008 and 2009 was collected in 2010 and this will not be repeated in 2011. Also, revenue from the settlement of pending tax cases, which is recorded under previous years' revenue, is expected to be smaller in 2011 (€600 million) than in 2010 (€700 million).

Ordinary budget expenditure[27] (without tax refunds) is expected to record a small increase of around 2.2% compared to 2010, and reach €67,651 million. This increase stems exclusively from interest payments, given that pri-

27 Let it be noted that, on account of the reclassification of different expenditure items as a result of local governments being vested with more powers in the framework of "Kallikratis Programme", expenditure in this year's Draft Budget (Table 4.4) follow a different classification than in previous years.

mary expenditure is anticipated to decline by 2.1% in 2011. This positive development will come from the cut of staff costs by 2.3%, the reduction of subsidies to pension funds (-4.2%), the cut of expenditure for the purchase of consumer goods (-10.7%) and of subsidies to transport organisations and other entities. Expenditure on pensions, however, is expected to increase slightly (+0.4%) on account of the large number of new pensioners.

Contrary to primary expenditure, interest payments are anticipated to increase by 19.6%, to €15,800 million in 2011, reflecting the increased borrowing rates of the Greek government and the high public debt. Interest payments have gradually increased from 4.3% of GDP in 2007 to 6.8% of GDP in 2011.

Let it be noted that, for the first time in many years, the Draft Budget for 2011 also includes a reserve of €500 million. This good practice, which used to be adopted in the past, had been abandoned in the last 10-15 years.

The *public investment budget deficit* is expected to decline by €1,207 million (0.5% of GDP), thus contributing to the achievement of a state budget deficit of 6.9% of GDP. According to the Draft Budget, the public investment budget deficit is expected to narrow mainly because of the 30.4% increase in receipts from EU Funds and the small (3.3%) decrease in expenditure vis-à-vis 2010.

It is reasonable that individual provisions of the Draft Budget will be revised to reflect the downward revision of GDP on the one hand and the upward revision of previous year's public deficit and debt on the other.

6.3 FURTHER ACTIONS SPECIFIED IN THE UPDATED MEMORANDUM

The Updated Memorandum dated 6 August specifies further actions that the government has to take in order to achieve the targets of the economic programme. The government is committed to continue with the expenditure containment policy. Moreover, if there is a deviation from the targets of the programme or a larger than expected decline in revenue, then the government is committed to take corrective measures focused on the containment of operating expenses. For 2011, the prospect of replacing temporary measures for expenditure saving with permanent ones is under consideration.

At the same time, the government is planning a tighter control of general government entities' expenditure. In more detail, hospitals will expedite payments in order to avoid the accumulation of outstanding debt and to limit the liabilities carried forward to 2011. The government will have to reduce the cost of medicine further. Also, hospital revenue is anticipated to increase with the mandatory €3 admission per patient to the outpatients departments and with the 24-hour operation of hospitals. Auditing companies will help with the financial management of public hospitals, facilitating the control of costs and accounts payable.

The passing of the law on the enhancement of the National Health System (24-hour operation of hospitals, improvement of doctor and nurse recruitment processes, better operation and administration of health services, enhancement of accountability, transparency and volunteering) at end-July is an important attempt under the health system reform programme, which, according to the Memorandum, has to be completed by the end of the year. However, it is crucial that the economic condition of hospitals is better recorded by imminently adopting a double-entry accounting system on an accrual basis. In this way hospital liabilities will be better recorded and, by improving in parallel the statistical monitoring of the work of hospitals and clinics, the efficiency and effectiveness of healthcare spending will be enhanced.[28]

28 See Chapter VII, Special Feature 4.

The provisions of the law on the reform of local government ("Kallikratis Programme") will be strictly observed, in order to ensure improved fiscal results (by about €500 million) for each of the three years 2011-13. In order to achieve budgetary gains at the general government level, the government committed in the Updated Memorandum to reduce public borrowing and transfers and to control local government budgets in line with the medium-term fiscal strategy. Moreover, according to the Updated Memorandum, the government will have to pass, by end-2010, an adjustment that will not allow local governments to record deficits, at least up until 2014 (these are structural reforms that have to be completed by end-2010 and will be part of the third progress check).

The squandering of public funds will be considerably limited by the abolition and merger of public organisations and enterprises. Government announcements are in the right direction; however, swift and effective materialisation is required in a way that will ensure the smooth absorption and transfer of surplus personnel.

Furthermore, the government has committed to improve the results of large public enterprises in deficit, in order to mitigate risks to the budget. Anticipated action relates to the enhancement of effectiveness, increases in public transport fares and the reduction of excessive benefits and overtime work.[29] In more detail, the government has committed to restructure the loss-making Hellenic Railways Organisation (OSE)[30] and to reform and privatise a number of other public enterprises.

The National Actuarial Authority will complete assessing the impact of the recent reform on the main pension funds by end-December 2010 and on major auxiliary pension funds by end-March 2011. Its assessment will determine whether further adjustment of the pension system is required in order for the increase in pension expenditure to be contained to 2.5% of GDP between 2009 and 2060. Any further adjustment, if needed, will be effected by end-June 2011.[31]

29 Moreover, according to the initial Memorandum, the 10 largest loss-making enterprises will have published their financial statements up until 2009 (structural target) on the internet by end-September, in order to enhance transparency in relation to their financial condition.

30 According to the restructuring programme, public service obligations/grants will be reduced to €50 million annually and no new government guarantees for debts will be granted to the restructured railway organisation, which has to interrupt a long history of big losses.

31 According to the provisions of the Updated Memorandum, public sector cash should be managed prudently, due to the limited liquidity. To this end, the Public Debt Management Agency will start conducting monthly auctions for Treasury bills from September 2010 onwards (initially with a maturity of three months) in order to improve cash management and normalise debt maturity schedules.

VI MONEY, CREDIT AND CAPITAL MARKETS

1 MONETARY AGGREGATES

In the period January-August 2010, the annual rate of change of the monetary aggregate M3 (excluding currency in circulation)[1] continued to follow the downward trend observed since the third quarter of 2008, turning negative as from February 2010 (August 2010: -11.3%, second quarter of 2010: -7.3%, fourth quarter of 2009: 4.8%, see Table VI.1). Throughout the reviewed period (except for January), and for the first time since February 2006, this rate was higher than that of the euro area. Indeed, as the euro area rate remained broadly unchanged in 2010, their differential widened substantially.

The slowdown of M3 growth in Greece is associated with the developments in domestic economic activity and the heightened uncertainty among investors. More specifically, the recession currently hitting the Greek economy, as well as the strong deceleration of total credit expansion impacted on this monetary aggregate negatively. Furthermore, the country's adverse fiscal position and the ensuing concerns of some savers contributed to a shift of savings out of M3 (especially time deposits with an agreed maturity of up to two years) and into investment abroad or other holdings (e.g. currency in circulation, gold sovereign coins etc.). Nonetheless, this behaviour has apparently started to decline, while, according to the latest data, the decrease in overnight deposits has gathered step, highlighting the slowdown of economic activity as the key determinant of falling deposits. By contrast, the decline in M3 growth is not attributable to developments in the opportunity cost, as the adverse impact of the slope of the yield curve on the monetary aggregate has weakened and interest rates on most types of short-term deposits have been rising since end-2009.[2] Finally, it is estimated that the rate of decline in the Greek M3 was stronger than what the evolution of economic activity and interest rates would justify as, given previous years' high growth rates,[3] a drop in the level of liquidity that has accumulated over this period should be expected. Moreover, the monetary aggregate does not include currency in circulation, which increased this year.

As regards individual M3 components, deposits with an agreed maturity of up to two years fell considerably in the first eight months of 2010 recording an annual rate of change of -14.4% in August 2010 (second quarter of 2010: -13.6%, fourth quarter of 2009: 2.7%, see Table VI.1), due to the above mentioned shift of savings out of this deposit category and into holdings abroad. Since end-2009, outstanding deposits with an agreed maturity of up to two years have decreased by €14.1 billion.[4] As a result, their contribution to M3 (excluding currency in circulation) stood at 55.3% in August, i.e. it was marginally lower than at end-2009 (55.4%). The annual rate of change of overnight deposits also followed a similar downward path, entering negative territory in June (August 2010: -5.6%, second quarter of 2010: 4.1%, fourth quarter of 2009: 11.4%). However, although outstanding deposits of this type have also decreased since the beginning of the year (by €10.5 billion),[5] their contribution to M3 remains practically unchanged, at 42.7% (December 2009: 42.6%). In the light of these developments, the rate of change of total deposits included in M3 gradually dropped in 2010 to stand at -10.6% in August (second quarter of 2010: -6.3%, fourth quarter of 2009: 6.6%). Finally, repo holdings and holdings of money market fund units/shares continued to decline (see Table VI.1 and Chart VI.1).

1 This aggregate constitutes the Greek contribution to the euro area M3 and 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. It should be noted that for the estimation of M3 in Greece, currency in circulation (M0) is not taken into account as, since January 2002 when euro banknotes replaced national banknotes, currency in circulation can be estimated only for the euro area as a whole and not for each country separately.
2 See Section 1.2 of this chapter.
3 Let it be noted that the annual growth rate of M3 in Greece reached a double digit (period average: 13.1%) between mid-2006 and the first quarter of 2009.
4 The rate of change in outstanding deposits of this type is not adjusted for foreign exchange valuation differences.
5 See note 4 above.

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

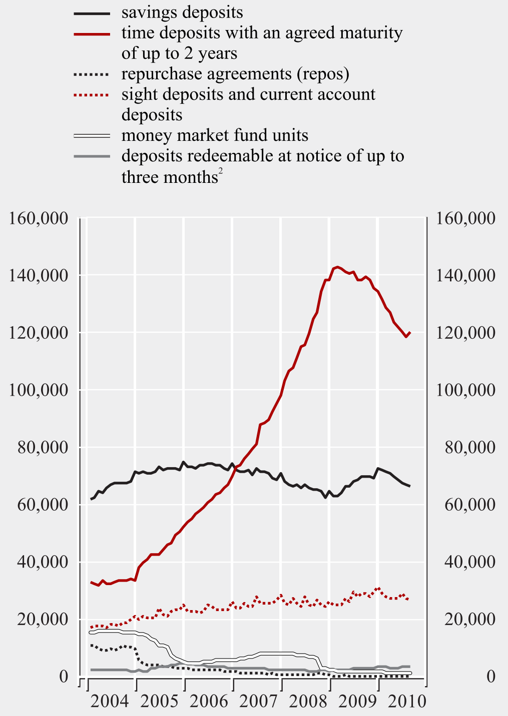
(non-seasonally adjusted data)

	Outstanding balances on 31.08.2010 (million euro)	Annual percentage changes[1]											
		2005	2006	2007	2008	2009					2010		
		Q4[2]	Q4[2]	Q4[2]	Q4[2]	Q1[2]	Q2[2]	Q3[2]	Q4[2]	Dec.[3]	Q1[2]	Q2[2]	Aug.[3]
1. Overnight deposits	92,649	9.3	0.7	-0.9	-7.0	-5.9	0.5	7.0	11.4	13.9	13.4	4.1	-5.6
1.1 Sight deposits and current account deposits	26,362	20.2	1.8	10.3	-3.6	-3.9	3.2	12.5	15.7	19.8	14.4	3.7	-7.8
1.2 Savings deposits	66,287	6.3	0.2	-4.6	-7.9	-6.3	-0.3	5.1	9.5	11.5	12.8	4.5	-4.4
2. Time deposits with an agreed maturity of up to 2 years	119,948	45.2	37.5	42.2	39.1	31.5	21.5	11.5	2.7	-2.4	-7.3	-13.6	-14.4
3. Deposits redeemable at notice of up to 3 months[4]	3,267	105.2	-24.4	-20.3	-24.1	-15.3	7.6	39.4	64.2	69.9	56.9	14.9	0.9
4. Total deposits (1+2+3)	215,864	20.7	12.1	15.9	15.3	13.4	12.0	9.8	6.6	4.6	1.2	-6.3	-10.6
5. Repurchase agreements	128	-72.8	-35.7	-54.3	-11.4	-55.3	-53.2	-55.1	-67.1	-50.0	-39.6	-51.4	-46.2
6. Money market fund shares/units	899	-51.8	-2.5	40.5	-58.8	-75.3	-79.7	-75.2	-44.8	-32.1	-27.7	-33.8	-47.3
7. Debt securities issued with a maturity of up to 2 years[5]	-9	-42.2	24.2	-	-	-	-	-	-	-	-		
8. M3 excluding currency in circulation (4+5+6+7)	216,882	6.9	10.6	14.7	14.4	11.2	9.2	6.7	4.8	3.2	0.1	-7.3	-11.3

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 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 VI.1 Deposits, repurchase agreements and money market fund units in Greece[1] (January 2004 - August 2010)

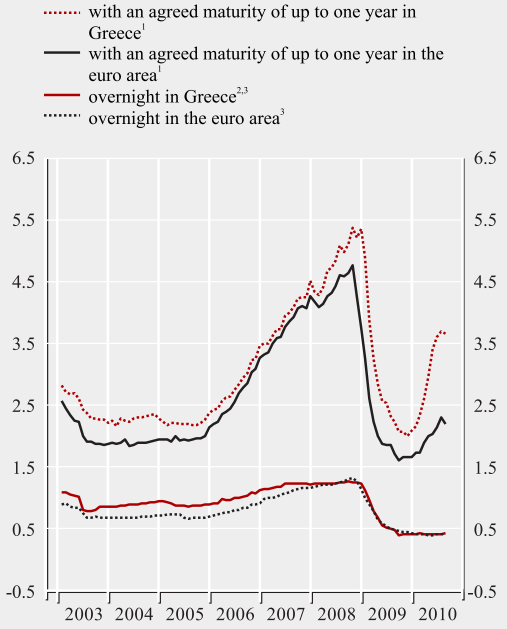
(end-of-period balances, million euro)



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.

Chart VI.2 Bank interest rates on new deposits by households in Greece and the euro area (January 2003 - August 2010)

(percentages per annum)



Sources: Bank of Greece and ECB.
1 Monthly average rate.
2 Interest rate on savings deposits (these deposits represent the bulk of overnight deposits and their interest rate is almost identical to the overnight rate).
3 End-of-month rate.

2 BANK DEPOSIT RATES

The level of new short-term[6] deposit rates is determined by the current key ECB interest rates and by market expectations of future changes in these rates, as well as by competition between credit institutions. However, in the period under review, the pressure exerted on Greek banks' liquidity,[7] market concerns about the country's fiscal outlook and heightened uncertainty among savers were key determinants of bank deposit rates. Therefore, although ECB rates remained unchanged, deposit and repo rates in Greece mostly increased[8] in January-August 2010, thus reversing their declining course since end-2008 (see Chart VI.2). An upward, albeit less pronounced, trend was reflected in the corresponding euro area interest rates during the reviewed period.

In more detail, the average rate on households'[9] new deposits with an agreed maturity of up to one year increased by more than 1.5 percentage points and stood at 3.66% in August (December 2009: 2.10%, December 2008: 5.36%, see Table VI.2A), which makes it the second highest rate among euro area countries (see Table VI.2B). The rate on households' overnight deposits remained almost unchanged

6 The bulk of deposits in Greece have a maturity of up to one year (August 2010: 95.9%).
7 As a result of Greek banks' inability to access international money and capital markets, following the downgrading of Greece's credit rating, and their weakened deposit bases. For a detailed discussion of Greek banks' liquidity, see Section 7 of this chapter.
8 Except for the rates on non-financial corporations' overnight deposits, which recorded a slight decline.
9 Households consist of individuals, private non-profit institutions and sole proprietors.

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

(percentages per annum)

	December 2009	August 2010	Change Dec. 2009/ Aug. 2010 (percentage points)
Overnight[1]			
Weighted average interest rate in the euro area	0.45	0.43	-0.02
Maximum interest rate	1.21	1.13	-0.08
Minimum interest rate	0.05	0.06	0.01
Interest rate in Greece	0.43	0.44	0.01
Interest rate differential between Greece and the euro area	-0.02	0.01	0.03
With an agreed maturity of up to one year[2]			
Weighted average interest rate in the euro area	1.67	2.20	0.53
Maximum interest rate	4.13	3.94	-0.19
Minimum interest rate	0.50	0.72	0.22
Interest rate in Greece	2.10	3.66	1.56
Interest rate differential between Greece and the euro area	0.43	1.46	1.03

Sources: ECB and euro area NCBs.
1 End-of-month rate.
2 Monthly average rate.

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

(percentages per annum)

	Overnight[2]		With an agreed maturity of up to 1 year[3]	
	December 2009	August 2010	December 2009	August 2010
Austria	0.64	0.56	1.21	1.01
Belgium	0.37	0.33	0.73	0.78
Cyprus	1.21	1.13	4.13	3.94
Finland	0.39	0.43	1.32	1.65
France	0.11	0.08	1.43	1.70
Germany	0.75	0.74	0.87	1.03
Greece	**0.43**	**0.44**	**2.10**	**3.66**
Ireland	0.64	0.61	1.62[4]	1.55[5]
Italy	0.26	0.25	1.01	1.40
Luxembourg	0.85	0.72	0.50	0.72
Malta	0.30	0.29	1.97	1.17
Netherlands	0.44	0.47	2.51	2.31
Portugal	0.05	0.06	1.52	1.82
Slovakia	0.34	0.33	1.88	1.87
Slovenia	0.23	0.19	2.00	1.83
Spain	0.36	0.30	2.15	2.46

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 rate.
3 Monthly average rate.
4 The interest rate applies to all time deposits irrespective of maturity.
5 The interest rate applies to all time deposits irrespective of maturity. The latest available data refer to July 2010.

(0.44%) compared with December 2009 (0.43%, December 2008: 1.24%). In the next months, deposit rates in Greece will be primarily affected by the liquidity conditions of credit institutions.

Unlike nominal rates, average real interest rates[10] on deposits decreased in the first eight months of 2010. On average, the real interest rate on households' overnight deposits dropped to -4.02% in 2010, from -0.28% in the corresponding period of 2009, whereas the rate on deposits with a maturity of up to one year fell to -1.38% (January-August 2009: 2.07%). In August 2010, the real rate on overnight deposits stood at -5.10% (December 2009: -2.21%), while that of deposits with an agreed maturity of up to one year stood at -1.88% (December 2009: -0.54%).

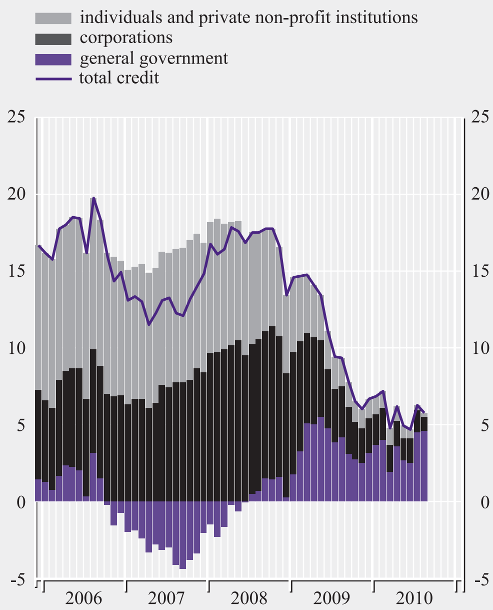
Interest rates on short-term time deposits for the euro area as a whole followed an upward path. However, their rise was comparatively smaller than that of the corresponding Greek deposit rates and, as a result, the differential between euro area and Greek rates widened. In fact, the positive differential between the Greek interest rate on households' deposits with an agreed maturity of up to one year and the corresponding euro area rate more than tripled (August 2010: 146 basis points, December 2009: 43 basis points). Conversely, the change in the respective differential of the rate on households' overnight deposits was only moderate (see Tables VI.2A and VI.2B).

3 FINANCING OF THE ECONOMY

The annual growth rate of outstanding total financing of the economy by domestic monetary financial institutions (MFIs),[11] after the plunge it recorded in 2009, fluctuated in the first eight months of 2010 and decelerated to 5.7% in August (December 2009: 6.7%, fourth quarter of 2009: 6.6%, see Chart VI.3 and Table VI.3). The growth rate of total financing to the economy slowed down between January and August 2010 reflecting a decline in the

Chart VI.3 Total credit to the economy by domestic MFIs and its sectoral breakdown (December 2005 - August 2010)

(annual percentage changes; shares in percentage points)



Source: Bank of Greece.
Note: Comprising outstanding MFI loans to the domestic private sector and general government, MFI holdings of government securities and corporate bonds and outstanding securitised loans and securitised corporate bonds. The rates of change are adjusted for exchange rate variations and write-offs carried out by banks during the reference period.

10 The average real interest rate of a period is equal to the period's average nominal rate less the average inflation rate of the same period.

11 Outstanding bank financing to general government and the domestic private sector is calculated as the sum of outstanding loans to general government and the domestic private sector, banks' holdings of Greek government debt securities and corporate bonds, plus outstanding securitised loans and corporate bonds. The rate of change in financing is calculated as the difference between outstanding bank financing at the beginning and at the end of the reference period. Banks' total write-offs/write-downs over the reference period are added to this difference, which is then adjusted for changes in the value of Greek government bonds (which are embedded in the outstanding financing to general government) and for foreign exchange differences arising from the valuation in euro of foreign currency-denominated loans (foreign exchange valuation differences from the appreciation of the euro vis-à-vis other currencies are added and differences from its depreciation against them are subtracted). Thus we arrive at the net flow of total financing. Finally, it should be noted that, in calculating the net flow and the rates of change of financing in 2009, account was also taken of loans and corporate bonds amounting to €4.5 billion, which were transferred by domestic credit institutions to affiliated banks outside Greece and to a credit company within the country. In February and March 2010, one bank repurchased part of those bonds (€686 million) but, although this transaction led to an increase in outstanding financing, it was not taken into account in the calculation of February's net flow or of the annual rate of change, as it did not reflect a flow of additional financing to the domestic private sector in that month.

Table VI.3 Total credit[1] to the economy by domestic MFIs

(annual percentage changes, non-seasonally adjusted data)

	2006	2007	2008	2009					2010		
	Q4[2]	Q4[2]	Q4[2]	Q1[2]	Q2[2]	Q3[2]	Q4[2]	December[3]	Q1[2]	Q2[2]	August[3]
1. Total credit by MFIs	15.6	13.5	16.6	14.5	13.6	9.4	6.6	6.7	6.6	5.2	5.7
2. Credit to general government	-1.8	-16.1	8.1	17.2	33.9	26.7	19.3	21.6	22.0	15.3	25.6
3. Credit to the private sector	21.7	21.7	18.3	14.1	9.9	6.4	4.4	4.1	3.8	3.0	1.4
3.1 Enterprises[4]	17.3	20.1	21.6	17.0	11.8	7.7	5.5	5.0	4.6	3.7	2.2
3.2 Sole proprietors	-	-	-	-	-	-	-	-	-	-	0.8
3.3 Individuals and private non-profit institutions	26.9	23.6	14.8	11.0	7.8	5.0	3.3	3.1	2.8	2.2	0.6
of which:											
3.3.1 Housing loans	28.4	23.3	13.4	10.1	7.4	5.1	3.9	3.7	3.6	3.1	1.6
3.3.2 Consumer loans	23.7	22.6	18.4	13.5	9.1	5.3	2.4	2.0	1.4	0.3	-1.5

Source: Bank of Greece.

1 Including MFI holdings of bank loans, corporate bonds and government securities, as well as securitised bank loans and corporate bonds. The rates of change take into account loan write-offs/write-downs and foreign exchange valuation differences in respect of loans denominated in foreign currencies. It should be noted that the rates of change in financing to enterprises take into account loans and corporate bonds transferred by MFIs to subsidiaries abroad and to one domestic finance company in 2009. In February and March 2010, however, one bank repurchased part of these bonds (€686 million) and although this transaction led to an increase in the outstanding amount of credit, it was not included in the net flow of credit and its annual rate of change.

2 The quarterly average is derived from monthly averages (which are calculated as 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 Since June 2010, loans to sole proprietors are presented separately and are no longer included in credit to enterprises. The change is purely statistical and does not influence credit expansion rates.

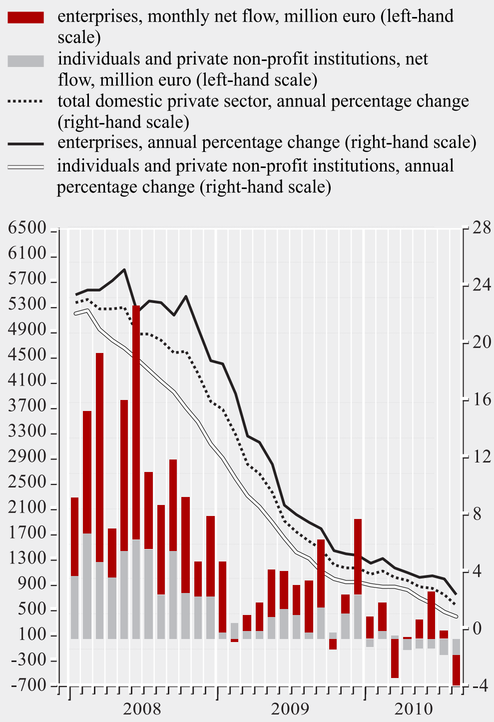
annual rate of credit expansion to the domestic private sector (non-financial corporations, sole proprietors, individuals and private non-profit institutions), which more than offset the acceleration in the growth rate of financing to general government.[12] In more detail, the growth rate of financing to the private sector kept decelerating throughout this period, while the rate of credit expansion to general government, after reaching a particularly high level in the first two months of the year, declined with sharp fluctuations until June 2010. In July-August 2010, the rate recovered substantially and reached 25.6%.[13]

The annual growth rate of financing to the domestic private sector by domestic MFIs declined from 4.1% in December 2009 to 1.4% in August 2010 (fourth quarter of 2009: 4.4%, see Chart VI.4). The slowdown in the annual growth rate of financing to the domestic private sector over the first eight months of 2010 (by 2.7 percentage points) was smaller compared with the corresponding period of 2009 (9.9 percentage points), mainly as a result of a more moderate decline in the growth rate of financing to non-financial corporations.[14] Nevertheless, the net flow of financing to the private sector[15] turned negative to -€394 million in January-August 2010, against a positive flow of €6,284 million year-on-year, because of the tightening of credit standards for new loans to non-financial corporations, individuals and private non-profit institutions, which have been constantly recording negative net flows since April 2010.

Behind the slowdown in credit growth to the private sector lie both supply- and demand-side factors. On the supply side, banks continue on a tighter credit policy amid heightened credit risk, as evidenced by the increasing number of non-performing loans, but also as a result of liquidity strains. At the same time, the downturn of economic activity and pessimistic projections on the short-term prospects of the economy led to a decline in loan demand. As a result, the latest Bank Lending Survey[16] of July 2010 recorded, overall, a further moderation in loan supply to the domestic private sector, as well as a stronger decline in loan

Chart VI.4 Credit[1] to the domestic private sector by domestic MFIs (January 2008-August 2010)

(monthly flows[2]; annual percentage changes)



Source: Bank of Greece.
1 Comprising outstanding MFI loans, MFI holdings of corporate bonds and the outstanding amounts of securitised loans and securitised corporate bonds. The annual rates of change are adjusted for loan write-offs and valuation differences arising when loans denominated in foreign currency are valued in euro.
2 Net montlhy flows of credit are calculated from month-to-month changes in stocks of credit, adding loan write-offs and adjusting for exchange rate variations.

12 As from June 2010, loans to self-employed persons, farmers and personal enterprises form a category of their own (that of "sole proprietors") and are not included in "credit to enterprises".
13 The high growth rate of financing to general government is due to a 20.2% increase in the portfolio value of government bonds held by other MFIs (MFIs other than the Bank of Greece) (August 2010: €43.7 billion, August 2009: €36.4 billion).
14 The rate of credit expansion to non-financial corporations had recorded a sharp decline during January-August 2009 (see Table VI.4).
15 The net flow of financing is calculated as the rate of change in outstanding financing over a specific period (one or more months), plus loan write-offs/write-downs plus foreign exchange valuation differences from the appreciation of the euro vis-à-vis other currencies, less foreign exchange differences from its depreciation over the same period.
16 The Bank Lending Survey is conducted by the Bank of Greece on a quarterly basis, in the wider framework of a Eurosystem survey.

demand in the second quarter of 2010 against the first quarter of 2010.

As regards the external financing of MFIs, Eurosystem's standing facilities and the extension of the government's liquidity support plan (Law 3723/2008) initially until end-June 2010 through the provision of State guarantees totalling €15 billion (article 4, paragraph 8 of Law 3845/2010) and then until December 2010 through additional guarantees amounting to €25 billion for the issuance of bank bonds (article 7 of Law 3872/2010) contributed decisively to positive rates of credit expansion to the domestic private sector throughout the period under review. However, constraints arising from Greek banks' difficulty to access foreign money and capital markets in the near future, but also from their already strong dependency on the Eurosystem, hamper new credit to the domestic private sector.[17]

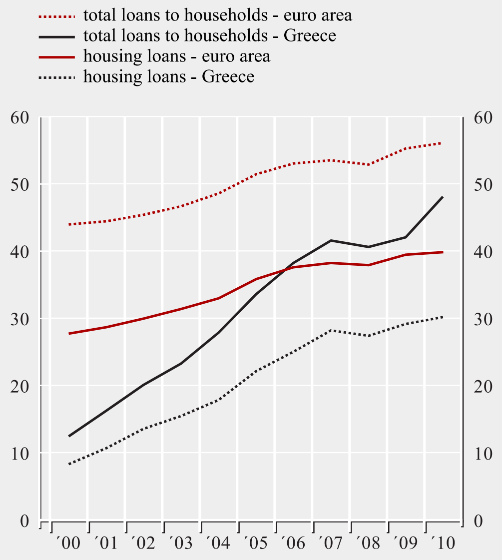
Outstanding financing to non-financial corporations as a percentage of GDP stood at 56.1% in June 2010[18] (December 2009: 57.3%). If securitised loans are not taken into account, it stands at 50.2% against 64.7% for the euro area. As regards financing to households (individuals, private non-profit institutions and sole proprietors), the rate rose to 57.7% in June 2010 (December 2009: 51.3%, see Chart VI.5), but if securitised loans are not taken into account, it rose to 48.1% against 56.0% for the euro area as a whole.

The annual growth rate of MFI financing to **enterprises** decelerated to 2.2% in August 2010, from 5.0% in December 2009 (see Chart VI.4), which reflects a moderation of credit supply on the banks' side, as already mentioned above, as well as a decline in the demand for new loans from enterprises. More specifically, as regards demand, difficulties facing small and medium sized enterprises (SMEs), as well as larger ones now, in most sectors mainly because of the economic downturn, have led to a postponement of their investment. A further slowdown in credit growth is also evidenced in the Bank Lending Survey of July 2010, which for the first time since the beginning of 2009 recorded weakened demand for corporate loans, particularly on the part of SMEs, in the second quarter of 2010 compared with the previous quarter. In addition, banks tightened their credit standards by raising interest rate margins and by adopting stricter collateral requirements and restrictive clauses for loans.

Especially in respect to SMEs, the Bank Lending Survey recorded a sizeable drop in loan

Chart VI.5 Bank loans[1] to households[2] in Greece and the euro area (2000 - June 2010)

(percentage of GDP)[3]



Sources: Bank of Greece and ECB for outstanding loans, Eurostat and ELSTAT for GDP.
1 Excluding the outstanding amounts of securitised loans.
2 Since June 2010, for the purpose of comparability with total euro area, outstanding loans to households in Greece, excluding individuals and private non-profit institutions, also include sole proprietors and unincorporated partnerships.
3 Forecasts for the 2010 GDP.

17 The Bank Lending Survey of July 2010 confirms banks' concerns about their funding, as banks reported that they continued to have difficulties in obtaining funding from money markets in the second quarter of 2010 and that they expect to have further difficulties in the third quarter as well.

18 It should be noted that this rate is not directly comparable with that of December 2009, because of a surge in outstanding financing to the domestic private sector as a result of the reclassification of loans to shipping in June 2010, which until then were considered loans to non-residents. If these loans are not taken into account, the rate stands at 52.1% in June 2010 against 57.3% in December 2009.

demand in the first half of 2010, while credit standards remained more or less unchanged over this period. Conversely, relatively high loan demand had been registered in the first half of 2009, according to the Flash Eurobarometer survey (for the European Commission).[19] Conditions changed in the course of 2010, with several SMEs facing financial problems, as (i) most of the enterprises in the sectors which were more strongly hit by the financial crisis (e.g. construction, trade and manufacturing) are small or medium-sized, and (ii) SMEs are influenced by domestic demand, which has considerably contributed to the decrease in GDP this year (as a rule SMEs, unlike larger enterprises, are not export-oriented, thus they cannot benefit from the recovery of external trade).

A breakdown by sector of economic activity shows that the annual rate of change of financing to enterprises fell to low or even negative levels in most sectors (particularly trade and construction) between January and August 2010 (see Table VI.4). Among the sectors with the largest share in total outstanding business financing, the rate of change of financing to manufacturing remained in negative territory (it turned negative for the first time in September 2009) during January-August 2010, with the exception of June (August 2010: -2.9%, December 2009: -3.5%). By contrast, shipping recorded a relatively high credit growth rate (August 2010: 4.5%, December 2009: 4.0%). Financing to commercial firms recorded a negative net flow (-€586 million) in the first eight months of 2010 and its annual rate of change turned negative (August 2010: -0.6%, December 2009: 4.2%). Financing to construction recorded a low annual rate of increase, 1.8%, in August (December 2009: 2.7%) and a negative net flow (-€34 million) in the period under review. It should be noted that the low or negative rates of change of financing to manufacturing, trade and construction are in line with their sluggish activity, while shipping enjoys more favourable prospects, as it is influenced by external economic activity and the orders for ships. As regards the remaining sectors, credit expansion to communication and transport excluding shipping was high, due to the financing of public enterprises and organisations, which has an important share in total outstanding financing to this sector. Nevertheless, in August 2010 credit expansion to this sector declined abruptly to 0.2%, as a result of a surge in outstanding financing in August 2009.

The annual rate of credit expansion to **sole proprietors** declined to 0.8% in August 2010, from 2.9% in the previous month, and the net flow of loans to this sector was negative (-€169 million). It is noted that as from June 2010, sole proprietors are not included in enterprises, but form a separate sector.

The annual rate of credit expansion to **individuals and private non-profit institutions** slowed down to 0.6% in August 2010 (see Chart VI.4), from 3.1% in December 2009. Financing to individuals and private non-profit institutions recorded negative monthly net flows almost throughout the reviewed period January-August 2010 (except for February and March), which totalled -€949 million. The observed slowdown is the result of the declining growth rate of residential loans (August 2010: 1.6%, December 2009: 3.7%), as well as of the negative rate of change of consumer loans (-1.5%) in August 2010 (against 2.0% in December 2009). Banks were cautious in granting new loans to households. Their cautiousness, as already mentioned above, is also attributed to the rise in non-performing loans, which was high in the case of residential and, mostly, consumer loans. Furthermore, households' demand for new loans is unfavourably influenced by the uncertainty about their disposable income, as a result of the income pol-

19 See Flash Eurobarometer (no. 271, "Access to finance", September 2009). In more detail, 38% of the sample's Greek SMEs reported that they applied for a new bank loan in the first half of 2009, a percentage which is the highest among European Union countries, compared with an average of 22% for the EU-27. However, according to the survey, only 27% of the sample's Greek SMEs which had submitted an application reported that they received the total loan amount they had requested, which accounts for the lowest percentage among European Union countries (average: 55%).

Table VI.4 Credit[1] to the domestic private sector by domestic MFIs

(annual percentage changes, non-seasonally adjusted data)

	Outstanding balances on 31.08.10 (million euro)	2006	2007	2008	2009					2010		
		Q4[2]	Q4[2]	Q4[2]	Q1[2]	Q2[2]	Q3[2]	Q4[2]	December[3]	Q1[2]	Q2[2]	August[3]
A. Enterprises[4,5]	128,968	17.3	20.1	21.6	17.0	11.8	7.6	5.5	5.0	4.6	3.7	2.2
1. Trade	26,632	9.9	17.9	22.2	19.0	14.8	9.0	5.0	4.2	2.4	-0.8	-0.6
2. Industry[6]	25,530	9.5	11.0	17.3	13.5	6.9	0.6	-2.9	-3.5	-2.8	-1.4	-2.9
3. Shipping	18,708	17.8	25.3	22.7	19.0	14.0	8.2	3.9	4.0	2.5	2.9	4.5
4. Construction	10,861	28.9	28.5	37.3	27.9	15.2	7.0	2.2	2.7	3.3	2.8	1.8
5. Tourism	7,348	11.0	21.0	24.3	16.9	11.0	7.3	6.4	7.8	8.0	6.6	4.6
6. Other financial institutions (non-MFI)	6,107	35.1	14.7	-2.1	-8.3	-7.2	-1.2	7.4	5.8	10.6	10.6	2.9
7. Communications and transport - excluding shipping	4,488	51.9	39.6	35.6	18.1	10.2	18.7	19.5	25.5	27.4	26.4	0.2
8. Electricity - gas - water supply	4,486	3.0	40.2	36.4	25.2	30.8	14.1	14.8	14.7	20.1	23.2	24.0
9. Agriculture	2,191	11.0	10.7	20.4	15.6	8.8	5.4	3.7	3.7	5.0	2.5	2.3
10. Other sectors	22,617	28.8	27.4	23.6	22.1	16.7	14.0	11.8	9.7	7.1	5.8	6.1
B. Sole proprietors and unincorporated partnerships[5]	13,754	-	-	-	-	-	-	-	-	-	-	0.8
C. Individuals and private non-profit institutions	119,363	26.9	23.6	14.8	11.0	7.8	5.0	3.3	3.1	2.8	2.2	0.6
1. Housing loans	81,374	28.4	23.3	13.4	10.1	7.4	5.1	3.9	3.7	3.6	3.1	1.6
2. Consumer loans	35,886	23.7	22.6	18.4	13.5	9.1	5.3	2.4	2.0	1.4	0.3	-1.5
- Credit cards	8,710	5.7	6.3	12.4	7.8	4.6	1.6	-0.4	-0.6	-1.4	-2.0	-2.9
- Other consumer loans[7]	27,176	35.4	30.9	20.9	15.8	10.9	6.7	3.5	3.1	2.5	1.2	-0.9
3. Other loans	2,103	30.6	42.2	7.5	6.8	4.0	-1.0	-2.3	-1.1	0.0	2.2	1.7
TOTAL	262,085	21.7	21.7	18.3	14.1	9.9	6.4	4.4	4.1	3.8	3.0	1.4

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/write-downs 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 in 2009 by domestic MFIs to subsidiaries abroad and to a domestic finance company. In February and March 2010, one bank repurchased bonds amounting to €686 million and, although this transaction led to an increase in the outstanding stock of credit, it does not represent a flow of new credit to the private sector in February and thus was not taken into account in the annual rate of change for that month.

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 Sectors are listed in descending order of their share in total credit, with the exception of "other sectors". Growth rates are adjusted for loan write-offs/write-downs.

5 As of June 2010, loans to sole proprietors are presented separately and are no longer included in “credit to enterprises”. This change, of a purely statistical nature, does not affect the rates of credit expansion.

6 Comprising manufacturing and mining/quarrying.

7 Comprising personal loans and loans against supporting documents.

icy, the increased tax burden and the risk of unemployment.[20] As regards residential loans, households' wait-and-see approach owing to their expectations for a further decrease in real estate prices, as evidenced in the Bank Lending Survey of July 2010, is an additional constraint on demand. According to the Survey, demand for residential loans weakened in the second quarter of 2010, while demand for consumer loans remained unchanged. The Survey recorded a tightening of bank credit standards in the second quarter of 2010 both for residential loans (by raising interest rate margins for high-risk loans, reducing the LTV (loan-to-value) ratio or by increasing collateral requirements) and consumer loans (by reducing loan maturities or by increasing financial burdens). It should be noted that, according to the results of the Survey from 2009 until today, the cumulative tightening of credit standards by Greek credit institutions in respect to the financing of both households and enterprises is high compared with the euro area as a whole.

The rate of credit expansion to the domestic private sector is expected to remain at a very low level or even turn negative by the end of the year, as a result of the adverse effect that the downturn in economic activity exerts on both the supply and the demand for loans. The abovementioned additional State guarantees totalling €25 billion (under Law 3872/2010) that will be supplied to banks, allowing them to obtain liquidity from the Eurosystem through the issuance of bonds, is expected to have a positive effect.

4 BANK LENDING RATES, THE INTEREST RATE SPREAD AND DIFFERENCES BETWEEN GREECE AND THE EURO AREA

Between January and August 2010, bank lending rates in Greece followed an upward path in most types of loans, reversing their broadly downward trend that was recorded throughout 2009 (see Table VI.5A and Chart VI.6). Among the main types, the sharpest rate increases during the reviewed period were recorded in consumer and corporate loans of up to €1 million with a floating rate or an initial rate fixation of up to one year. Bank lending rates in the euro area followed, in most types of loans, a downward or slightly upward trend; as a result, their spread from the typically higher Greek interest rates widened further (see Table VI.5B and Chart VI.7).

As in the period under review the key ECB interest rates remained unchanged and the short-term money market rates did not change considerably,[21] the upward trend of lending rates in Greece is attributable to the country-specific macroeconomic conditions that prevailed and affected the functioning of the domestic banking system. More specifically, the sharp slowdown in economic activity, the deterioration of households' and enterprises' financial situation, as well as their lower asset valuations, heightened the credit risk facing credit institutions and, subsequently, the risk premium incorporated in the lending rates.[22] Furthermore, adverse developments in the fiscal aggregates of the Greek economy hindered Greek banks' access to international money and capital markets and, coupled with a decline in bank deposits, exerted strong pressures on credit institutions' liquidity,[23] which were reflected in deposit and lending rates. Actually, the rise in bank lending rates would be higher if the non-standard monetary policy measures taken by the ECB

20 A recent European Commission survey concerning the social implications of the financial crisis for EU countries is quite interesting. This survey records the comparatively stronger pessimism of Greek households in the sample about their financial situation (see "Monitoring the social impact of the crisis", Flash Eurobarometer 289, June 2010, on the European Commission website). In more detail, 69% of Greek households in the sample expect a worsening of their financial situation within the next 12 months after May 2010, against 36% in the previous survey of December 2009 and compared with an average of 28% for the EU-27. It is noted that in many replies, the pessimism percentages recorded for Greek households in the sample are the highest or among the highest of the EU. Moreover, these percentages have deteriorated compared with the respective survey of December 2009.

21 The key ECB interest rates remained unchanged at 1%, while the monthly average of the 3-month Euribor increased slightly by 19 basis points in the first eight months of this year.

22 Higher credit risk is evidenced by an increase in non-performing loans which was observed across all types of loans in the first half of 2010 (see Chapter IV, *Financial Stability Report*, July 2010, and Section 7 of this chapter).

23 For developments in the banking sector, see Section 7 of this chapter.

Table VI.5A Bank interest rates on new loans in the euro area and Greece

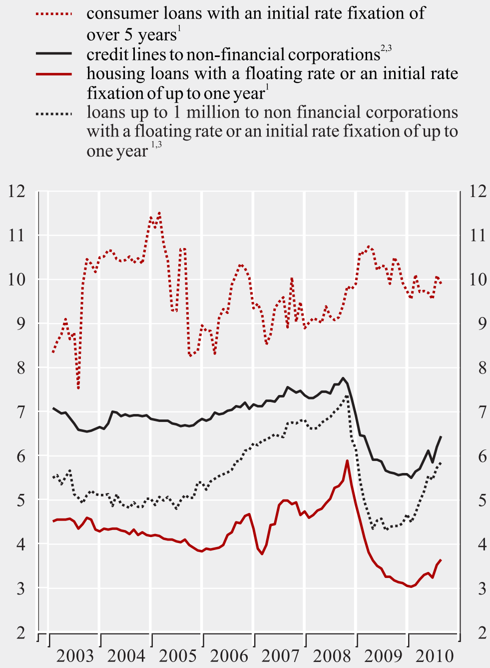
(percentages per annum)

	December 2009	August 2010	Change Dec. 2009/ Aug. 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	3.28	3.38	0.10
Maximum interest rate	6.00	6.44	0.44
Minimum interest rate	2.42	2.37	-0.05
Interest rate in Greece[2]	4.70	5.87	1.60
Interest rate differential between Greece and the euro area	1.42	2.49	1.07
A.2. Loans of more than €1 million to non-financial corporations			
Weighted average interest rate in the euro area	2.19	2.29	0.10
Maximum interest rate	5.47	6.27	0.80
Minimum interest rate	1.63	1.65	0.02
Interest rate in Greece	3.24	4.51	1.27
Interest rate differential between Greece and the euro area	1.05	2.22	1.17
A.3. Housing loans			
Weighted average interest rate in the euro area	2.71	2.81	0.10
Maximum interest rate	5.26	4.80	-0.46
Minimum interest rate	1.92	2.01	0.09
Interest rate in Greece	3.08	3.67	0.59
Interest rate differential between Greece and the euro area	0.37	0.86	0.49
A.4. Consumer loans			
Weighted average interest rate in the euro area	6.42	5.29	-1.13
Maximum interest rate	9.85	10.92	1.07
Minimum interest rate	3.04	2.91	-0.13
Interest rate in Greece	8.18	10.92	2.74
Interest rate differential between Greece and the euro area	1.76	5.63	3.87
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	3.96	3.63	-0.33
Maximum interest rate	5.57	5.37	-0.20
Minimum interest rate	2.94	2.59	-0.35
Interest rate in Greece	4.60	4.33	-0.27
Interest rate differential between Greece and the euro area	0.64	0.70	0.06
B.1. Consumer loans			
Weighted average interest rate in the euro area	6.26	6.25	-0.01
Maximum interest rate	15.47	14.91	-0.56
Minimum interest rate	4.44	3.55	-0.89
Interest rate in Greece	8.95	8.20	-0.75
Interest rate differential between Greece and the euro area	2.69	1.95	-0.74

Sources: ECB and euro area national central banks.
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. Changes in interest rates on credit to enterprises are calculated after a relevant adjustment.

Chart VI.6 Bank interest rates on new loans in Greece (January 2003 - August 2010)

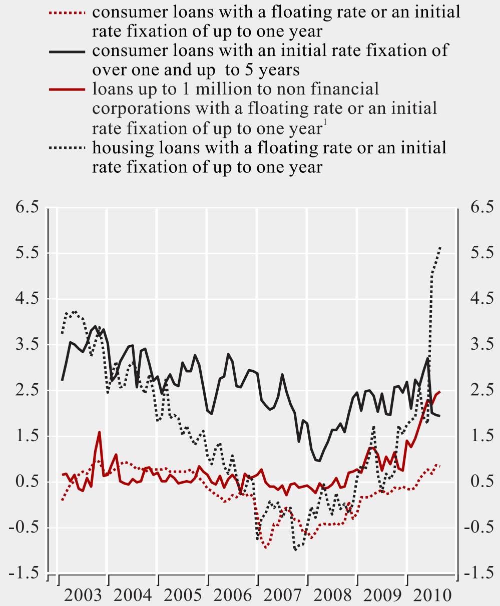
(percentages per annum)



Source: Bank of Greece.
1 Monthly average rate.
2 End-of-month rate.
3 See footnote 2 in Table VI.5A.

Chart VI.7 Bank interest rates on new loans: differentials between Greece and the euro area (January 2003 - August 2010)

(percentage points)



Sources: Bank of Greece and ECB.
1 See footnote 2 in Table VI.5A.

had not facilitated Greek banks in obtaining liquidity.[24]

In more detail, as regards new loans to individuals and private non-profit institutions, the average interest rate on residential loans in Greece stood at 3.89% in August 2010, up by 48 basis points compared with end-2009. It should be noted that this interest rate remained on average at historically low levels in 2010 compared with previous years.[25] The average interest rate on consumer loans for a specified amount and a fixed maturity stood at 9.86% (December 2009: 8.94%), while there was a rise in the interest rate on credit cards (August 2010: 16.35%, December 2009: 15.17%), as well as in the interest rate on open consumer loans (August 2010: 11.95%, December 2009: 12.06%). As already mentioned above, the highest increase (of 274 basis points) was recorded in interest rates on consumer loans, notably those with a fixed maturity and a floating rate or an initial rate fixation of up to one year.

As regards new loans to non-financial corporations,[26] the interest rate on credit lines stood at 6.47% in August (December 2008: 5.60%), while the interest rate on new loans for a specified amount and maturity was 5.87% for loans up to €1 million and to 4.51% for loans over €1 million. In these two types of corporate loans, which represent the most important loan types, the increase in interest rates between January and August 2010 was 160 and 127 basis points respectively. Moreover, interest rates on

24 These measures include, among other things, the acceptance of Greek government bonds, irrespective of their credit rating, as eligible collateral in the Eurosystem's refinancing operations, the launch of the Securities Markets Programme and the re-adoption of a fixed rate tender procedure with full allotment in all its three-month liquidity-providing operations. For a more detailed analysis of the ECB's liquidity-supply intervention policy, see Chapter III.
25 The lowest average interest rate on new residential loans in Greece between 2003 and 2009 was recorded in December 2009 (3.91%).
26 See footnote 12 above.

Table VI.5B Bank interest rates on new loans in euro area countries[1]

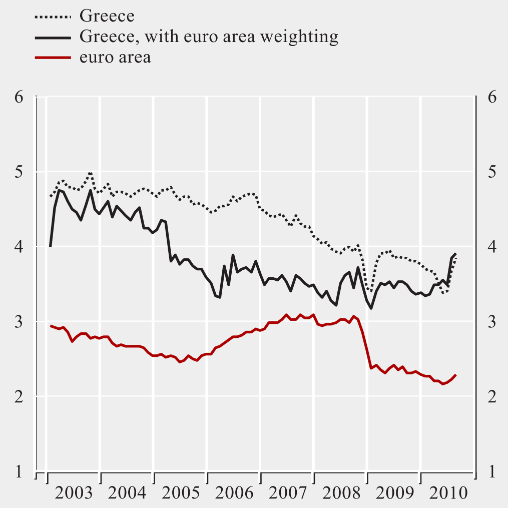
(percentages per annum)

	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. 2009	Aug. 2010	Dec. 2009	Aug. 2010	Dec. 2009	Aug. 2010	Dec. 2009	Aug. 2010	Dec. 2009	Aug. 2010
Austria	2.48	2.37	2.04	2.04	2.91	2.63	4.26	4.74	4.44	4.67
Belgium	2.42	2.54	1.63	1.65	2.92	2.86	5.27	5.81	6.50	6.37
Cyprus	6.00	6.44	5.47	6.27	5.01	4.80	7.00	6.96	...[3]	...[3]
Finland	2.53	2.92	2.08	1.77	1.92	2.01	3.04	3.46	4.76	3,55
France	2.71	2.59	1.94	2.09	3.38	3.21	6.91	6.58	6.15	5.95
Germany	3.36	3.55	2.57	2.62	3.36	3.27	4.04	3.38	4.83	5.76
Greece	**4.70**	**5.87**[4]	**3.24**	**4.51**[4]	**3.08**	**3.67**	**8.18**	**10.92**	**8.95**	**8.20**
Ireland	3.32	3.82	2.50	2.69	2.61	3.07	3.63	5.79	...[3]	...[3]
Italy	2.95	3.18	1.78	2.03	2.24	2.43	9.85	7.23	8.28	6.85
Luxembourg	2.42	2.96	2.03	2.36	2.03	2.05	...[3]	...[3]	5.17	4.87
Malta	5.29	5.61	4.19	4.71	3.48	3.41	...[3]	...[3]	...[3]	...[3]
Netherlands	3.18	2.53	1.96	1.72	3.84	3.16	8.76	2.91	...[3]	...[3]
Portugal	4.95	5.58	3.27	3.65	2.22	2.54	5.53	6.74	12.17	10.33
Slovakia	3.70	4.17	2.57	3.43	5.26	4.80	7.11	9.16	15.47	14.91
Slovenia	5.65	5.70	4.63	4.73	3.36	3.26	4.99	4.74	7.35	6.95
Spain	3.63	3.61	2.16	2.24	2.45	2.45	9.72	6.17	8.08	7.97

Sources: ECB and euro area national central banks.
1 Despite the efforts to harmonise statistical methodologies across the euro area, considerable heterogeneity remains in terms of instrument characteristics and relative weights; this partly reflects differences in national conventions and practices, as well as in regulatory and fiscal arrangements.
2 Monthly average rate.
3 These countries do not publish data on the respective interest rates.
4 See footnote 2, Table VI.5A.

Chart VI.8 Average interest rate differential between new loans and new deposits in Greece and the euro area (January 2003 - August 2010)

(percentage points)



Sources: Bank of Greece and ECB.

these loans were among the highest across euro area countries (see Table VI5.B).

As already mentioned above, lending rates in the euro area as a whole declined or increased slightly in the period under review, while interest rates in Greece mostly received high increases; as a result, the positive differential between Greek interest rates and the corresponding European rates widened in most loan categories (see Chart VI.7). The largest increase in the interest rate differential between Greece and the euro area was recorded for consumer loans with a floating rate or an initial rate fixation of up to one year (see Table VI.5A). The largest differential (August 2010: 563 basis points) still involves loans to households without an agreed maturity, as well as consumer loans with a floating rate, whereas the smallest differential (70 basis points) involves residential loans with an interest rate fixation of over one and up to five years.

Table VI.6 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
Dec. 1998	16.21	8.12	8.09	...	...
Dec. 1999	14.02	6.98	7.04	...	...
Dec. 2000	9.68	4.00	5.68	...	...
Dec. 2001	7.26	1.96	5.30	...	...
Dec. 2002	6.29	1.67	4.62	...	...
Dec. 2003	5.92	1.2	4.72	4.45	2.77
Dec. 2004	5.94	1.22	4.72	4.18	2.53
Dec. 2005	5.79	1.27	4.52	3.59	2.56
Dec. 2006	6.38	1.87	4.51	3.63	2.89
Dec. 2007	6.67	2.53	4.14	3.48	3.09
Dec. 2008	6.72	3.27	3.45	3.27	2.63
Dec. 2009	5.09	1.32	3.77	3.40	2.29
Aug. 2010	5.99	2.13	3.86	3.92	2.29

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.

The differential between the average weighted interest rate on new bank loans and the corresponding rate on new deposits (interest rate margin) increased by 9 basis points during the reviewed period to stand at 3.86% in August (see Table VI.6 and Chart VI.8).[27] The interest rate spread in the euro area remained unchanged (at 2.29%), thus resulting to a slight widening of their difference (August 2010: 157 basis points, December 2009: 148 basis points). This spread, which was set on a downward path from the second quarter of 2005 until the end of 2008 (December 2008: 0.82%), widened abruptly in the first quarter of 2009 (April 2009: 162 basis points). Nevertheless, the difference between the Greek and the euro area interest spreads remains lower than its seven-year (2003-2009) average, which stands at 172 basis points.

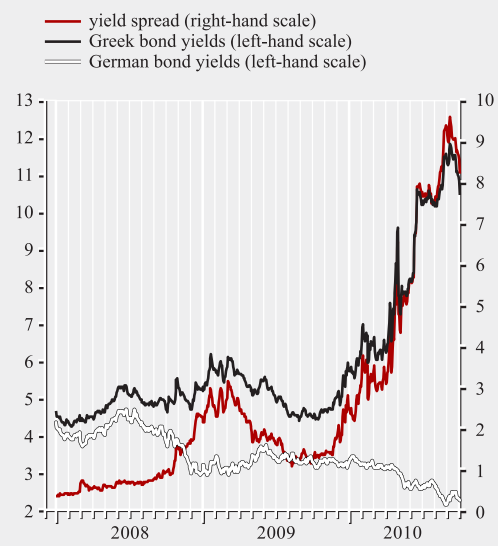
5 THE GOVERNMENT BOND MARKET

In the first nine months of 2010, developments in the secondary market for Greek government bonds were mainly characterised by a surge in yields, which made borrowing costs virtually prohibitive for new issues, particularly from April onwards. Furthermore, a gradual contraction of transactions was observed.

In more detail, Greek government bond yields increased considerably across maturities in the first nine months of 2010 compared with end-2009 (for instance, see Chart VI.9 for the ten-year bond), and yield volatility was particularly high. These developments indicate investors' heightened uncertainty about the outlook of mainly fiscal aggregates and economic activity in Greece; these factors were behind the consecutive downgrades of Greece's credit rating by international rating agencies.[28,29] At the same time, negative publications on Greek economic prospects and the country's ability to meet its debt obligations were becoming more and more frequent in international media. A merely temporary decline in yields was observed after the country's recourse to the financial support mechanism, which was jointly established by the European Commission, the ECB and the IMF, as well as after the announcement of ECB's decisions regarding its market interventions and the eligible collateral criteria for Greek bonds. It should be noted that in September 2010 Greek government bond yields recorded a slight decrease, which continued into the first two weeks of October.

Chart VI.9 Yields on the 10-year Greek and German government bonds (January 2008 - September 2010)

(daily data; yields in percentages per annum; yield spread in percentage points)



Source: Bank of Greece.

As a result of these developments, the Greek government bond yield curve at end-September 2010 shifted upwards, compared with end-December 2009, and its slope turned negative from mid-April onwards (see Chart VI.10).[30,31]

27 It should be noted that the interest rate margin in Greece, weighted for euro area loans and deposits, stood at 3.92% in August.

28 In more detail, Fitch Ratings downgraded Greece's credit rating from BBB+ to BBB– on 9 April 2010, followed by Moody's on 22 April and Standard & Poor's on 27 April that downgraded it from A2 to A3 and from BBB+ to BB+ respectively. Finally, a further downgrade from A3 to Ba1 was announced by Moody's on 14 June 2010.

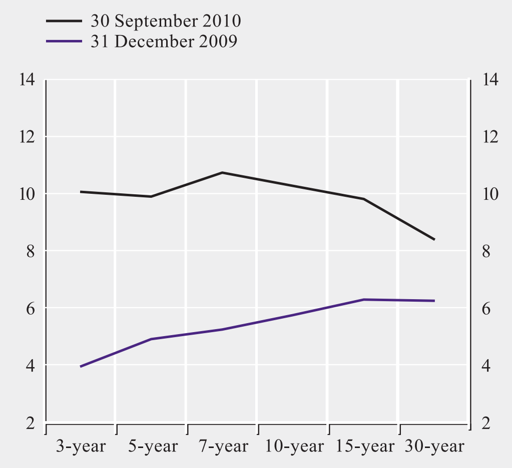
29 Notably, the volatility of Greek bond yields rose considerably during April-May 2010, as well as in the last two weeks of June 2010, i.e. when the downgradings were announced.

30 The slope of the yield curve took on its maximum negative value at end-April 2010 and, although it remained negative, it has narrowed ever since.

31 The activation of the trilateral mechanism for the support of the Greek economy also contributed to this development.

Chart VI.10 Greek government paper yield curves

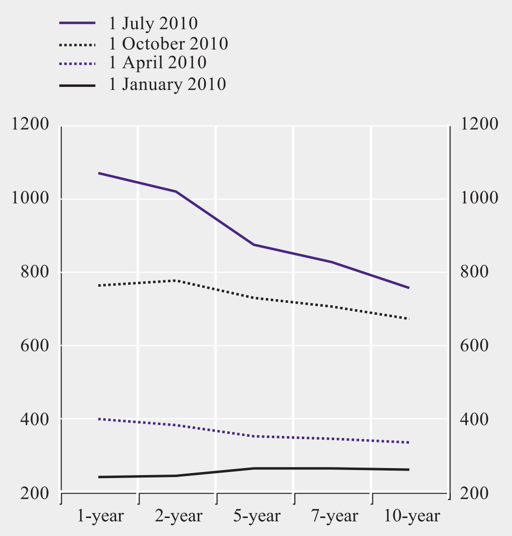
(yields in percentages per annum)



Source: Bank of Greece.

Chart VI.11 CDS spread curves for Greek sovereign bonds

(basis points)



Source: Thomson Reuters.

These developments in the yield curve reflect investors' assessment of increased macroeconomic risks, associated with the short-term outlook of economic activity. A further sign of increased short-term risks is also the reversal of the credit default swap (CDS) yield curve for Greek bond issues (see Chart VI.11).[32,33] Nevertheless, the negative slope of the curve flattened considerably in September, but the curve itself shifted downwards during the same period.

Uncertainty from these risks led to a rise in the ten-year Greek government bond yield; this, coupled with a decline in the yield of its German counterpart, contributed to the widening of the spread between the Greek and the German sovereign bonds. In particular, the yield of the ten-year Greek government bond was 10.48% at end-September 2010, up by 479 basis points compared with end-December 2009, while the yield of the corresponding German bond declined by 116 basis points in the same period and reached 2.24%. As a result of the above, the yield spread widened to 824 basis points (30.9.2010) from 229 basis points (31.12.2009). According to related papers,[34] the key determinants of intra-euro area government bond spreads are the following:

– investor risk aversion;

– expectations on the issuer's fiscal position (i.e. the outlook of its public debt servicing and the future burden of public expenditure for the payment of pensions);

– the issuer's economic outlook and credit rating; and

– the liquidity conditions prevailing in the secondary market for government securities, which determine investors' ability to make transactions any time without this causing sharp movements in the prices of these securities.

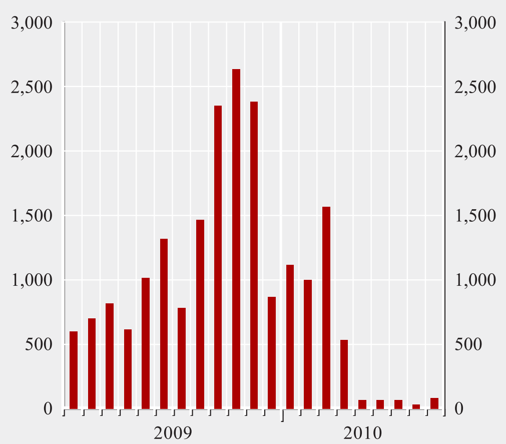
32 On how to extract information from the movements of the risk premium curve for bonds with different maturities, see Berg (2010), "The term structure of risk premia: new evidence from the financial crisis", ECB Working Paper no. 1165.

33 It is also noted that there was an upward trend in CDS prices for the corresponding bond issues of other European countries as well.

34 For instance see: (i) Gerlach *et al.* (2010), "Banking and sovereign risk in the euro area", CEPR discussion paper no. 7833, (ii) Georgoutsos and Migiakis (2010), "European sovereign bond spreads: monetary unification, market conditions and financial integration", Bank of Greece, Working Paper no. 115, and (iii) Manganelli and Wolswijk (2009), "What drives spreads in the euro area government bond market?", *Economic Policy*, 24(58), 191-240.

Chart VI.12 Average daily value of transactions in the Electronic Secondary Securities Market (HDAT)
(January 2009 - September 2010)

(million euro)



Source:Bank of Greece.

The average daily value of transactions in the Electronic Secondary Securities Market (HDAT) was €504 million in the period under review,[35] down by 46.8% year-on-year (see Chart VI.12); this is due to the reduced activity observed after the first quarter of 2010. Nevertheless, it should be noted that in September 2010 the daily value of HDAT transactions rose significantly compared with August. The average bid/ask spread increased to 126 basis points in September 2010, from 61 basis points in December 2009.

Developments in the secondary market for government securities actually shaped conditions in the primary securities market. As a result of investors' subdued demand for Greek government securities and because of very high yields in the secondary market, the Greek government did not proceed with any bond issues during April-September 2010 (see Table VI.7). After the first quarter of 2010, the Greek State issued only Treasury bills with maturities of 13, 26 and 52 weeks in April 2010 (amounting to €2.5 billion, €1.0 billion and €1.0 billion respectively) and of 13 and 26 weeks in July and September 2010 (amounting to €2.4 billion and €2.4 billion respectively in July, and to €415 million and €1.2 billion respectively in September 2010).

35 During the same period, a drop was also observed in the total average daily value of transactions in the Book-Entry Securities System of the Bank of Greece, which declined to €16.4 billion, from €24.8 billion year-on-year. In September 2010, however, the average daily value of transactions was double that of August.

Table VI.7 Greek government paper issues

	January-September					
	2009			2010		
Type of security	**Million euro**	**Percentage of total**		**Million euro**	**Percentage of total**	
Treasury bills	*11,916*	*17.9*		*14,727*	*42.1*	
Bonds[1]	*54,544*	*82.1*	*100.0*	*20,272*	*57.9*	*100.0*
3-year	14,612		26.8	-		0.0
4-year	5,808		10.6	-		0.0
5-year	17,879		32.8	9,967		49.2
7-year	-		0.0	4,972		24.5
10-year	16,235		29.8	4,947		24.4
20-year	-		0.0	386		1.9
Total	**66,460**	**100.0**		**34,999**	**100.0**	

Source: Ministry of Finance.
1 On the basis of initial (rather than residual) maturity.

The unfavourable investment climate in respect to Greek government securities inevitably pushed upwards their interest rate in the primary market. The weighted average borrowing cost for Treasury bills issued in April, July and September rose to 4.12%, 4.32% and 4.60% respectively (in annualised terms), against 1.74% in January 2010. The rise in the weighted average cost in September 2010 actually stemmed from the interest rate on Treasury bills with a maturity of six months, which increased from 4.65% in July to 4.82% in September. It should be noted that the calculation of the weighted average covers a decline in the interest rate of the 3-month Treasury bill issue (3.98% in September, against 4.05% in July).

However, given the adverse market conditions, the strong demand for these issues is a positive development, as the coverage ratio for the issues of April, July and September averaged 4.7, 3.8 and 5 respectively, against 3.6 for the issues of January 2010.

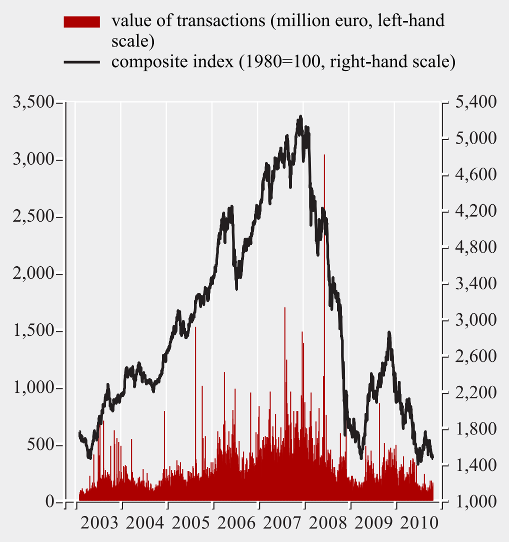
6 STOCK MARKET DEVELOPMENTS

In the January-September 2010 period, the drop in Athens Exchange (Athex) share prices was sharp (see Chart VI.13), in contrast with the relatively slight fall, on average, in euro area share prices. Transaction activity increased year-on-year (see Chart VI.13), whereas fund-raising from the stock market declined (see Table VI.8).

In more detail, the downward trend of the Athex composite share price index since mid-October 2009 continued at a swift pace into the first five months of 2010. Despite the upward trend observed thereafter, mostly between June and July 2010, the Athex composite share price index at end-September 2010 was 33% lower compared with end-December 2009. Declining Athex share prices are directly associated with investor uncertainty about the development of fiscal aggregates in Greece, as well as the outlook of economic activity.[36]

Chart VI.13 Athens Exchange: composite share price index and value of transactions (January 2003 - September 2010)

(daily data)



Source: Athens Exchange.

The Athex composite index during the period under review was not only largely outperformed by the Dow Jones EURO STOXX index (-3.8%), but also recorded the lowest performance across euro area stock markets, where share prices declined only modestly despite investor concerns about the likelihood of the intensifying European fiscal crisis affecting global economic growth.

As regards the remaining Athex fundamentals, the daily average value of transactions reached €153 million in the January-September 2010 period, i.e. down by approximately 18% year-on-year, which is a relatively low rate, if the above mentioned sizeable drop in prices is taken into account.

During the period under review, total funds raised in the stock market recorded a considerable decline and stood at €1,193.8 million, against €3,251.2 million in the respective period of 2009 (Table VI.8). Funding to non-

36 As a result of these developments, a €1.4 billion outflow by foreign investors was observed between January and September 2010.

Table VI.8 Funds raised through the Athens Exchange

(million euro)

Categories of firms and sectors	Number of firms		Funds raised[1]	
	January-September		January-September	
	2009	2010*	2009	2010*
Listed firms	17	6	3,251.2	1,193.8
Newly listed firms	-	-	0.0	0.0
Total	**17**	**6**	**3,251.2**	**1,193.8**
Financial sector	5	2	2.837.3	1,037.8
Non-financial sector	12	4	413.9	156.0

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.

financial corporations remained particularly limited in the reviewed period, while one bank raised around 95% of total funds obtained by non-financial corporations.

Finally, as far as the banking sector is concerned,[37] the rate of decline in the Athex bank index (-44.3%) was higher than that of the Athex composite share price index and significantly stronger compared with the euro area banking sub-index (-16.9%). This adverse development is due to the liquidity strain that Greek banks suffered on account of fiscal developments, as well as to the impact that the slowdown in domestic activity and the weakening of credit expansion to non-financial corporations and households had and will probably continue to have on their profitability.

7 REVIEW OF BANKING SECTOR DEVELOPMENTS IN THE FIRST HALF OF 2010

7.1 INTRODUCTION

In the first half of 2010, macroeconomic —and particularly fiscal— conditions in Greece affected the banking sector considerably. The access of banks to international money and capital markets was practically impossible, the quality of banks' loan portfolios deteriorated and the banking system as a whole recorded losses. These adverse developments, as evidenced by the results of the EU-wide stress test in July 2010, were counterbalanced by the relatively high capital adequacy of Greek banks and banking groups, which however declined slightly compared with end-2009.

7.2 BANKING RISKS

7.2.1 Credit risk

The quality of bank loans to the private sector deteriorated further in the first half of 2010 in Greece. The ratio of non-performing loans to total loans (NPL ratio) rose (June 2010: 9%, December 2009: 7.7% – see Table VI.9), influenced by a small number of banks with a relatively high ratio of non-performing loans.[38] In the last six quarters a rise in the NPL ratio was observed across loan types, most notably consumer loans. Furthermore, the coverage ratio (provisions to non-performing loans), albeit slightly improved compared with end-2009, remained relatively low (June 2010: 43.4%, December 2009: 41.5%). This improvement is

37 For further details on banking sector developments, see Section VI.7 of this chapter.
38 If foreign banks' subsidiaries in Greece are not taken into account, the NPL ratio stands at 7.9% at end-June 2010, against 6.8% in 2009.

Table VI.9 Key vulnerability and shock-absorption capacity indicators of Greek commercial banks and banking groups

(percentages)

	Banks		Banking groups	
	December 2009	June 2010	December 2009	June 2010
Asset quality[1]				
Non-performing loans (NPLs) - total	7.7	9.0		
– Housing loans	7.4	8.7		
– Consumer loans	13.4	16.7		
– Business loans	6.7	7.6		
Accumulated provisions over NPLs	41.5	43.4		
Liquidity				
Loan-to-deposit ratio	106.6	115.6	113.7	122.4
Liquid asset ratio	24.2	20.0	21.4	20.1
Asset/liability maturity mismatch ratio	-4.2	-10.4	-4.9	-7.8
Capital adequacy				
Capital adequacy ratio	13.2	12.3	11.8	11.2
Tier I ratio	12.0	11.0	10.7	10.1
	Jan.-June 2009	Jan.-June 2010	Jan.-June 2009	Jan.-June 2010
Profitability[2]				
Net interest margin	1.8	1.9	2.5	2.7
Cost-to-income ratio	53.4	66.0	52.4	59.0
Return on assets - ROA (after tax)	0.2	-0.6	0.5	-0.3
Return on equity - ROE (after tax)	4.5	-9.7	7.5	-4.5

Source: Bank of Greece and financial statements of commercial banks and banking groups.
1 NPL data on international activities are not comparable and therefore the NPL ratio on a consolidated basis is not reported.

not satisfactory considering the effect that the negative rate of change of economic activity will have on the quality of banks' loan portfolios. Therefore, these developments call for a considerable increase in provisions against credit risk. The need to increase the stock of provisions also stems from the fact that the ratio of net NPLs (i.e. NPLs less accumulated provisions for credit risk) to total regulatory capital rose in the same period.

7.2.2 Liquidity and market risks

During the first months of 2010, mounting concerns among international investors and rating agencies about the medium-term fiscal and overall economic prospects of the Greek economy triggered successive downgradings of Greece's sovereign credit rating and, consequently, of Greek banks and their securities. As a result of these developments:

- international money and capital markets became virtually inaccessible to Greek banks;

- the recourse of Greek banks to the Eurosystem for liquidity increased further and considerably,[39] and

- a decrease in deposits by non-financial corporations and households was recorded.[40]

39 At end-September 2010, Eurosystem funding to Greek banks amounted to €96 billion.
40 At end-August 2010 this decrease was in the area of €25 billion.

Table VI.10 Financial results of Greek commercial banks and banking groups with shares listed on the Athens Exchange (first half of 2009 – first half of 2010)

(amounts in million euro and annual percentage changes)

	Banks			Banking groups		
	First half of 2009	First half of 2010	Change (%)	First half of 2009	First half of 2010	Change (%)
Operating income	**5,403**	**4,435**	**-17.9**	**7,872**	**7,074**	**-10.1**
Net interest income	3,756	4,318	15.0	5,504	6,129	11.4
– Interest income	10,364	8,643	-16.6	12,805	11,007	-14.0
– Interest expenses	6,608	4,324	-34.6	7,301	4,878	-33.2
Net non-interest income	1,646	117	-92.9	2,368	945	-60.1
– Net fee income	625	631	1,0	1,063	1,054	-0.8
– Income from financial operations	766	-618	-	996	-313	-
– Other income	255	104	-59.2	309	204	-34.1
Operating costs	**2,887**	**2,928**	**1.4**	**4,119**	**4,173**	**1.3**
Staff costs	1,705	1,759	3.2	2,325	2,413	3.8
Administrative costs	964	983	2.0	1,427	1,410	-1.2
Depreciation	194	177	-8.4	332	329	-0.8
Other costs	24	8	-65.3	36	20	-44.1
Net income (operating income less costs)	**2,516**	**1,507**	**-40.1**	**3,752**	**2,901**	**-22.7**
Provisions for credit risk	1,756	2,657	51.3	2,333	3,231	38.5
Pre-tax profits	**760**	**-1,150**	**-**	**1,425**	**-333**	**-**
Taxes	255	172	-32.7	420	372	-11.4
After tax profits	**505**	**-1,322**	**-**	**1,005**	**-705**	**-**

Source: Financial statements of Greek commercial banks,

The pressure on the liquidity of Greek banks and banking groups was reflected in the deterioration of regulatory liquidity ratios, i.e. the liquid asset ratio and the mismatch ratio,[41] whose level remained well above the regulatory minimum nonetheless, as well as the loan-to-deposit ratio, which stood at 115.6 for banks and 122.4 for banking groups at end-June 2010 (see Table VI.10). These developments would definitely be worse, if the Greek government had not adopted a package of measures aimed to enhance banks' access to liquidity.

In more detail, in order to enhance the ability of Greek banks to use the refinancing facilities of the Eurosystem, the Greek government, with the approval of the European Commission, extended initially until 31 June 2010 and subsequently until 31 December 2010 the deadline for the use of unallocated funds under the liquidity support measures of Law 3723/2008. In addition, Law 3845/2010 expanded the bank bond guarantee scheme by €15 billion (further to the €15 billion which were initially provided for by Law 3723/2008).[42] In this context, in the first half of 2010, Greek banks issued bonds under Greek government

41 It should be noted that the Bank of Greece was one of the very few supervisory authorities globally to have imposed regulatory liquidity ratios since 2005, by virtue of the Bank of Greece Governor's Act 2560/1.4.2005. The liquid asset ratio is calculated as the ratio of liquid assets with a maturity of up to 30 days and readily realisable assets to total borrowed funds with a maturity of up to one year and its regulatory minimum is 20%. The mismatch ratio is defined as the ratio of assets net of liabilities with a maturity of up to 30 days to total borrowed funds with a maturity of up to one year and its regulatory minimum is -20%. Liquid assets are cash assets and claims on financial institutions with a maturity of up to 30 days, while readily realisable assets are Treasury bills, (government and corporate) bonds, shares and mutual funds listed in regulated markets of the EU, the European Economic Area and G-10 countries. Borrowed funds consist of total liabilities with a maturity of up to 12 months and comprise by 100% sight deposits, savings and current accounts.

42 It should be noted that the key aggregates of the Greek economy and the unfavourable expectations on their development had an adverse impact on Greek bond prices and subsequently on the market value of the Greek government bond portfolios of Greek banks, thereby limiting their ability to obtain liquidity via the Eurosystem using these bonds as collateral. Furthermore, the downgrading of the Greek government bonds credit rating below A- entails a haircut add-on of 5% in Eurosystem credit operations.

guarantee totalling €26.8 billion and received Greek government securities amounting to €3.1 billion. Persisting unfavourable liquidity conditions called for a further expansion of the bank bond guarantee scheme by another €25 billion in August 2010 (under article 7 of Law 3872/2010).

Apart from the measures taken by the Greek government, Greek banks' access to liquidity was further facilitated by several decisions taken by the ECB, such as its decision (of 3 May 2010) to accept as collateral in the Eurosystem's refinancing operations all Greek government bonds, as well as bonds guaranteed by the Greek government, irrespective of credit rating, or its decision (10 May 2010) to make interventions in the euro area public and private securities markets (Securities Markets Programme).

The considerable widening of the yield spread of Greek government bonds vis-à-vis German ones increased the Greek banks' market risk. However, this development had a limited impact on their fundamentals (i.e. profitability and capital adequacy) as the bulk of Greek government bonds is part of Greek banks' held-to-maturity investment portfolios.

7.3 PROFITABILITY AND CAPITAL ADEQUACY

7.3.1 Profitability

Unfavourable macroeconomic conditions in the first half of 2010 inevitably had a negative impact on the profitability of banks. Banks' net profits (operating income less operating costs) declined in the first half of 2010 year-on-year both at bank and at banking group level (-41% and -23.1%, respectively). The positive influence of higher net interest income was more than offset by losses from financial operations (mainly from transactions in Greek government bonds) and a considerable decrease in other income, while there were marginal changes in net fee income. Operating costs recorded a rise, albeit relatively weak. The sizeable increase in provisions for credit risk (as a result of a deterioration in the quality of loan portfolios) led to negative pre-tax and after provisions profits. The above developments had an adverse impact on profitability indicators (ROE and ROA)[43] and on the cost-to-income ratio[44] both for banks and banking groups (see Table VI.10).

7.3.2 Capital adequacy

At end-June 2010, a slight decline was observed in the capital adequacy ratio (CAR) and the Tier 1 ratio, compared with end-December 2009, at both bank and banking group level (see Table VII.9). This development is mainly due to the decrease in regulatory own funds on account of negative developments in the profitability of banks, as well as to an increase in risk-weighted assets (as a result of credit expansion and a rise in non-performing loans, which implies higher capital requirements). However, at end-June 2010, both the CAR (banks: 12.3%, banking groups: 11.2%) and the Tier 1 ratio (banks: 11.0%, banking groups: 10.1%) remained well above the regulatory minimum of 8%; as a result, capital buffers at system level reached €9.2 billion. Furthermore, €1.2 billion from the capital support scheme are available under Law 3723/2008, while by virtue of Law 3864/2010 the Hellenic Financial Stability Fund (HFSF) was established, with a capital of €10 billion. Its objective is to maintain the stability of the Greek banking system, by enhancing the capital adequacy of credit institutions. It should be noted that a credit institution that meets the capital requirements of Article 28 of Law 3601/2007 and Bank of Greece Governor's Act 2595/20.8.2007 may submit a request for capital support to the HFSF after a recommendation from the Bank of Greece or on its own initiative. Such an initiative can be backed by the Bank of Greece, provided that all the following conditions are cumulatively met: (a) on the basis of conservative assumptions of the Bank of Greece, it is assessed

43 Return on equity (ROE) and return on assets (ROA) are defined as the ratio of pre-tax profits to shareholders' equity and to assets, respectively.
44 The cost-to-income ratio is the ratio of operating costs to operating income.

that there is a well-founded risk that the credit institution may not be able to continue to meet the capital adequacy requirements under Article 28 of Law 3601/2007 and Bank of Greece Governor's Act 2595/20.8.2007; and (b) all of the credit institution's efforts to increase its own funds with the participation of existing or new shareholders have failed. Additionally, the Bank of Greece may recommend that a credit institution submits a request for capital support to the HFSF provided that the credit institution does not meet capital adequacy requirements (a) under Article 28 of Law 3601/2007 and Bank of Greece Governor's Act 2595/20.8.2007 and (b) under Article 27 of Law 3601/2007, when all the efforts of the credit institution to increase its own funds with the participation of existing or new shareholders have failed.

Banking sector's fundamentals will not improve, if the factors that put pressure on banks' credit rating and subsequently their ability to raise funds in money and capital markets are not repaired. Therefore, what is required is to improve the general macroeconomic environment, as well as to promptly and fully implement the institutional reforms and important changes in public administration that will contribute positively to a competitive economy. The achievement of the above will allow mitigation of banks' liquidity and credit risks, so that these are in a position to meet the observed demand for banking credit satisfactorily. It is quite encouraging that Greece is already making use of the trilateral support mechanism and adheres to the fiscal and reform targets set by the government under the Memorandum of Economic and Financial Policies. This is also evidenced in recent assessments made by the EU/ECB/IMF tripartite committee.

At the same time, however, Greek banks should adapt proactively to the new economic and regulatory environment, taking into account that, even if economic activity gets back on an upward path, the growth rate of banking transactions will fall below pre-crisis levels. Moreover, the ECB's remaining non-standard measures will be phased out gradually, while from 2011 onwards fund-raising in international markets will be hampered, as governments, banks and non-financial corporations will be competing for funding more sharply. Therefore, banks should be prepared to cope with the ensuing liquidity conditions. Meanwhile, banks should also anticipate the —gradual, between 2013 and 2018— implementation of the international regulatory framework, which was in principle endorsed by the Basel Committee on 12 September 2010.[45] The reforms provided for under this new framework seek to enhance both the quantity and the quality of credit institutions' capital and to limit banks' exposure to risk, by introducing a leverage indicator, dynamic provisioning against credit risk and adopting an international standard for the calculation of liquidity risk.

All these make it necessary for banks to revisit their business models, with a view to maintaining a high level of capital adequacy through adequate provisioning against credit risk and through the rationalisation of expenditure. It is certain that strategic alliances and mergers will contribute to the achievement of these targets, by reaping the gains of synergies on profitability, capital adequacy, expenditure curtailment and liquidity.

45 See Box VI.1.

Box VI.1

REFORMING THE INTERNATIONAL REGULATORY FRAMEWORK FOR BANKS

On 12 September 2010, the Basel Committee on Banking Supervision (BCBS) announced impending changes in the regulatory framework of banks, expected to be completed by 2018. Reforms under this new framework aim at improving both the quality and the quantity of credit institutions' capital, as well as mitigating banks' exposure to risks, through the adoption of a leverage ratio, the establishment of a dynamic provisioning system for credit risk and the introduction of an international standard for the measurement of liquidity risk.

The relevant proposals are included in the press release of the Basel Committee and discussions on their finalisation within this year will be held both at EU and G-20 level. The proposals can be summarised as follows:

1. The minimum common equity requirement (core Tier 1) will be increased from the current 2% to 4.5%; this will be phased in between 1 January 2012 and 1 January 2015. Meanwhile, instruments such as deferred tax assets from timing differences, minority interests, amounts above the aggregate 15% limit for investment in financial institutions, which until now were being deducted by 50% from Tier 1 capital and by 50% from Tier 2 capital, will be now deducted only from core Tier 1 capital, as from 1 January 2014. These regulatory adjustments will be phased in by 1 January 2018, when deductions will have reached 100%.

2. The Tier 1 capital requirement, which includes common equity and hybrid securities, will increase from its current 4% to 6%; this will be phased in by 1 January 2015. In addition, a stricter definition and eligibility criteria for hybrid securities in this category of capital instruments will be adopted, as it has already been determined under Directive 2009/111/EC on capital requirements (CRD II) of 16.9.2009.

3. A capital conservation buffer, which will be met with common equity serving as a buffer of capital that can be used to absorb losses during periods of financial and economic stress, will be established. This conservation buffer will start increasing gradually on 1 January 2016, by 0.625% each subsequent year, to finally reach 2.5% on 1 January 2019. During periods of crisis, credit institutions will be allowed to draw on the buffer to absorb losses. Nevertheless, it should be noted that the closer their regulatory capital ratios approach the minimum requirement, the greater the constraints on earnings distributions.

4. A countercyclical buffer of capital, within a range of 0%-2.5%, will be implemented according to national macroeconomic circumstances. The purpose of the countercyclical buffer is to achieve the broader goal of financial stability by protecting the banking sector from periods of excess credit growth that results in the build-up of risk.

5. These capital requirements are supplemented by a leverage ratio, which will be calculated as the ratio of Tier 1 capital to total assets plus some off-balance sheet items. This ratio, which will be at least 3%, will serve as a backstop against mounting banking risk. At a first stage, the supervisory monitoring period will commence on 1 January 2011 and the parallel run period will start on 1 January 2013, with a view to migrating to a Pillar 1 treatment on 1 January 2018 based on appropriate review and calibration.

6. A common framework for monitoring liquidity risk will be established by introducing two new supervisory ratios: the Liquidity Coverage Ratio (LCR) as of 1 January 2015 and the Net Stable Funding Ratio (NSFR) as of 1 January 2018.

7. Dynamic provisioning is intended to address expected credit losses during an economic cycle. Dynamic provisioning aims at mitigating the pro-cyclicality of provisions, which results from their calculation method on the basis of International Accounting Standards.

As regards systemically important credit institutions, which should have high-quality capital and increased loss-absorbing capacity beyond the standards set with this framework, the Basel Committee and the Financial Stability Board are developing a well integrated approach which could include, among other things, contingent capital to ensure the loss absorbency of regulatory capital at the point of non-viability.

VII TOWARDS A MORE EFFECTIVE IMPLEMENTATION OF THE FISCAL ADJUSTMENT PROGRAMME AND OF STRUCTURAL REFORMS

SPECIAL FEATURE I: DIRECTIONS FOR FURTHER REDUCING PRIMARY PUBLIC EXPENDITURE

As has been repeatedly stressed in various Bank of Greece reports, reducing primary expenditure through measures of a permanent nature should be the cornerstone of all fiscal adjustment efforts. First, experience both worldwide and in Greece has shown that fiscal adjustment is *sustainable*, if it is based on cuts in primary expenditure.[1] On the contrary, if it is based on tax increases or reduced interest payments, as was the case in Greece during 1994-2000, then it can be easily reversed.[2]

Second, fiscal adjustment achieved through a permanent drop in primary expenditure can trigger economic activity and employment in the medium term. In other words, a tighter fiscal policy can have (in the medium term) an expansionary effect ("expansionary fiscal consolidation"). This expansionary effect arises when the initial fiscal position (i.e. at the time when the measures are taken) is so weak (e.g. very high deficit combined with a debt exceeding 100% of GDP and adverse growth prospects) that the country risks losing (or has already lost) market confidence. Under such adverse conditions, which have prevailed in Greece over the past 12 months, fiscal consolidation based on a permanent drop in primary expenditure can foster economic activity and employment, at least in the medium term. The expansionary effect of fiscal consolidation (achieved through the reduction of primary expenditure) is the result of the perceived fall in future interest rates and the positive expectations created in the private sector as a result of future tax cuts. Positive expectations for lower interest rates increase both investment and the present value of disposable income, which, in turn, lead to increased (current) consumption. As already mentioned, initial fiscal conditions are essential to this expansionary effect, same as the extent of cuts in primary expenditure and the intensity and duration of fiscal consolidation.[3]

Third, in the European Union, where tax competition is sharp, there is limited scope for introducing new taxes or increasing existing ones. Particularly in the euro area, an increase in taxes affects the competitiveness of a country with regard to return on investment and the attraction of capital, in the long term hindering economic growth. This is why almost all Member States reduced their tax rates once they joined the EMU. All twelve countries that joined the European Union after 2000 also made large tax reductions. In this environment and after taking into account the large tax increases introduced in 2010, a sustainable fiscal consolidation can only be based on a significant reduction in primary expenditure.

Fourth, reducing primary expenditure entails transferring funds from the non-tradable goods and services sectors to the tradable ones, which would also narrow the current account deficit.

Finally, for a country like Greece, with a public sector which is too large and ineffective, it is very important to reduce its size, so as to limit the negative impact on private economic activity.

In parallel with containing primary expenditure, it is also necessary to restructure and reorient it toward "development-friendly"

1 McDermott, J. and R.F. Wescott, "An Empirical Analysis of Fiscal Adjustments", *IMF Staff Papers*, vol. 43, 1966, p. 726-727.
2 Manessiotis, V. and R.D. Reischauer, "Greek Fiscal and Budget Policy and EMU", in Bryant, R.C., N.C. Garganas and G.S. Tavlas (eds.), *Greece's Economic Performance and Prospects*, Bank of Greece and The Brookings Institution, Athens, 2002, p. 103.
3 See (a) Giavazzi, F. and M. Pagano, "Can severe fiscal contractions be expansionary? Tales of two small European countries", CERP Discussion Paper No. 417, 1990, (b) Giavazzi, F. and M. Pagano, "Non-Keynesian effects of fiscal policy changes: International evidence and the Swedish experience", Swedish Economic Policy Review, 3(3), 1996, p. 67-103, (c) Perotti, R., "Fiscal policy in good times and bad", *Quarterly Journal of Economics*, vol. 1141999, pp. 1399-1436, (d) Blanchard, O., "Comment on Giavazzi and Pagano", in: Blanchard, O. and S. Fischer (eds.), *NBER Macroeconomics Annual*, No 5, Cambridge Mass: The MIT Press, 1990, p. 111-112. Especially in respect to the significance of high public debt, see: Sutherland, A., "Fiscal crises and aggregate demand: Can high public debt reverse the effects of fiscal policy?", *Journal of Public Economics*, vol. 65, 1997, p. 213-240. A recent analysis by the IMF (*World Economic Outlook*, October 2010, chapter 3, particularly p. 113) reaches varying conclusions: a restrictive fiscal policy does have a contractionary impact on economic activity in the short term, but this impact is smaller for countries whose public debt arouses market distrust. However, the analysis confirms that in the long term a contractionary fiscal policy leading to lower public debt contributes to increased investment and output.

spending, including spending for human and fixed capital formation and for research and development.

Of course, cutting primary expenditure is not easy. Experience in other countries has shown, however, that it is feasible and has a positive effect on the economy.[4] It requires, though, a large, comprehensive and systematic effort, as well as continuity, consistency, changed practices and mentality. A non-exhaustive list of measures that have been successfully taken in other countries can be found below.

Measures of an institutional nature

- Adopting rules, practices and procedures relative to the preparation, compilation and implementation of the budget aimed at *containing and controlling public spending*. Such measures may include the following:

a. Putting into practice a system for the evaluation of primary expenditure during the budget process (including, for example, a zero-based budget approach, programme budgeting, etc). A pilot project of "zero-based budgeting" in Greece during 1977-1979 had impressive results but, while preparations were under way for the introduction of the system in all ministries, the project was abandoned without explanation.

b. Multi-annual (usually three-year) budgeting. The new Law 3871/2010 (articles 8-9) is a first step in this direction, although it only applies to aggregate budget figures.

c. Preparing and submitting the budget to the Parliament six months before the start of the fiscal year (namely, in May or June).

d. Publishing monthly data and detailed reports on the implementation of the budget (already done to a significant extent), fully accounting for any deviations. In general, the preparation and implementation of the budget should ensure: transparency, credibility, coverage of the entire general government rather than the central government only, comparability of data and timely and frequent publication of data, as well as accountability.

e. Presenting separately the future commitments of each entity, in addition to the expenditure already disbursed.

f. Publishing annual balance sheets, which enable monitoring changes in the net position of the general government. Many EU countries managed to bring down their deficits by "converting" assets to current revenue.

Some of these principles are set out in Law 3871/2010 (article 1).

- Adopting "numerical fiscal rules"[5] in respect to the annual growth rate of primary expenditure, their level in absolute terms or as a percentage of GDP.[6] If these rules are to be effective, some conditions must be met in addition to the six rules mentioned above. In more detail, the targeted fiscal variables should be clearly specified, their evolution should be systematically monitored and the outcome should be measurable. Rules must be considered *permanent* and annual targets should be linked to relevant medium-term targets. Moreover, the body or person responsible for the achievement of each target should be clearly defined and the final outcome should be

4 New Zealand, Canada, the United Kingdom and Australia have developed remarkable methods for controlling their expenditure and fiscal deficits. All in all, twelve OECD member countries have set upper limits to the level of their expenditure as a percentage of GDP and nine others have set limits to the level of expenditure in absolute terms and in current prices. See Atkinson, P. and P. van den Noord, "Managing Public Expenditures: Some Emerging Policy Issues and a Framework for Analysis", in *Fiscal Rules*, Banca d' Italia, 2001, p. 112. On the importance of well-designed expenditure rules, see also "Ten years of the Stability and Growth Pact", ECB, *Monthly Bulletin*, October 2008, p. 65. Also, Deroose, S., M. Larch and A. Schaechter, "Constricted, lame and pro-cyclical? Fiscal policy in the euro area revisited", *European Economy, Economic Paper* no. 353, December 2008.

5 The Bank of Greece has repeatedly stressed in the past ten years that it is necessary to adopt such rules in Greece. See (a) *Annual Report 1999*, p.31 (b) *Annual Report 2001*, p. 52-53, (c) *Annual Report 2003*, p. 69-71, featuring a detailed and comprehensive presentation of numerical fiscal rules and of some necessary conditions in order to control expenditure and fiscal deficits, (d) *Annual Report 2004*, p. 65, (e) *Annual Report 2006*, p. 213-216, (f) *Monetary Policy – Interim Report 2008*, p. 23-24, (g) *Monetary Policy 2008-2009*, p. 29-32 and (h) *Monetary Policy 2009-2010*, p. 129-133.

6 See footnote 4 above.

checked by a body of independent auditors. According to a survey of the European Commission,[7] the numerical fiscal rules in force in almost all other EU-25 Member States increased fourfold[8] between 1990 and 2005. Furthermore, rules cover much more sub-sectors of the general government today than in the past. The most recent development is that numerical rules have also been imposed on social security expenditure. National rules complement and reinforce rules under the Maastricht Treaty and the Stability and Growth Pact.

The survey also showed that the introduction of numerical fiscal rules and the extension of their scope to an increasing part of the general government contributed to the reduction of the cyclically adjusted general government deficit (or to the increase in the general government surplus). Furthermore, the imposition of numerical fiscal rules on primary expenditure resulted in the reduction of the primary expenditure to GDP ratio. Rules are most effective when they are prescribed by law[9] and widely publicised and when strong enforcement mechanisms have been set up.

The recent Law 3871/2010 provides for the imposition of numerical fiscal rules (the "general principles" are laid down in article 2), but details have not gone public yet. Thus, for the time being it is not possible to estimate whether the implementation of these rules in Greece will be in line with international practice.

• Establishment of an independent body[10] that will make public analyses and assessments of (i) the fiscal situation, (ii) the fiscal policy pursued, (iii) adherence to applicable fiscal rules and (iv) Greece's fiscal performance in general. This body will also monitor budget implementation and will bring any deviation out in the open. Finally, it will make proposals and put forward fiscal policy measures in relation to fiscal adjustment.

In accordance with the Memorandum, in July 2010 it was decided that a "State Budget Office" would be established within the Parliament (following the modification of its Statute), which would be responsible for analysing, evaluating and monitoring the implementation of the Budget.

Let it be stressed that optimum results can be achieved by a combination of rules on the compilation of the budget, "numerical fiscal rules" and bodies that analyse and evaluate fiscal performance. Although each of the above measures is in itself very useful and important for the control of public expenditure, their effectiveness increases sharply when they are combined and operate together, as they interact and reinforce each other.

Employment and incomes policy in the public sector

Personnel outlays are the largest single cost item in both the State budget and the general government. Therefore, if primary expenditure is to be substantially contained on a permanent basis, it is essential that personnel layouts are reduced.[11]

• Recruitment and incomes policies in the public sector should be re-evaluated and redesigned, so that the public sector can stop being the primary labour market in Greece. Over the medium to longer term, the number of general government employees (currently about 770,000) should be reduced significantly and on a permanent basis.

• The liberalisation of personnel reassignments from 2007 onwards facilitated transfers

7 See European Commission, *Public Finances in EMU – 2006*, p. 122-168.
8 According to the survey, in 1990 there were 16 numerical rules in force, but 66 in 2006. Certainly, this is partly due to the expansion of the European Union. See European Commission, *Public Finances in EMU – 2006*, p. 136-148.
9 For example, rules enshrined in the Constitution or in legal provisions are more effective than those based on political agreements.
10 Such bodies are commonly referred to as "fiscal councils", but research institutes or other similar bodies can also play this role. For a detailed presentation of the issue, see Rapanos, V. and G. Kaplanoglou, "Independent Fiscal Councils and their possible role in Greece", Bank of Greece, *Economic Bulletin*, 33, May 2010, p. 7-19.
11 McDermott, J. and R.F. Wescott, op.cit., p. 726-727.

according to personnel's wishes, which resulted in some ministries and agencies being overstaffed and others understaffed. Ministries with a net loss of employees ask for new recruitments, increasing the number of civil servants. Under the provisions in force until recently, employees of municipal corporations could easily be transferred to the municipality (as permanent municipal employees) and then move to the central administration (as civil servants). The possibility to be reassigned must be put under control and recruitments by municipal corporations and municipalities must be carried out through the Supreme Council for Civil Personnel Selection (ASEP).

• In accordance with the current legal framework, allowances or other wage arrangements introduced for a few dozens of employees with exceptional skills or under special working conditions can very easily (and successfully) be claimed by and granted to hundreds of thousands of civil servants, even with retroactive effect. It is necessary to thoroughly review and eliminate all legal channels allowing such results.

• The provisions currently in force whereby a two-year work period at the office of Members of the Parliament entitles the worker to be hired in the public sector should be abolished. At the same time, the practice of seconding public servants (even employees of State-owned banks) to offices of political parties must also be eliminated immediately.

Education expenses

• The Ministry of Education employs the largest number of civil servants (about 180,000-190,000) compared to any other ministry. (They are mostly teachers, as total employees in the central service are no more than 1,000). Despite the large number of teachers (twice their per capita number in Finland), every year it becomes necessary to hire thousands of hourly-paid teachers to fill "vacancies". At the same time, more than 10,000 teachers are seconded to other (non-educational) agencies, in most cases outside the Ministry of Education. Given the demographic trends in Greece, a full review of the recruitment policy in education is certainly required.

• The operational expenses of Universities and Technological Educational Institutes are too high and every effort should be made to contain them. To begin with, the number of these departments is too great and constantly increasing, as new ones are constantly being established, although there is no market interest in the respective disciplines. The Ministry of Education has already taken these issues into consideration. It should also be noted that there are no "external economies" in tertiary education of a scale that would justify free-of-charge attendance indefinitely. Perhaps scholarships and student loans should be increased and the existing system should change, as it gives rise to protracted attendance (phenomenon of "perpetual students") on account of low opportunity costs.

• Expenditure for the transport of pupils (mostly of secondary education) from remote villages to their schools has exceeded any reasonable limit. The relevant budget appropriations for 2010 amounted to €280 million. Actually, this school transport scheme has turned into a means of subsidisation of intercity buses and should be reviewed and modified.

Local government

• In the past 15 years, local government has been absorbing increasing amounts from the State budget, despite the fact that the number of municipalities and communities has been reduced from 6,000 to 1,034. Over the same period, municipalities established about 6,000 municipal corporations, whose finances are not subject to control, giving rise to a significant "fiscal asymmetry". Municipalities determine virtually themselves the level of their expenditure and then claim (and usually receive) increased amounts from the budget. This asymmetry is known to lead to increasingly rising and uncontrollable expenses.

• Municipalities will have to take full responsibility for collecting their revenue, if they are to enjoy true fiscal autonomy. Management of the property tax and revenue from it should be given to municipalities and at the same time *all* transfer payments from the State budget should be abolished. This tax should be merged with the property fee currently collected through PPC bills. Apart from exceptional circumstances, municipalities should not be allowed to record deficits and all loss-making municipal corporations should close down. Furthermore, many entities financed by the municipalities, such as the Open Care Centres for the Elderly (KAPH),[12] would have to suspend some activities, including travels abroad or free holidays, for a period of five years, until financial stability is restored. It is also difficult to understand how over-indebted municipalities can operate radio and TV channels that employ hundreds of journalists.

• Moreover, a domestic "Stability and Growth Pact" should be concluded, whereby *local government should clearly commit to a balanced budget and zero debt to the central government.* Given that the central government has undertaken very strict and legally binding obligations towards the European Union, the IMF and the European Central Bank and that it has committed to strict fiscal discipline and significantly reduced government deficit and debt, municipalities should also immediately and drastically tighten their current too relaxed fiscal management (which cannot reasonably continue).

In the context of the "Kallikratis" programme (Law 3852/2010) these issues can be addressed effectively, provided that some critical conditions are met. The law aims at saving on costs by reducing the number of local authorities and their legal entities, thereby leading to economies of scale, as well as at establishing strong conditions for development at the first and second levels of local government that will create value added. A critical condition for these economies of scale to exist is the design of a programme in support of "Kallikratis" (it has yet to be completed), and that this should be implemented consistently in terms of both time and quality. The government has committed to achieve an improvement of the fiscal balance by €500 million annually in the period 2011-13 by implementing this programme.

Public hospitals

• The current system of public hospital procurement has led to the accumulation of large debts to suppliers. Such liabilities are settled by the State from time to time. Since the mid-1990s, hospital liabilities have been settled three times and a fourth settlement is under way (for an amount of some €6 billion, Law 3867/2010, article 27). From what has reached publicity, these enormous liabilities are mostly attributable to two reasons: on the one hand, public hospitals buy health equipment, medicine, orthopaedic supplies and chemical reagents at prices that are multiple to those paid either by private hospitals or in markets abroad and, on the other hand, they often use more material than necessary.

On top of these, there is no way to track down, in terms of accounting, this material after it is delivered to the hospital. It is believed that there is an extremely wide scope for improving and rationalising the hospital procurement system and, in general, the financial management of hospitals, which could save many million euro (see also Feature 4 in this Chapter).

Better use of real estate property

• The State, local government and prefectural authorities let real property for their agencies. Usually, the State and local governments pay very high rents, higher than the market rates.

12 Since the government found itself in the need to make cuts in pensions as its last resort, the operation of KAPH (with municipalities' funds granted by the State) is totally meaningless. It would be preferable to use these funds to increase pensions. As suggested by consumer theory, consumers derive increased utility when receiving cash than when receiving goods of equal monetary value. Therefore, travels abroad organised by KAPH under the subsidy of municipalities, as well as 7-day summer holidays with costs fully covered by municipalities should be discontinued. This would also eliminate corruption related to the operation of KAPH.

By contrast, when the State or social security funds (or the Church) hire out their own buildings, the rent they receive is usually lower than the market rates.

At the same time, the State, as well as other bodies (including universities) own real estate (often encroached) which is not put in good use. According to some experts, the real estate property owned by the State has not been recorded systematically up until today.

It goes without saying that this situation should change, in the sense that State agencies should be located at State-owned (existing) buildings and that the remaining real estate property should be put to better use (see also Special Feature 3).

Elimination and merging of entities

- Legal entities in public law[13] that are subsidised to a small or greater extent from the government budget in Greece are estimated to amount to 5,000 and form part of the general government. Many of them are now superfluous, as the purpose for which they were established no longer exists. Nevertheless, the entities in question continue to operate and employ staff, have management, rent offices, etc. Most of these entities should be repealed and some of them should merge with similar entities in order to make significant savings. The Memorandum provides for extensive mergers or repeals of entities and in the past few months there has been quite some mobility on this issue. Already, a draft bill has been submitted to the Parliament that provides for the repeal of 18 entities and the merger of 13 others into 5.

It is also noted that since the mid-2000s a practice has prevailed to transfer tasks from central services (ministries, etc.) to newly-established legal entities in public or private law financed from the state budget. For example, about five years ago some of the tasks of the Pedagogical Institute (under the Ministry of Education) were transferred to two newly created bodies, the "Teachers' Further Training Organisation" (OEPEK) and the "Education Research Centre", thus generating many additional expenses (wages, rents, administrative expenses, etc.) without improving the work performed. In the past five to six years many such organisations have been established. It is necessary to reconsider whether the operation of these entities should continue and decide on a case-by-case basis whether they should be abolished and their powers reinstated to the central agencies or whether they should merge with other legal entities. Let it be noted that recruitments in many such organisations are not made through the Supreme Council for Civil Personnel Selection (ASEP).

Of particular interest are public TV stations (ET1, NET, ET3, "Prisma" and the Hellenic Parliament TV). Not only are these stations way too many for a country with the size of Greece, but they also operate with too many employees and at extremely high cost,[14] which is multiple that of equivalent private stations broadcasting at national level. Public TV stations should merge into one or two and cover more than 70% of their operating costs from advertising revenue, as is the case with private stations. Advisably, the revenue currently collected through PPC bills should instead be allocated to the reduction of public debt.

Moreover, many activities, including those of the General Secretariat for Youth, should be suspended for a period of five years, until public finances restore their sustainability.[15]

Transport Organisations

According to Law 3429/2005, public enterprises are defined as enterprises not listed on

13 As well as some legal entities in private law.
14 See *Naftemporiki*, 30 July 2010.
15 For example, it is difficult to explain to pensioners, who have lost a significant part of their pensions, that the General Secretariat in question chartered dozens of sailboats that carried hundreds of young people in the Argosaronikos Gulf in the summer of 2009, when the deficit skyrocketed. We also find it difficult to understand why the Farmers' Insurance Fund (OGA), which is financed entirely out of the state budget, provides a four-day cruise (not only to Greek islands) to its insurees.

the Athens Exchange (Athex), whose finances are decisively influenced directly or indirectly by the State. In recent years, the net borrowing requirements of these enterprises amount to €1.5-2.0 billion annually.[16] This deficit is essentially attributable to the public transport organisations of Athens and Thessaloniki, as well as to the Hellenic Railways Organisation (OSE)[17] (see also Special Feature 5). With the review of financial data (expected to be released by Eurostat on 22 October), large public enterprises in the public transport sector will be included in general government. This means that general government deficit will now also include their deficit (while the forfeiture of State guarantees for loans they have taken will no longer be included in the general government deficit).

The deficit is mainly attributable to the high operating costs[18] of these organisations and particularly to the high staff costs, both on account of the large number of employees[19] and the level of wages in some organisations (particularly OSE and HLPAP): relevant data were published by the Ministry of Finance on 13 October. Thus, in the context of putting primary expenditure under control, it is necessary, on the one hand, to control operating costs and other expenses of these organisations (especially OSE) and, on the other hand, to fundamentally reconsider their pricing policy and ensure that all passengers pay a ticket. In the Updated Memorandum (August 2010) the Greek government committed itself to take concrete measures in this direction.

Conclusion

Examples like the ones described above show that there is very large scope for reducing public primary expenditure in Greece. However, huge effort, change in mentality and strong consistency will be needed to this end. Reducing expenses is a multi-faceted long-term process that requires continuous interventions both of a legislative and administrative nature, which will also have to take into account the need to employ different approaches depending on the case.

16 Bank of Greece, *Annual Report 2009*, April 2010, p. 97.
17 Ibid, p. 99.
18 It must be noted, however, that there is also a significant loss of revenue, as ticket prices are low and many passengers travel without a ticket.
19 Until 2008 the Athens metro had recorded no losses, but after recruitments in the summer of 2009, it recorded a deficit for the first time.

SPECIAL FEATURE 2: TAX EVASION AND TAX ADMINISTRATION: DIRECTIONS FOR STREAMLINING THE TAX COLLECTION MECHANISM

The significance of the problem of tax evasion in Greece need not be overstated. Tax evasion is a complex and manifold fact that has taken up endemic character. Its extent and its economic, social and ethical implications require an imminent and effective solution. Curbing tax evasion could substantially increase government revenue and thus help reduce deficits in this period which is extremely critical for the Greek economy. As with expenditure (see Special Feature 1), the problem of tax evasion is structural and its resolution requires systematic efforts, consistency and continuity, a broader social consensus and cooperation among many agencies and government services. Tax evasion takes up various forms, depending on the category of tax, the type or scale of economic activity (e.g. small or large enterprises) or on the taxpayer's employment status (e.g. salaried worker, self-employed, etc.). It becomes clear that the problem cannot be addressed by any single measure alone. Rather, it requires a whole set of measures, as well as the cooperation of all the parties involved.

The analytical review of tax evasion is based on the —now classic— model of Allingham and Sandmo,[20] which finds among the determinants

20 Allingham, M.G. and A. Sandmo (1972), "Income Tax Evasion: A Theoretical Analysis", *Journal of Public Economics*, p. 323-338. This analysis followed the equally classic work of Garry Becker "Crime and punishment: an economic approach", *Journal of Political Economy*, 1968, 76(2), p. 169-217.

of a taxpayer's decision to evade taxes: (i) the (marginal) tax rate to be paid by the taxpayer; (ii) the probability for the evasion to be detected and punished; and (iii) the amount of the penalty. Given that all three parameters are directly or indirectly determined and controlled by tax authorities, the level and extent of tax evasion can be controlled.[21] The most recent relevant study on Denmark[22] has shown that among the three determinants the most important one is by far the probability of the evasion being detected.

In Greece, tax rates may be relatively high, but not high enough to justify such an extensive tax evasion. Penalties are high, unjustifiably high in some cases, and definitely preventive of tax evasion in principle. *The big problem, however, is that the probability for the evasion to be detected and punished is almost zero*, owing to the inefficiency of the relevant services, the conduct of very few and insufficient tax audits and to the complexity of tax regulations that favours non-transparent practices.

As documented below, there is a huge problem with the efficiency of the tax collection mechanism in Greece, i.e. as to the most important determinant of tax evasion. The significance of tax system administration has been underestimated in Greece and it clearly was not sufficiently taken into account that any effort to combat tax evasion must begin with improving the tax collection mechanism and *increasing tax audits*. The probability of tax evasion to be detected and punished must increase by any means. International experience has shown that *no tax measure can substitute for an effective tax collection mechanism*.

The importance of the tax collection mechanism

Tax administration is extremely significant, mainly for four reasons: (i) it substantially increases tax revenue and eliminates fiscal and macroeconomic imbalances; (ii) it offers the possibility to implement a better tax policy that would contain the negative effect of taxes on the economy; (iii) it distributes the tax burden among taxpayers more fairly and establishes the belief that the tax system is fair; and (iv) it increases social welfare.

Tax authorities are the only link between the tax base and tax legislation, on the one hand, and the tax base and tax revenue, on the other. Certainly, a tax collection mechanism does not qualify as good, if it collects high tax revenue only from easy-to-tax groups (e.g. employees and pensioners) and leaves hard-to-tax groups virtually untaxed (e.g. entrepreneurs, self-employed etc.).

Moreover, the ability of tax authorities to manage "difficult" taxes clearly affects the tax system. Especially in developing countries, experts believe that the strength of the tax collection system is what essentially dictates the tax policy.[23] They also maintain that all tax reform efforts must seriously take into account the potential of tax agencies. It is well-known that, e.g. in Greece, the introduction of VAT was postponed four times (and for almost twenty years) because of the tax agencies' shortcomings.

Finally, tax authorities must be effective in certifying and collecting the revenue provided for by tax legislation at minimum *administrative* cost for the State and at minimum *compliance cost* for taxpayers.

Tax agencies in Greece

For many years, the problems of the tax collection mechanism had not received much attention; as a result, the mechanism now

21 Another conclusion drawn is that any significant increases in tax rates must be accompanied by a radical reorganisation of the tax collection mechanism. Otherwise, the collection of expected revenue is not certain.
22 Kleven, H.J., M.B. Knudsen, C.T. Kreiner, S. Pedersen and E. Saez, "Unwilling or Unable to Cheat? Evidence from a Randomized Tax Audit Experiment in Denmark", NBER Working Paper No 15769, February 2010.
23 Casanegra de Jantscher, Milka, "Administering the VAT", in Malcolm Gillis, Carl S. Shoup and Gerardo P. Sicat (eds.), *Value Added Taxation in Developing Countries*, Washington: World Bank, 1990. See also Faria, A.G. and Z. Yucelik, "The Interrelationship Between Tax Policy and Tax Administration", in P. Shome (ed.), *Tax Policy Handbook*, IMF, 1995, p. 267-272.

exhibits significant and extensive shortcomings in certifying and collecting taxes, including:

(a) Tax arrears are extremely high and rising. At the end of the 1980s tax arrears ranged between 30 and 50 billion drachmas (about €90-€150 million). In 2010 they reached €32-€33 billion euro. In addition, tax offices write off a large part of tax arrears every year: in 2000-2008, certified tax arrears of €17.5 billion were written off. Moreover, 150,000 tax cases, which could yield revenue up to €30 billion, are pending before administrative courts.[24]

(b) Administrative costs are too high.[25] The cost of certifying and collecting tax revenue as a percentage of revenue is much higher in Greece than in other countries. According to available estimates,[26] total administrative costs for collecting all tax revenue in Greece are 1.61%, against 0.86% in Canada. In respect to income tax in particular, administrative costs amount to 2.39% in Greece, compared with 1.0% in Canada and 0.6% in the United States.[27]

(c) Compliance costs are also very high. Taxpayers incur increased costs in terms of the time they sacrifice for filling out forms, frequently visiting tax offices and waiting in queues and in terms of the money they have to pay to tax consultants. The recent decision on keeping receipts for all the purchases made throughout the year increases compliance costs significantly (although electronic methods of recording the transactions for 2011 are being examined, in order to avoid the keeping of receipts).

(d) Tax evasion is very high and rising. Tax evasion is essentially associated with the shortcomings of the tax collection mechanism only. Tax *audits*, in particular, which play a crucial role in combating tax evasion, are non-existent or conducted with a 5-10 year lag.

(e) There have been successive settlements of pending tax cases. Unaudited tax returns of companies and self-employed individuals pile up at the tax offices and pending tax cases are "settled" every 3-5 years under "favourable terms for taxpayers" (tax evaders). *These successive settlements are perhaps the clearest evidence of the huge shortcomings of the tax collection mechanism*, causing at the same time a very strong feeling of injustice to honest taxpayers. Unaudited cases now amount to 2,000,000 and this is why a new settlement was decided under Law 3888/2010.

(f) Voluntary compliance is extremely low in Greece. This is not due to the absence of tax ethics, but to the fact that taxpayers are very rarely audited and are aware that there is almost no chance of a tax evasion being detected.

(g) Corruption is extensive and rising. Tax agencies, town planning offices and local government are considered the public services with the highest number of corruption incidents in Greece. In the annual reports of the Inspector General of Public Administration specific cases are marked in detail.[28]

(h) The quality of services that tax offices provide to taxpayers is extremely poor compared to international practices, while taxpayers are often treated inappropriately.[29] This is well-known, but could also be easily documented by a survey or on the basis of the complaints made to the Ombudsman or the

24 See the Minister of Finance's speech (22 September 2010) to representatives of economic actors in view of the new settlement of pending tax cases.

25 Administrative costs are those incurred by governments to enforce tax legislation and collect taxes. These consist of expenditure for human resources, as well as for the use of capital equipment by all agencies involved in tax administration. This expenditure is expressed as a percentage of the amount of the corresponding tax that is finally collected. See Balfoussias Ath., *Administrative Costs of the Greek Tax System*, Center of Planning and Economic Research - KEPE, 1998, pp. 10 and 12 to 26.

26 Balfoussias Ath., *ibid.*

27 Especially for the United States, see Slemrod, J. and S. Yitzhaki, "Tax Avoidance, Evasion and Administration" in: Auerbach, A. and M. Feldstein (eds.), *Handbook of Public Economics*, Vol. 3, 2002.

28 See *Annual Report of the Inspector General of Public Administration for 2004; Annual Report for 2007; Annual Report for 2008; Annual Report for 2009.*

29 For the "right attitude" towards taxpayers in face-to-face contacts, see Frampton, D. (1993), *Practical Tax Administration*, Fiscal Publications, p. 34.

findings of the Inspector General of Public Administration.

(i) Finally, the (unsuccessful) use for almost 60 years of indirect methods to imply the revenue of self-employed individuals and small companies reflects the huge shortcomings of Greek tax authorities. Using assumptions to determine the (implied) income is justified as a temporary solution only, until the tax collection mechanism improves and becomes able to determine the taxable income through common accounting methods.[30]

The issue is not exhausted with these points; they remain, nonetheless, indicative of the immense problems of the tax collection mechanism in Greece, in a period that is extremely crucial for the Greek economy. Substantially curbing tax evasion could yield sizeable revenue, which would contribute to addressing the fiscal imbalances and to restoring market confidence in Greece.

Causes of the serious weaknesses of the tax collection mechanism

An in-depth analysis and evaluation of the current state of tax agencies should also look into the causes and acknowledge that some of them are not specific to the tax collection mechanism only.

(a) Tax authorities do not operate in a vacuum; they form part of the Greek public administration and, therefore, are subject to all the well-known general weaknesses of public administration, including the lack of adequate organisation, delays, errors and omissions, lack of responsibility and accountability, low morale, passivity, external interventions and interventions from above, extremely mild "disciplining" of offenders by disciplinary boards, etc. The only difference is that, in the case of tax agencies, these weaknesses cost billions of euro to the State (in the form of lost revenue), while the same problems in other agencies (e.g. a registry) do not have a direct economic bearing.

(b) Tax authorities are called to implement a particularly complex tax system.[31] Despite the introduction of VAT (which incorporated more than 10 taxes) and the "termination" of the "regulatory tax", which had incorporated many charges on imported products, the tax system remains extremely complex. This complexity is the result of the very large number of taxes and tax rates (often in order for the tax to "look" progressive), of many special tax exemptions and reductions and of the fact that in the past 60 years the tax system has been used as a vehicle for promoting the government's various aims and policies. These policies are not always rational and many of them are a product of compromise. For instance, the tax system has been used up to now for promoting economic growth and private investment; importing funds from abroad (or "repatriating" Greek funds); promoting regional development (VAT rates are lower in east Aegean islands), exports, shipping, tourism; promoting mergers and creating big business ventures; supporting savings; developing the capital market; supporting families with many children or people with special needs etc. Moreover, the frequent recourse to "extraordinary taxes" in order to address urgent fiscal needs, as well as the incessant arrangements for "tax amnesty" and the collection of tax arrears make the tax system even more complex (for the recent arrangements under Law 3888/2010, see Chapter I.3). Finally, the tax system is often used for offsetting the shortcomings of the tax collection mechanism itself. Thus, additional supporting documents, information and procedures are all too often required from taxpayers with a view to limiting tax evasion (although this is not usually achieved in the end).

(c) The tax system is not only complex; it also changes very often. Thus, tax officers do

30 Bird, R.M. and Casanegra de Jantscher, M. (eds.), *Improving Tax Administration in Developing Countries*, IMF, 1992, p. 7.

31 In 1964, when George Break and Ralph Turvey evaluated the Greek tax system, they wrote that the only simple generalisation about the Greek tax system is that it is extremely complicated. See Break, G. and R. Turvey, *Studies in Greek Taxation*, Center of Planning and Economic Research - KEPE, 1964, p. 19.

not have the required time to be updated and implement the new provisions appropriately.

(d) Although significant resources have been made available to date, computerisation of tax services is not satisfactory. In many cases, information and databases do not communicate with each other, even within the same tax office. For instance, the Code Department (where books and records are authenticated and punched) does not communicate (electronically) with the Register.

(e) Tax cases brought to court take a very long time to be heard. It takes 7 to 10 years for a court judgment on tax violations to become final. At the same time, courts very easily grant indefinite "suspension" of the taxpayer's obligation to pay 25% of the tax owed until the case is heard. This suspension, which is granted to 90% of the cases, renders tax authorities fully inactive.[32] In addition, even if the State is vindicated, it is still uncertain that the tax will be collected after all.

(f) Frequent settlements of pending tax cases are an additional (and often urgent) task for tax authorities. This distracts tax officers from their main duties, i.e. to frequently monitor and regularly audit taxpayers.

(g) Tax officers who breach their duties and are taken to official disciplinary boards receive extremely mild treatment, which does not contribute to combating corruption.

The tax authorities are clearly responsible for some of the foregoing but, in most cases, the tax collection mechanism can and should be improved.

Practical suggestions to enhance the tax collection mechanism

It has become evident that the tax collection mechanism has immense weaknesses and must undergo immediate and extensive overhauling. International experience shows that, for a successful reform and reorganisation of tax services, three conditions should be met:[33]

(a) simplification of the tax system;

(b) strategy, i.e. a comprehensive reform plan with clear priorities; and

(c) strong commitment to reform. Commitment and the will to reform must stretch both to the administrative and the political levels. Without them, not even the best reform strategy can succeed.

Here follow specific measures that have been proven useful in most countries.

(i) Modern computer technology has created enormous potential for filing tax returns, identifying and monitoring taxpayers and conducting tax audits and cross-checks. This is the reason why any effort to reorganise tax services must focus on the use of IT systems. Many (and costly) efforts have been made in the past to computerise tax services in Greece, but the results were not the expected ones. This failure is mainly attributable to two reasons: first, efforts were piecemeal and not part of a comprehensive computerisation programme and, second, the introduction of electronic media was not *accompanied by the necessary simplifications.*

Computerisation is much more than simply transferring the existing obsolete procedures and practices in electronic form. For computerisation to be successful, an in-depth reorganisation and simplification of tax provisions, rules, systems, practices and procedures is required.[34] This simplification was never made in Greece and, hence, any computerisation effort is condemned.

The successful implementation of tax provisions by tax authorities requires:

32 See the Minister of Finance's speech of 22 September 2010.
33 See Bird, R.M. and M. Casanegra de Jantscher, *op.cit.*, p. 3-4.
34 Bird, R.M. and Casanegra de Jantscher, M., *ibid*, p. 3.

– *identification of taxpayers;*

– *longitudinal monitoring of taxpayers;* and

– *frequent auditing of taxpayers.*

According to international experience, to facilitate the task of tax authorities (and public administration as a whole), it would be advisable:

- that all Greek citizens have a *unique individual identification number*, which will appear in all public documents that concern them throughout their life, i.e. academic qualifications, birth certificates etc., military service certificates, identity cards, passports, social security, driving licence, land and mortgage registries, registration and license for vehicles, yachts etc., tax returns, building permits, all transactions with banks, insurance policies etc. In some cases, this unique number could be used in parallel with existing numbers (e.g. identity card, passport, social security number etc.). For a country with the population of Greece, this unique number would make taxpayer search and identification very simple. (The government announced the introduction, by the end of 2011, of the "Citizen Card", which would have digitised in it identity particulars, TIN and social security number and, therefore, could be very useful for the purpose discussed here.)

- *that tax authorities compile a single individual electronic file* for each taxpayer over 18 years of age (or younger, if they work or engage in real estate transactions). Moreover, it would be adviseable to create a unique electronic file for every small enterprise (personal, limited or general partnership, but not société anonyme). The electronic file for each taxpayer could contain information (in the form of "time series") on declared annual income, occupation, acquisition of assets and large-value goods (e.g. vehicles, yachts etc.), any entrepreneurial activities, share holdings, bank accounts (without necessarily showing the account balance) etc. Of course, the file would also include any transaction with tax authorities for all taxes and all years (e.g. income, VAT, car registration fees, real estate transfers etc.), as well as any tax violations, settlements and penalties. It would also show (or provide access to) all social security information. It would show, for instance, if a person insured with Self-Employed Workers' Insurance Organisation (OAEE) is regularly paying social security contributions. Individual electronic files would also make reference to the corresponding files of members of the same family. The personal files of entrepreneurs would also make reference to the file of their enterprise (personal, general or limited partnership) and vice versa. The contents of the files would be continuously updated by tax agencies. For instance, the forwarding of notices for car registration fees would immediately appear in the taxpayer file (as a debt) and the settlement of the fees would appear as a payment. Such a system would ensure the *timely and continuous monitoring* of taxpayer transactions, *information cross-checks* and *continuous tax auditing*. It would, therefore, be very easy e.g. for tax authorities to ascertain that the income declared by a taxpayer in the past fifteen years does not suffice for him to purchase the assets acquired in the same period etc.

Access to individual files would be granted only to the tax office in which the taxpayer is registered (place of residence or business headquarters) and the IT centre of the Ministry of Finance. Other tax offices, using the unique individual number, would identify through their computer the tax office in which the taxpayer is registered and would electronically forward any information (or query) to the taxpayer's tax office.

Today, tax services are organised by category (type) of tax, i.e. every tax office comprises the department of income tax, the department of capital tax, the VAT department, etc. In other words, the organisation is "tax-centred" and communication between the *departments is minimum or inexistent. Moreover, access to previous years' data is extremely difficult. This does not allow tax offices to have a complete picture of the taxpayer profile and behaviour as regards his tax obligations over time. The system described above (based on international experience) focuses on the taxpayer: it is a totally different approach.*

(ii) E-invoicing by large enterprises. The electronic issuance of invoices would substantially contribute to curbing tax evasion, since it would record not only the issuance, but also the payment of invoices, which could then be cross-checked. Moreover, the substitution of paper invoices with electronic ones in transactions between commercial firms could substantially reduce the cost of issuing and handling invoices (as well as of audits) and lead to increases in GDP.[35] According to a recent survey by the Athens University of Economics and Business, Greek enterprises are aware of the advantages of e-invoicing and more than half of the companies that took part in the survey said that they intended to apply it soon.[36]

(iii) Cash registers of small retail enterprises (not sociétés anonymes) could be linked online with the computers of the Ministry of Finance, so that every single sale (i.e. issuance of receipts) is immediately recorded and can not be falsified. Thus, audits would focus on the issuance of retail sales receipts. This would eliminate VAT evasion and, to a large extent, income tax evasion. (The Ministry of Finance is already contemplating a similar measure, which would be combined with the use by consumers, in their purchases, of electronic cards that would contain their TIN).

(iv) With a view to reducing administrative costs, on the one hand, and taxpayer compliance costs, on the other, the measure of keeping receipts could be replaced with transacting through credit cards, if taxpayers were given the same tax incentive. In any event, credit cards have the appropriate mechanisms for keeping and recording such transactions in electronic form, with zero taxpayer compliance cost. (The Ministry plans to introduce, as mentioned in point (iii), the use of cards containing the TIN and recording expenses/transactions automatically).

(v) After the clearance of tax returns and on the basis of the electronic files of each taxpayer, an electronic program would automatically identify cases in need of a tax audit. A tax officer would then look into "suspicious" tax returns and decide whether to conduct a regular audit or not.

(vi) It is advisable to reorganise tax audit mechanisms (auditors) in order to audit cases of great interest in priority. Some countries have even established special agencies that monitor taxpayers with high incomes only or other cases of great interest.[37] According to a recent decision (31 August 2010) of the Ministry of Finance, five task-forces are established to combat tax evasion, including the "special task force for high-income taxpayers" for corporate taxpayers and the "special task force for the wealthy and high-income individuals" for natural persons.

(vii) Easier access of tax authorities to taxpayer bank accounts, ensuring at the same time confidentiality and other taxpayer rights.

(viii) Increase in the percentage of audited returns to 5% of annual returns. For the self-employed and (small- and medium-sized) corporate taxpayers, this percentage has to reach 25%-30% annually, so that everyone is audited every three to four years. For employees, auditing 1% of returns would be enough. By way of exception, a much higher percentage of audits is required for civil servants serving at

35 According to a study by the European Association of Corporate Treasurers, euro area GDP could increase by up to 2.9%, if e-invoicing was used.
36 See *Imerisia* newspaper, 11-12 September 2010.
37 See Bird, R.M. and M. Casanegra de Jantscher, op. cit., p. 7.

critical agencies. According to a recent study,[38] the "probability of audit" and "recent audit experience" play decisive role in combating tax evasion.

(ix) Increase, *as much as possible*, tax withholdings at source and income declaration by third parties, provided that the information can be cross-checked. For instance, employers will declare the income of their employees. It is important, however, that a cross-checking of the income declared by the employer ("third party") and the taxpayer is possible. According to a relevant study on Denmark, third-party declaration (and withholding at source) limits tax evasion to 0.3%, compared with a 37% tax evasion by the self-employed who declare their income themselves.[39]

(x) Elimination or merger of all low-yielding taxes with high administrative (or compliance) costs, such as taxes in favour of third parties. The administrative costs of the latter are extremely high and came to 39.5% at the end of the 1990s.[40]

(xi) Better services to taxpayers. Taxpayers should receive every possible assistance and encouragement by tax agencies in being consistent and complying with their tax obligations. At the same time, tax return forms and relevant procedures should be simplified, instructions should be clear and easy-to-understand and taxpayers' access to the Tax Office should improve.

"in the long run, (...) the cheapest and most effective means of collecting and enforcing the revenue is by achieving the highest possible level of voluntary compliance".[41]

(xii) Tax office personnel are *the most important and valuable asset of the tax-collection mechanism* and cannot be replaced by any form or extent of computerisation. Ultimately, it is the personnel that implements the tax law and collects the revenue. For this reason, hiring, training, motivating and remunerating the personnel are very important for the efficient and effective operation of the tax-collection mechanism and for reaching out to taxpayers (in order to increase voluntary compliance). In Greece, the personnel perform poor[42] and corruption increases at times. It is very important for tax auditors (and "supervisors" and tax office managers) to have in-depth knowledge of their subject, excellent ethos, integrity, high morale and great interest in their work. Moreover, the personnel must be trained on an ongoing basis.

(xiii) Corruption must be radically addressed. In cases of guilt proven beyond any reasonable doubt, extremely severe sanctions must be the rule, in addition to any criminal responsibility. Taxpayers who bribe tax officers should also be punished. *Corruption can practically invalidate the importance of tax audits, since a taxpayer who is found evading may not pay his tax, but bribe the tax officer instead.*

(xiv) Against this background, internal auditing is extremely important for eliminating corruption in the tax-collection mechanism.[43] According to the annual reports of the Inspector General of Public Administration, today, the role of internal auditing is rather restricted[44] and follows the practice of disciplinary boards. It is, therefore, advisable not only to reinforce the role and change the mentality as far as internal auditing is concerned, but also to assign it to independent public officials (or private individuals).

(xv) To facilitate internal auditing, tax offices' monthly reports to the central Tax Depart-

38 Kleven et al., *op. cit.*, p. 4, 5 and 33.
39 Kleven et al., *op. cit.*, p. 3.
40 Balfoussias, *op. cit.*, p. 36.
41 Frampton, *op. cit.*, p. 14.
42 See *Annual Report of the Inspector General of Public Administration for 2007, p. 114, and Annual Report for 2008*, p. 133.
43 See e.g. Frampton, *op. cit.*, p. 14.
44 For instance, a financial inspector who conducted an investigation into a case of red-handed arrest of tax officers for bribery came to the conclusion that ".... with the existing information, it is impossible to draw safe conclusions..." and that "... these will be drawn upon completion of criminal proceedings". Eventually, the officers were sentenced by the court. See *Annual Report of the Inspector General of Public Administration for 2008*, p. 128.

ment must be more frequent and cover all aspects of their operation. Pending tax cases, the number of tax audits, the amount of certified taxes, of collected revenue, tax arrears, write-offs etc. must be electronically forwarded to the central Tax Department every month. The central Tax Department must employ the appropriate software to continuously monitor and evaluate the performance of each tax office (including cases of corruption) every month.

(xvi) Finally, the time required to hear tax cases must be significantly reduced and should not exceed 3 to 5 months, compared with the many years (or even decades) currently required. This could be achieved with the establishment of a small number (6-7) of special tax courts that would hear tax cases *exclusively*. Moreover, the legal representation of the State should be upgraded.[45]

The Ministry of Finance is reviewing a number of ways to expedite the hearing of court cases, in the context of a draft law being jointly prepared with the Ministry of Justice.

Conclusions

Tax evasion in Greece is enormous in size and extent and largely associated with the shortcomings of the tax-collection mechanism. Extensive tax evasion creates large fiscal deficits, unfair distribution of the tax burden and a strong feeling of injustice among taxpayers, as well as reduced social welfare. A substantial curbing of tax evasion would yield sizeable revenue which would contribute to addressing the fiscal imbalances and to restoring market confidence in Greece. In the medium and long term, it would also contribute to reduced tax rates, positively affecting the rate of economic growth.

It is evident that there is an immediate and imperative need to upgrade and reorganise the tax-collection mechanism, given that no other measure can take the place of an efficient and effective tax-collection mechanism.

The reorganisation of tax services must focus on upgrading their computerisation and utilising the enormous potential of modern computer technology. This measure, however, should be accompanied by *extensive simplification of procedures, practices, rules and tax provisions*. Furthermore, the organisation of tax offices and computerisation should cease to be "tax-centred" and should mainly focus on the taxpayer instead. An individual electronic "file" for each taxpayer would contain all relevant information in the form of a time series.

Special emphasis must be given to increasing the tax audits and the electronic cross-checking of the self-employed and of small enterprises. Audits must be conducted every 3-4 years at most. Overall, taxpayers must be under the impression that the probability for the evasion to be detected has increased significantly, compared to what was the case until now.

Special attention must be paid to improving human resource management in tax offices, motivating the personnel to work efficiently and enhancing the internal auditing mechanisms of the Ministry of Finance.

Finally, expediting the hearing of tax cases and upgrading the legal representation of the State would significantly contribute to curbing tax evasion.

45 According to a recent comment by Mr. Georgakopoulos, General Secretary of Taxation and Customs of the Ministry of Finance, the State loses most of the tax cases referred to courts, because its legal representation is not adequate. Thus, the State loses billions of euro in tax revenue (see *Imerisia*, 14 July 2010, p. 8).

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SPECIAL FEATURE 3: THE REAL ESTATE PROPERTY OF THE STATE

The Greek State is the largest property owner in Greece. However, the registration, protection, management and utilisation of such property involve numerous stakeholders of different or overlapping competences, making its overall valuation particularly complicated. According to recently published estimates, the value of real estate property owned by the Greek State (central government, local authorities, social security organisations, other legal persons in public law, bequests, public corporations, etc.) amounts to some €300 billion.[46] Today, the bulk of this property is managed by the Hellenic Public Real Estate Corporation (KED), which —according to its founding law— aims at an all-inclusive administration of public real estate and servicing the housing needs of public sector services.[47] KED manages roughly 92% of the real estate assets owned by the Greek State, while the rest belong to other public entities: ministries, the Hellenic Tourism Development Co, the Hellenic Olympic Properties SA, the Public Corporation of Urban Planning and Housing (DEPOS SA), the AGROGI-agricultural land SA (which goes into liquidation according to the draft law on the abolition or merger of public sector entities), the National Defence Fund, social security funds and other public entities.[48]

The difficulty in managing public property is associated with the lack of a central policy or a cohesive and comprehensive plan, emphasising on transparency, control and efficiency. The way in which public real estate assets were being used in the past presents serious draw-

46 The amount of €300 billion does not include the property of the Church. In a report published last year, the IMF made an indirect estimate of the Greek State property, according to which the value of the country's net fixed capital stock in 2008 was equal to 51% of GDP, i.e. approximately 125 billion (*Greece – Selected Issues*, August 2009, Chapter II, p. 9-10). However, based on the methodology applied, this does not include the value of the land, while the value of the capital stock was calculated indirectly, as the cumulative result of investments made between 1960 and 2008.

47 KED was founded in 1979, by virtue of Law 973/1979, as a legal person in private law based in Athens. Supervised by the Minister of Finance, it is a Société Anonyme and its sole shareholder is the Greek State.

48 The State property can be divided into owner-used assets (used by State services), income generating (leased) real estate, non-utilised public property that may be developed and utilised in the future, and public property subject to legal abeyance and other limitations (lands encroached upon, properties of disputed ownership, properties held in abeyance by town planning authorities, etc.).

backs. Each entity or ministry was responsible for managing its "own" real estate property, either through bureaucratic mechanisms already in place, or by setting up companies (e.g. Hellenic Olympic Properties SA) with a limited number of assets in their portfolio. Apart from the negative impact on management costs and economic efficiency, this policy has also been blemished by instances of non-transparent management, which gave to private interests the opportunity to exploit or chisel out, one way or another, part of the public property.

A commonly held view is that within the huge —compared with other EU countries— real estate property of the Greek State lie considerable valuation gains that could contribute to economic growth and improve urban environment and public space, while strengthening public revenue. Nevertheless, efforts appear to be hindered by a number of constraints. In greater detail:

(a) The Greek State is unaware of the true size of its property, mainly because of an absence of a complete and accurate cadastre. The real value of public property will be reliably assessed after the identification of the State's assets and the required separation between communal property (which is untradeable and cannot be liquidated, though its use can be handed over to third parties for a price) and utilisable public property (land plots, buildings, fields, quarries, salt mines, etc.) that can be commercially traded.

(b) The lack of a cadastral survey of public property has given ground to repeated encroachments and unending litigations, with major legal problems of disputed claims obstructing the use and management of a considerable part of this property.

(c) The registration, protection, management and utilisation of public property is entrusted to a large number of entities (ministries, social security organisations, KED and other companies set up by the State, special services of the tax offices, local government, etc.), of different, overlapping or conflicting competences that make its overall assessment and utilisation particularly hard.

(d) A large number of public real estate assets is subject to multiple encumbrances and restrictions as to their use, and thus the commercial value of the public property stands at levels much lower than market prices. More specifically, many major urban buildings within city limits, which would be of a very high commercial value if they were privately owned, are subject to serious restrictions as to their use. The same holds also for many public buildings and lands located primarily in coastal areas, which have limited prospects of commercial use, due to legal restrictions (protection of the environment or of the local architectural identity, archaeological restrictions, land accreditations by forest inspection authorities, etc.).

(e) Significant limitations, invariably set by the donors, often hold back the use and management of bequests' property that has come under Greek State ownership. The legislation governing the bequests' supervision regime should be thoroughly revised, since the monitoring and administration mechanism has proven bureaucratic and ineffective. Modernising both the relevant legislation and the administrative and control mechanisms is necessary, in order for bequests to be utilised and fulfil their social role.

Notwithstanding the above, the real estate property of the Greek State can make a substantial contribution to public finances. Dynamic, rational and immediate use and management of the public property can ensure sizeable, steady and long-term proceeds for the Greek State, as well as additional growth gains for local societies and economies, while at the same time protecting the environment and safeguarding the local architectural identity and heritage.

At any rate, overcoming, immediately or in the short run, the country's fiscal problem through the management of the State's real estate property seems to be rather difficult. However, certain actions, such as the renegotiation of leasing contracts that has already been announced, are expected to help strengthening public revenue and reduce expenses. Profitable management and rational use of the public property can become a considerable source of public revenue in the medium run. But this requires easier use, full registering and, mainly, removal of existing limitations and red-tape or organisational obstacles.

Effectively managing the public property, while also ensuring the social interest, requires coordination between all entities involved and primarily the creation of a full electronic registry of the State's real estate assets, by consolidating all disperse information into a single electronic geographic database. The creation of an independent and flexible management entity would most probably help addressing more effectively the lack of coordination, red-tape and overlapping competences.[49] Such an entity would supervise all individual public property management companies and entities, so as to ensure transparency and uniformity. Also, it would coordinate efforts to register and protect the public real estate property, and prepare a single all-inclusive property catalogue that will allow the assessment of its value. Finally, it could undertake the management and monitoring of tenders related to the utilisation of major public real estate assets, while being responsible for covering the housing needs of all State services.

These could be the first steps towards a transparent, rational and efficient registration and use of the public property. The next step, which requires more time and systematic efforts, would be to develop a cohesive and comprehensive public property utilisation plan. Many individual plans submitted and approved by relevant government bodies in the past typically concerned liquidations and long-term leases, renegotiation of leases, private utilisation and concession agreements, Public-Private Partnership (PPP) schemes, etc. Emphasis must now be placed on the most advanced real estate portfolio management tools that make best use of the private sector's experience, such as securitisations of owner-used real estate assets (issuance of government bonds backed by real estate), the creation of a Real Estate Investment Company (REIC), the formation of holding companies that will be listed on the Athens Exchange as soon as conditions allow it, "sale and leaseback" or "lease and leaseback" techniques,[50] etc. Moreover, concession agreements are a particularly effective tool for utilising the public property, e.g. in infrastructure but also in commercial property.

In any case, what is absolutely necessary is to rationally manage the housing needs of public services and efficiently use the State property, while ensuring the social interest.

It is worth noting that on 2 June 2010 the Greek government announced[51] that KED, the Hellenic Tourism Development Co and the Hellenic Olympic Properties SA will merge into a new company, to which real estate assets now managed by other ministries will also be signed over. Also a separate portfolio management company could be established, via holding companies that may be later listed on the Athens Exchange. As regards the "Xenia" hotels, individual units may be sold, or an investment scheme will be created, to which the exploitation rights of all "Xenia" units will be signed over for utilisation through concession agreements. This company may also be listed on the Athens Exchange, with the State retaining 51% or a binding minority of 34% of its shares. As for the Hellenic Tourism Prop-

49 For instance, following a complete overhaul and clear definition of competences, this role could be assigned to an already existing entity such as KED, which already manages a particularly large part of the public property.

50 These refer to assets sold and simultaneously leased by the State, so that their use may continue, or similarly, to assets assigned to contractors for upgrading and renovation works, and then leased by the State for a certain period of time, upon expiry of which the State regains ownership.

51 Joint press conference by competent ministers on privatisations and the management of public property.

erties SA, the government plans to build "high-quality" tourism real estate asset portfolios and sign them over to development companies through concession agreements. Finally, it will set up (or reactivate already existing) special purpose vehicles for the utilisation of major State assets (such as those in the Elliniko and Tatoi areas).

SPECIAL FEATURE 4: STRUCTURAL REFORMS IN HEALTHCARE AIMING TO CONTAIN COSTS, RATIONALISE EXPENDITURE AND IMPROVE THE QUALITY OF SERVICES

1 HEALTHCARE IN GREECE: PROBLEMS AND SUGGESTED REFORMS

A significant part of the country's fiscal problem seems to be directly associated with increasingly higher expenditure for healthcare and with the accumulated debt of public hospitals and social security funds.

Moreover, the healthcare system in Greece exhibits several weaknesses, lacking in fields such as hospital efficiency, financial efficiency, social fairness, cost-effectiveness and productivity. *Hospital efficiency* calls for (i) an appropriate organisational and operational structure, (ii) orientation to population needs and (iii) ensuring the fiscal sustainability of the system. *Financial efficiency* necessitates a tighter control over healthcare spending, so as to ensure the stability of public finances. *Social fairness* requires a healthcare system that allows access to everyone and its funding is secured. *Cost-effectiveness* and *productivity* of the healthcare system are achieved by decoupling demand from the supply of healthcare services and by enhancing competition.

According to a recent OECD study, reforming the structures and the management of the healthcare system, enhancing the quality of primary care, modernising hospital administration and tightening the control over pharmaceutical expenditure is in order.[52] Government initiatives and action within the framework of the Economic Adjustment Programme are oriented in this direction.[53]

1.1 Productivity and cost minimisation

Facts:

- Costs are shaped to a large extent by doctors who, in some cases, act as health service suppliers and create artificial demand. The problem is exacerbated in Greece, as the number of doctors is very high in comparison with other OECD countries. In particular, the number of doctors in Greece is double the OECD average (6 doctors per 1,000 inhabitants, against 3.2 in OECD countries in 2008), whereas the number of nurses is just 1/3 (3.4 nurses per 1,000 inhabitants, against 9 in OECD countries in 2008). Over 90% of doctors in Greece are specialists. The number of doctors affiliated with the national healthcare system is directly associated with the serious issue of artificial demand: as the number of affiliated doctors increases, healthcare spending increases too (for medicine, therapeutic devices, medical tests etc.).[54]

- Private hospitals provide health services within an oligopolistic organisation that allows high profit margins.[55]

52 See Economou and Giorno (2009), "Improving the performance of the public health care systems in Greece", OECD, Economics Department Working Paper No. 722.

53 Similar proposals were set forth recently in the following papers: (i) National Bank of Greece, Sectoral Reports, December 2009, *Private hospitals: a dynamic sector, with significant prospects for outward-looking development* (in Greek), (ii) Ilias Maroutsis, "Shock therapy for the National Health System" (in Greek), *Ethnos*, 20 June 2010, (iii) Foundation for Economic & Industrial Research (IOBE), Health Economics Observatory, *Annual Report 2009 – The Pharmaceutical Market in Greece*, (iv) IOBE, Elli Vitsou, "Intertemporal analysis of changes in pharmaceutical prices during 1998-2008" (in Greek), (v) OECD, 2010, *Greece at a Glance – Policies for a Sustainable Recovery*, (vi) OECD, 2010, *Improving Health Sector Efficiency* – The Role of Information and Communication Technologies.

54 See *Briefing Note for OECD Health Data 2010: How Does Greece Compare*, OECD, 29 June 2010.

55 Indicatively, according to the Sectoral Report of the National Bank of Greece (see footnote 53), the turnover of the 5 largest private hospitals in Greece account for half the market.

• Public hospitals follow inefficient administrative procedures at all levels (starting with the board of directors), characterised by poor cost monitoring and control mechanisms and unreliable accounting and fiscal management systems.

• The significant lack of statistical data makes it difficult to evaluate the efficiency of individual health service units and to draw reliable conclusions about the problems of the system.[56] In general, the Greek healthcare system is "ungoverned" and there is ample room for saving.[57]

Orientation of reforms:

• Decouple demand from supply: health insurance funds should determine demand (applying the method of capitation[58] to expenditure) and, on the supply side, provide competitive public and private healthcare services.

• Introduce computerisation and a new electronic system for monitoring liabilities.

• Establish a double-entry accounting method (on an accrual basis).

• Develop continuous monitoring systems for the proper execution of individual health services units' budget, provisions, stock and supplies. Agree on budgets per hospital and region.

• Unify health insurance funds and decouple them from pension funds. Moreover, uniform rules should be adopted (medical and diagnostic protocols, etc.), as well as a single pricing policy of the services provided, common pharmaceutical and prescription lists, etc.

• Establish a control system and enhance the accountability of public hospitals.

• Free the healthcare system from political interventions and make recruitments based on meritocracy.

1.2 Financial efficiency: pharmaceutical expenditure

Facts:

• Total pharmaceutical expenditure as a percentage of GDP in Greece is higher than in the euro area (2007: euro area average: 1.6%, Greece: 2.4%).[59]

• The average participation of the insured in pharmaceutical expenses is around 15%-16%.

• Up until now, the reduction in healthcare costs concerned pricing policies alone. However, inflated expenditure for pharmaceuticals is mostly attributable to increased quantities and not to prices. Demographic factors, such as population ageing, the rising number of immigrants, the high percentage of smokers, the increase in obesity, add to pharmaceutical expenditure only a little. Excessive and uncontrolled prescribing by an increasing number of affiliated doctors is primarily the reason behind the high amounts of pharmaceutical expenditure in Greece.

• Moreover, a sizeable contribution to the amount of pharmaceutical expenditure comes from the general increase in healthcare consumption and the substitution of new, more expensive drugs for old ones (the health expenditure indicator rose by 93% in Greece from 2000 to 2007, against only 42% in OECD coun-

56 For instance, in order to make comparisons between hospitals, which could help improve the healthcare system as a whole, apart from computerisation and improving the quality of financial and accounting data, it is essential to collect reliable statistical data regarding the tasks performed by each hospital (i.e. the services provided, the number of patients visiting outpatient units, the use of supplies and medical equipment by different hospital units etc.), which should be evaluated on a regular basis.

57 It is worth mentioning that the OECD has also made note of the need to clamp down on squandering and to control expenditure in the healthcare system. In particular, as noted by Angel Gurría, Secretary-General of the OECD, in his report on Greece, "Control over government spending needs to be strengthened by improving administration, reducing the public sector wage bill, and more strictly controlling public entities (including in the health system) and loss-making state enterprises". See OECD, *Greece at a Glance: Policies for a Sustainable Recovery*, 15 March 2010.

58 Capitation is a payment method for healthcare services. According to this method, the healthcare service provider receives a pre-specified amount for specific services on a regular basis.

59 See OECD, *Health Policy Studies: Value for Money in Health Spending*, October 2010.

tries). The substitution rate in Greece is strong compared with other euro area countries, as around 3/4 of drugs after 2000 are new ones. In this respect, it should be noted that the price freeze essentially prompts substitution of old drugs with new, more expensive ones that incorporate higher research and development costs.

Orientation of reforms:

- Introduce an electronic prescription system (estimated annual profit of €1.5 billion), which will provide useful data and information for clamping down on squandering and the creation of artificial demand.

- Introduce a single codification system for the continuous computerised monitoring of pharmaceuticals and other hospital supplies. Top priority should be given to the computerisation of the system.

- Increase the share of cheaper, generic medicines (by providing incentives for their selective prescription).[60]

- Partial refund of health insurance funds by pharmaceutical companies. The refund will be financed from pharmaceutical companies' profits.[61]

- Introduce the capitation system, already used by insurance companies.

- Use objective and comparable criteria in setting the prices of pharmaceuticals (e.g. deviations in GDP, productivity or the wage level compared to European averages).

- Create a distinct, flexible and exclusive managing authority for pharmaceuticals. The managing authority should replace all ministries and organisations currently dealing with the management of pharmaceuticals (pricing, drug lists, etc.).

- Advise the public on a regular basis of the consequences of medicine overuse, etc.

1.3 Financial efficiency: diagnostics, equipment and medical supplies

Facts:

- There is ample room for improvement as regards the management of therapeutic devices and medical equipment. The number of medical diagnostic equipment in Greece is very high compared with other OECD countries. For instance, in 2008 the number of computed tomography (CT) scanners rose to 30.7 per million inhabitants, against 23.8 in OECD and the number of magnetic resonance imaging (MRI) units was 19.6 against 12.6 in OECD.[62]

- Public hospitals' higher spending for diagnostic equipment and medical supplies is partly attributable to overpricing. In Greece, diagnostic equipment, their maintenance and repair, medical equipment and supplies of public hospitals cost a lot more than in Northern European countries.

- The strong increase in check-ups is partly attributable to technological advances (diagnostic equipment), but to doctors as well, especially those employed in private hospitals, as they have a motive to create artificial demand for such services.

Orientation of reforms:

- Compare prices between Greece and other countries.

- Single codification of consumables, medical equipment etc. at the central level and continuous updating of the relevant database.

- Run a market survey and monitor consumption related to patient traffic and the

60 In Greece, the proportion of generic medicines is estimated at a mere 15%, when in other European countries it is about 50%.
61 Insurance funds could be refunded with 2.6% of pharmaceutical expenditure for 2004-2009 by pharmaceutical companies (a rebate, according to relevant laws). However, insurance funds are not in a position to receive these amounts (the exact amounts are not known and there are also judicial issues).
62 See *Briefing Note for OECD Health Data 2010: How Does Greece Compare*, OECD, 29 June 2010.

kind of incidents treated by individual healthcare units.

• Decouple supply from demand, document and record artificial demand and introduce a capitation system.

• Directors of individual healthcare units have to take responsibility for mapping out their needs on an annual basis regarding medical equipment and consumables, without slippages. Create a mechanism to monitor supplies, stocks and consumption.

• Carry out centralised procurements. Alternatively, tenders could be carried out by hospitals up to a specific level of annual expenditure, always within annual planning, according to the standards set by the central authority and to the maximum acquisition costs defined by the Ministry of Health.

• Apply reference or maximum prices to each item, set by the Ministry of Health.

1.4 Hospital efficiency

Facts:

• Fragmentation of hospitalisation, medical and hospital care.

• Almost exclusive treatment of severe and chronic diseases by public hospitals.

• Prolonged waiting in public hospitals.

• Surplus medical staff and lack of nursing staff in Greece compared with other European countries.

Orientation of reforms:

• Concentrate medical and hospital care at a central unit within the hospital. The expected legal interventions could be an important step in this direction, establishing the provision of primary hospital care under the auspices of the National Healthcare System.

• Efficiently exchange healthcare information through IT and communication technologies. This can significantly reduce the length of hospitalisation through effective time management, especially in respect to chronic diseases.

• Further enhance the financial sustainability of public hospitals by channelling investment to specific medical equipment necessary both for regular and for profitable surgeries/therapies (e.g. cardiac surgeries).

• Base financing procedures/rules on the quality of the services provided.

• The production of health services by hospitals and the hospital remuneration system are currently based on consumption. It is imperative to move to a capitation system where, on the basis of the population's quantitative needs (according to morbidity, chronic diseases, the demographics of the population etc.), part of the risks pass on to the producer (hospital, health centre etc.).

• Implement clinical governance and clinical audit techniques, in order to ensure medical suitability and necessity, healthcare according to scientific documentation, evaluation of healthcare services (patient benefits, financial efficiency, suitability of infrastructute) etc. The fact that resources were freed up in private healthcare units where clinical audit techniques are applied (by private insurance companies) at a very low cost (around 1% of hospitalisation costs) is also significant.

• Create an audit body for each healthcare unit in the National Healthcare System, consisting of health professionals and people employed in the sector. Training and lifelong learning of the audit unit.

• Establish a system for the evaluation of individual health service units (NHS) and set out specific goals, measurements and indices (reduction in the average length of stay in hospitals, cutback of hospitalisation days and emergency visits, reduction in check-ins, increased redirecting to outpatient units or primary care arrangements, etc.).

• Enhance the availability of statistical data necessary to evaluate the efficiency of the healthcare system, as well as the design and implementation of health policies.

1.5 Social fairness and equality

Facts:

• Total healthcare spending as a percentage of GDP in Greece stands close to euro area levels or the OECD countries' average (2007: euro area: 9.8%, Greece: 9.6%).

• However, the size of private healthcare spending constantly increases and already stands at much higher levels (participation of private spending in total healthcare expenditure, 2007: Greece: 37.1%, euro area: 23.7%).

• Although the National Healthcare System has been operating in Greece for more than 25 years, the relatively high private healthcare expenditure makes the Greek system seem more similar to private healthcare systems.

• The per capita health expenditure varies considerably across social security funds, indeed quite arbitrarily, as it is not associated with a respective differentiation in the quality of the services provided.

• There is better healthcare in urban rather than in agricultural areas of the country.[63]

Orientation of reforms:

• Improve access based on diagnostic systems that work through digital image files and information (telediagnosis).

• Increase efficiency of public hospitals and enhance competition in the supply of healthcare.

• Achieve a balance between "horizontal" own funds (charge-for-use) and "vertical" own funds (redistribution through the tax system in order to help households in lower income brackets).

2 REFORMING THE HEALTHCARE SYSTEM WITHIN THE FRAMEWORK OF THE ECONOMIC ADJUSTMENT PROGRAMME

The Greek government, within the framework of the Economic Adjustment Programme, is committed to improve the management of the healthcare system, mostly in respect to public hospitals. To this effect, a clear distinction between the expenditure of health funds and the corresponding pension expenditure of the social security system should be made. Moreover, a merger between health insurance funds is projected, so as to simplify the existing piecemeal system, while all health-related activities should be organised by one ministry.

In more detail, the measures expected to be taken within the framework of the Economic Adjustment Programme by the end of 2010 are:

• Making legal interventions relevant to the institutional framework of medical supplies and the new system for the management of pharmaceuticals (wider use of generic medicines, electronic prescribing etc.).

• Computerising hospitals, upgrading hospitals' budget preparation systems, reforming the administrative, accounting and financial system. This includes the introduction of a double-entry accounting method for the accrued revenue in hospitals, the regular publication of audited accounts, as well as improvement of the pricing and costing mechanisms.

63 It should also be noted that households in lower income brackets pay relatively more (against their total expenditure) for healthcare, compared with households in higher income brackets. For instance, the results of the Household Budget Survey for 2005 conducted by ELSTAT show that healthcare expenditure of households as a percentage of their total expenditure is 7.2% for all households, 9.8% for households with a monthly income of up to €750, and 6.4% for households with a monthly income of over €3,500.

• Strengthening the role of the Ministry of Economy as regards fiscal and operational oversight of healthcare expenditure.

• Submitting on a monthly basis overdue hospital debts within 30 days after the end of the month.

According to the updated text of the Economic Adjustment Programme (August 2010), the government is planning to enhance control over the expenditure of organisations belonging to the general government, including hospitals. In particular, the government has committed to: (i) expedite payments from hospitals so as to avoid the accumulation of overdue liabilities and to reduce the carry-over of liabilities into 2011; (ii) further reduce the cost of pharmaceuticals (a relevant law on electronic prescribing has been submitted to the Parliament); (iii) improve the income of hospitals through the mandatory payment of a €3 participation for visiting outpatient units, and the 24-hour operation of hospitals; and (iv) assign to auditing companies the financial management and control of expenditure as well as of the accounts payable of public hospitals.

Actions already taken are associated with overdue hospital debts, price-setting and the healthcare expenditure of social security funds and can be summarised as follows:

• The pricing of pharmaceuticals: Since the beginning of April 2010 (Law 3840/2010, Article 14) the price of prototype medicines after the expiration of their patents declines by at least 20%. Moreover, a relevant comparison of prices is adopted (against the three cheapest EU countries) regarding generic medicines.

• Final settlement of public hospitals' overdue debts, as announced on 9 June 2010 by the Minister of Economy and the Minister of Health. Until then, liabilities of €1.5 billion, created in 2005-2007 had been repaid. According to another announcement, the remaining debt of the 2005-2006 period and part of the liabilities from the year 2007 will be repaid in cash (€240 million). The remaining debt from the year 2007 and the 2008-2009 period will be repaid through the issuance of zero coupon bonds. These bonds will be tradable and fully marketable debt instruments. This settlement will increase the public debt by almost €5.4 billion in 2010.

• Integration and operation within a single framework of primary and secondary healthcare services provided by the NHS, social security bodies under the General Secretariat for Social Security and the Seamen's Fund, financial and accounting independence of the healthcare branch of Social Insurance Institute (IKA) as of 1 January 2011.

• According to announcements of the Ministry of Economy, five international auditing companies have already been assigned to audit the financial results of hospitals, starting by the hospitals "Evaggelismos", "Attikon" and "G. Gennimatas". As recently announced by the Ministry of Health, auditors in cooperation with five large international agencies will be appointed in 30 large hospitals throughout the country. The aim of the auditing companies is to record all hospital expenditure and apply new control systems (e.g. introduction of a double-entry method), as well as to identify possible liabilities that may have been taken up but have not been recorded yet.

• Within the framework of the fight against corruption, the Ministry of Health asked hospital administrations to have certain doctors suspended, if there is evidence that they over-prescribe, accept bribes or receive commissions through the use of materials, requesting at the same time to put in more effort in reducing hospitals' pharmaceutical expenditure and in inviting all tenders for supplies under the Unified Procurement Programme for 2010. The financial data presented by the Ministry of Health show a 5%-6% decline in hospitals' general expenditure and 16%-17% lower expenditure for supplies and pharmaceuticals. As regards hospitals' income, 50% on average of the financial claims of the National Healthcare System has been asserted by social security funds and 10% of the relevant amounts has been collected. Within the framework of expenditure control and improved financial planning, the Ministry of Health asked hospital administrations to submit their current (for the first seven months of 2010) claims from social security funds and to compile their budgets for 2011 on time.

- The law on the enhancement of the National Healthcare System (Law 3868), which was adopted in July, provides for the 24-hour operation of public hospitals, improved recruitment procedures for medical and nursing staff, advanced functionality and management of healthcare services, enhanced accountability, transparency and volunteerism. Further reforms and improvements in the operation of the National Healthcare System should be part of the legal initiatives taken by the government in respect to primary healthcare services, schooling and training, medical research, as well as the institutional framework concerning the benefits of private healthcare.

3 ASSESSMENT OF ACTIONS TAKEN THUS FAR AND TOP PRIORITIES

As per the Economic Adjustment Programme, the government took up a series of actions aiming to reduce pharmaceutical expenditure, clamp down on squandering related to medical supplies, improve the recording of hospital liabilities, increase hospital efficiency and fight corruption.

However, there is still a lot of work to be done in order to improve the healthcare system. This is also in line with the above mentioned proposals on the necessary progress regarding hospital efficiency, financial efficiency, social fairness, cost-effectiveness and productivity of the Greek healthcare system.

The overhaul of the healthcare system, the control of expenditure and the clamp-down on squandering may need time and may also cause conflict between interest groups.

Nevertheless, there are three imminent interventions that can help achieve the target of the healthcare system reform, which should be given top priority:

- Full computerisation of the healthcare system and activation of mechanisms for the control and monitoring of costs, as well as for expenditure efficiency.

- Immediate introduction of a double-entry accounting method on an accrual basis, which is a prerequisite for improving the administration and management of public hospitals and for improving the recording of expenditure and liabilities.

- Enhanced statistical data, which is a prerequisite to first assess and then improve effectiveness and efficiency of health expenditure and the healthcare system in general. Enhanced statistical data translates into improved collection and coverage of statistical information at hospital and clinic level (e.g. information per patient and per day of hospitalisation, weighted according to the severity of the incidence), etc.

SPECIAL FEATURE 5: USEFUL DATA ON PRIVATISATIONS DURING 1996-2009 AND ON LOSS-MAKING PUBLIC ENTERPRISES

1 THE PRIVATISATION PROGRAMME UNTIL TODAY

The term "privatisation" refers to the process of selling part of the total capital stock of public enterprises to private investors through public offerings and of listing their shares on the stock exchange. The Greek State, depending on the stake it retains, may preserve the right to appoint their administrations.

In Greece, the privatisation programme was launched in 1996 with the Hellenic Telecommunications Organisation (OTE), gathering step thereafter for a period of roughly ten years. The said period witnessed the sale of four public enterprises (Emporiki Bank, Ionian Bank, Hellenic Industrial Development Bank and Olympic Airways) as well as the privatisation of fifteen others (see Table VII.5.A for details), namely:

1. Hellenic Telecommunications Organisation (OTE)
2. Postal Savings Bank (TT)
3. Hellenic Post (ELTA)
4. Agricultural Bank of Greece (ATE)
5. Greek Soccer Pools Organisation (OPAP)
6. Hellenic Petroleum (ELPE)
7. National Bank of Greece (ETE)
8. Public Power Corporation (DEH)
9. Piraeus Port Authority (OLP)
10. Thessaloniki Port Authority (THPA)
11. Hellenic Exchanges (HELEX)
12. Thessaloniki Water Supply and Sewerage Company (EYATH)
13. Athens Water Supply and Sewerage Company (EYDAP)
14. COSMOTE Mobile Telecommunications (COSMOTE)
15. Hellenic Vehicle Industry (ELVO)

As of 2005, all privatised enterprises are no longer included in public enterprises, as their shares have been listed on the Athens Exchange. According to Law 3429/2005 (Government Gazette No. A 314/27.12.2005), 20 new public enterprises replaced 19 older ones in the table of public enterprises attached to the Introductory Report on the 2007 Budget. After that, the Introductory Report on the 2008 Budget counted 49 public enterprises and the Introductory Reports on the 2009 and 2010 Budgets 52.[64] Privatised enterprises' financial results are published in their annual balance sheets. So far all privatised enterprises have distributed annual dividends, as their post-privatisation financial years have been profitable.

These privatisations have brought to the treasury total revenues of around €18 billion. It should be noted that for reasons of prudent fiscal management all revenue from privatisations should be used to reduce public debt. However, only about 41% of that revenue went to the reduction of public debt, with the remainder covering other cash requirements of the general government.

The public enterprises' financial results are presented each year in the Introductory Report on the State Budget, while the Annual Report of the Bank of Greece gives a detailed analysis of the public enterprises' aggregate data. The *Annual Report for 2009* includes a table[65] on the public enterprises' results and financing. (On 13 October 2010 the Special Secretariat of Public Enterprises and Entities of the Ministry of Finance published analytical data on the *11 worst performing Public Enterprises and Entities* (DEKO), the total losses and net borrowing of which amounted in 2009 to €1.7 billion and €12.0 billion respectively.)

The deficits recorded in the past five years are in the area of 0.9%-1.0% of GDP each year and, in absolute figures, as follows:

64 Introductory Report on the 2010 State Budget, Table 5.2.
65 Table VIII.7, p. 97.

- 2006: €1,857 million

- 2007: €2,335 million

- 2008: €2,065 million

- 2009: €2,372 million

- 2010: €2,130 million (budgeted)

Public enterprises' large deficits mainly originate from the public transport companies of Athens – i.e. Athens Urban Transport Organisation (OASA), Thermal Buses S.A. (ETHEL), Athens-Piraeus Electric Railways (ISAP) and Athens-Piraeus Trolley Buses (ILPAP) – as well as from the Hellenic Railways Organisation (OSE) and its subsidiaries (EDISY and TRAINOSE), and from two defence companies, the Hellenic Defence Systems (EAS) and the Hellenic Aerospace Industry (EAB – see Table VII.5.B).

Table VII.5.B lists financial data for the public transport companies over the past five years. The table shows that all these companies have been facing problems in terms of income and operating costs throughout this period. It should be noted in this respect that personnel outlays alone exceed the total income of each company in each of the years under review. The deficits widen further once account is also taken of other operating expenses and loan servicing costs, rendering the operation of these enterprises problematic. Table VII.5.C presents total government subsidies in the five-year period 2005-2009.

Inevitably, these large deficits increase accordingly the public enterprises' borrowing requirements, which are usually covered by loans bearing the guarantee of the Greek State. When these loans are not repaid, the guaranties are forfeited. In the current juncture, the inability to turn to the markets for borrowing and the need to reduce the excessive public debt are among the reasons that explain why the Greek government decided to proceed with an immediate restructuring (initially) of OSE – the relevant draft law was submitted to Parliament on 7 October 2010 – and (then) of other loss-making enterprises. Moreover, following the revision of the fiscal data for the past few years expected to be announced by Eurostat on 22 October 2010, it was judged that certain public enterprises (such as OSE, OASA and EAS) belong to the general government sector, and thus their deficits and debts directly add to the general government deficit and debt, while on the other hand the general government deficit is no longer exacerbated by the forfeiture of State guaranties on the loan agreements that these enterprises had concluded.

Overall, it is obvious that the companies under review have to be reorganised and run on a different philosophy characterised by transparency and professionalism and aimed at yielding positive results according to annually set goals.

2 COMMITMENTS UNDER THE MEMORANDUM

Under the Economic Adjustment Programme, the government has pledged to further reduce state participation in public enterprises. Its commitments include:

- Releasing balance sheets, audited by chartered accountants, for the 10 worst performing public enterprises.

- Preparing a roadmap for actions that will improve the financial results of the worst performers – mainly OSE and the capital's public transport companies.

- Improving the management of public enterprises.

- Cutting the State's capital injections to public enterprises by at least €800 million in the 2012 Budget.

- Implementing a privatisation programme that will yield at least €1 billion annually over 2011-2013, which should be drawn up by end-2010.

Table VII.5.A Privatisation activity in 1996-2009

Year	Privatisation of public enterprises per year																		
1996	OTE 8%																		
1997	OTE 12%																		
1998	OTE 10%	ELPE 23%	HELEX 10%	ETE															
1999	OTE 14%			ETE	IONIAN BANK 5%	ETBA 30%	EYDAP 30%												
2000	OTE 3%	ELPE 9%						EMPORIKI BANK 7%	ELVO 43%	COSMOTE 15%	ATE 13%								
2001	OTE 10%											OPAP 5.43%	DEH 16.1%	THPA 25%	EYATH 25%				
2002	OTE 8%					ETBA 57.8%						OPAP 18.9%	DEH 13.2%						
2003		ELPE 16.65%	HELEX 33.3%	ETE 11%								OPAP 25%	DEH 15.73%			OLP 25.50%			
2004		ELPE 8.20%		ETE 7.46%															
2005	OTE 10%											OPAP 16.44%							
2006								EMPORIKI BANK 11.01%			ATE						ELTA 10%	TT 44.84%	
2007	OTE 10.7%																	TT 20%	
2008	OTE 3%																		
2009	OTE 5%																		OLYMPIC AIRWAYS

Source: Bank of Greece.
Notes: **OTE**: Hellenic Telecommunications Organisation, **ELPE**: Hellenic Petroleum, **HELEX**: Hellenic Exchanges, **ETE**: National Bank of Greece, **ETBA**: Hellenic Industrial Development Bank, **EYDAP**: Athens Water Supply and Sewerage Company, **ELVO**: Hellenic Vehicle Industry, **COSMOTE**: COSMOTE Mobile Telecommunications, **ATE**: Agricultural Bank of Greece, **OPAP**: Greek Soccer Pools Organisation, **DEH**: Public Power Corporation, **THPA**: Thessaloniki Port Authority, **EYATH**: Thessaloniki Water Supply and Sewerage Company, **OLP**: Piraeus Port Authority, **ELTA**: Hellenic Post, **TT**: Postal Savings Bank.

Table VII.5.B Financial results of public transport companies

(million euro)

Year	Company	Income	Staff costs	Fuel	Depreciation	Interest payments	Other	Financial results**
2005	Hellenic Railways Organisation (OSE)	169.03	303.73	45.64	115.86	215.19	84.79	(596.18)
2006	Hellenic Railways Organisation (OSE)	173.09	355.57	49.88	133.43	266.70	58.00	(690.49)
2007	Hellenic Railways Organisation (OSE)	197.13	12.25	47.89	143.43	339.64	97.04	(443.12)
	Rail passenger and freight transportation services (TRAINOSE)	118.31	113.40	0.03	0.32	0.04	159.58	(155.06)
	National railway infrastructure management (EDISY)	138.27	225.34	46.75	0.10	0.00	74.30	(208.22)
2008	Hellenic Railways Organisation (OSE)	230.33	11.31	0.09	143.43	388.45	288.40	(601.35)
	Rail passenger and freight transportation services (TRAINOSE)	111.16	117.77	0.14	0.00	0.05	223.07	(229.87)
	National railway infrastructure management (EDISY)	167.73	261.30	2.30	0.20	0.01	80.49	(176.57)
2009*	Hellenic Railways Organisation (OSE)	177.66	10.50	1.00	143.00	416.00	114.99	(507.83)
	Rail passenger and freight transportation services (TRAINOSE)	119.64	120.78	0.03	0.82	0.04	211.50	(213.53)
	National railway infrastructure management (EDISY)	162.40	258.60	3.00	0.21	0.01	69.97	(169.39)
2005	Company of Thermal Buses (ETHEL)	188.56	232.40	37.66	23.19	50.17	22.72	(177.58)
2006	"	187.78	263.35	38.42	19.31	49.19	33.20	(215.69)
2007	"	194.73	280.99	46.27	17.51	44.60	45.24	(239.88)
2008	"	193.59	301.27	55.37	17.81	48.83	56.62	(286.31)
2009*	"	204.46	321.77	43.88	20.30	52.30	70.27	(304.06)
2005	Athens-Piraeus Trolley Buses (ILPAP)	48.01	59.18	2.47	24.96	6.54	10.61	(55.75)
2006	"	43.52	58.38	3.05	17.72	7.92	12.20	(55.75)
2007	"	44.72	63.64	0.00	13.39	10.71	18.03	(61.05)
2008	"	49.74	65.96	0.00	12.46	12.09	21.39	(62.16)
2009*	"	49.16	72.50	0.00	13.00	15.75	18.87	(70.96)
2005	Athens-Piraeus Electric Railways (ISAP)	82.20	78.57	1.61	26.71	17.69	28.46	(70.84)
2006	"	85.90	81.23	0.82	28.09	20.29	28.13	(72.66)
2007	"	91.40	88.40	0.78	26.66	21.63	26.46	(72.53)
2008	"	95.90	97.62	0.83	22.28	24.01	28.96	(77.80)
2009*	"	95.07	100.35	0.36	24.53	28.02	27.84	(86.03)
2005	Athens Urban Transport Organisation (OASA)	10.92	10.33	0.00	0.99	0.57	3.53	(4.50)
2006	"	12.35	11.03	0.00	1.26	1.06	4.39	(5.39)
2007	"	11.13	11.61	0.00	0.62	1.22	3.05	(5.37)
2008	"	11.02	12.68	0.00	1.78	1.41	2.91	(7.76)
2009*	"	13.28	13.88	0.00	1.74	2.28	5.26	(9,88)

Source: Ministry of Finance.
* Provisional data.
** Amounts in parentheses represent losses.

Table VII.5.C Budget subsidies to public transport companies

(million euro)

Year	Hellenic Railways Organisation (OSE)	National railway infrastructure management (EDISY)	Rail passenger and freight transportation services (TRAINOSE)	Company of Thermal Buses (ETHEL)	Athens-Piraeus Electric Railways (ISAP)	Athens-Piraeus Trolley Buses (ILPAP)	Athens Urban Transport Organisation (OASA)
2005	-	-	-	70.81	19.31	24.13	-
2006	-	-	-	70.64	23.85	19.28	-
2007	-	-	-	72.48	23.85	19.46	-
2008	-	-	-	73.39	24.77	20.18	-
2009*	-	-	-	75.23	26.15	21.56	-

Sourse: Ministry of Finance.
* Provisional data.

3 GOVERNMENT POLICY GUIDELINES

On 2 June 2010[66] the government announced its general guidelines for a broad privatisation programme that will involve the railway network, road transports, airports, ports, other utility enterprises, the gambling industry (OPAP, casinos), as well as public real estate. The means used to this end will include privatisation through sales, concession agreements, introduction of strategic investors, the floating of companies on the Athens Exchange or the creation of holding companies.

66 Joint press conference given by the competent ministers for privatisations and the management of public sector real estate.

SPECIAL FEATURE 6: ADDRESSING CLIMATE CHANGE AND GREEN TAX POLICIES

1 ADDRESSING CLIMATE CHANGE: THE RECENT INTERNATIONAL AND GREEK EXPERIENCE

1.1 Current developments in the EU policy for addressing climate change

In its announcement following the Copenhagen Climate Change Conference in December 2009, the European Commission recommended the immediate implementation of the Copenhagen Accord, providing at the same time for fast-start support to developing countries totalling €2.4 billion annually for 2010-2012. It also emphasised the effort to reach a legally-binding global agreement during the United Nations Climate Change Conference, which is scheduled for December 2010 in Cancun, Mexico.[67] Moreover, the European Commission is exploring the possibility of introducing an EU-wide energy tax, which could boost the competitiveness of renewable energy sources (RES) and low-carbon energy sources in general, as well as contribute to the reduction of fiscal deficits associated with the recent economic crisis.[68]

On 17 June 2010 the European Council decided to examine the Commission proposals to reduce greenhouse gas emissions more than 20%, together with the consequences for Member States, as well as to report at the Cancun

67 European Commission Communication of 9 March 2010, COM(2010) 86 final.
68 Specifically, a minimum rate of taxation could be imposed on energy sources, such as coal, biofuels and RES. For instance, carbon tax could range at a suggested rate of €4-€30 per tonne of carbon dioxide. The objective, however, is not to raise taxes but to restructure them in a way that consumers can reduce the amount of tax they pay by changing their behaviour (see Reuters, *Exclusive: EU debt crisis boosts chance of energy tax overhaul*, 1 June 2010).

conference on the progress achieved by Member States in the implementation of their commitments for 2010. Furthermore, on 14 July 2010 the European Commission welcomed the vote by the Climate Change Committee in support of the Commission's proposal for a Regulation governing the auctioning of emission allowances[69] under the EU Emissions Trading System. The draft Regulation lays down the rules for auctioning emission allowances from 2013 onwards.[70]

Finally, on 19 July 2010 the OECD Secretary-General welcomed the call by ministers in France, Germany and the United Kingdom for Europe to adopt a 30% reduction in greenhouse gas emissions over 1990 levels by 2020. According to OECD,[71] the additional cost that will arise from the readjustment of the EU target for a 30% reduction in gas emissions, against the current target of 20%, is estimated at about 0.3% of GDP yearly until 2020 (compared with 0.2% which corresponds to a 20% reduction in gas emissions). Possible options to reach the 30% target include the reduction of allowances auctioned under the EU Emissions Trading System, the adoption of provisions aimed at boosting energy efficiency, directing EU funds towards green investments, etc. Meeting this target would yield additional revenues, which could contribute to fiscal consolidation and, thus, to the narrowing of fiscal deficits associated with the recent economic crisis.[72]

1.2 The current policy of the Greek government for tackling climate change

The Greek government strategy for attaining the 20-20-20 target[73] is based on two scenarios: (a) the baseline scenario, which includes actions and policies originally launched before 2009, and (b) the target-attainment scenario, which also includes policies adopted recently, such as the law on the acceleration of RES development (Law 3851/2010 was enacted at end-May).[74] The results of the target-attainment scenario show that the achievement of the target for a RES participation of 20% in total final energy consumption and of 40% in electricity generation is feasible. Investment in RES is expected to reach €16 billion by 2020 which will lead to more than 15,000 MW of installed capacity, against 4,500 MW in 2010. Specifically, another 6,000 MW of wind power capacity, 2,500 MW of photovoltaic capacity and about 250 MW biomass power plants[75] are expected to be installed. In order for this strategy to be materialised, the National Renewable Energy Action Plan for Greece was submitted to the European Commission with a view to reaching the target for a 20% share of RES in final energy consumption by 2020.[76]

Efforts for the development of RES also include a preliminary site planning of offshore wind farms,[77] which is a prerequisite for the licensing procedure. This procedure determines the exact location of offshore wind farms, the sea area they will occupy and the maximum installed capacity. The selected areas regard the first phase of the development of offshore wind farms in Greece, i.e. the

69 Each year Member States grant to installations covered by the emissions trading system the quantity of annual allowances that are allocated free of charge. The sectoral breakdown of allowance allocation, as well as the allocation rules of each Member State are set out in its national allocation plan (see Bank of Greece, *Annual Report 2008*, April 2009, Chapter X, pp. 161-163). From 2013 onwards, emission allowances not allocated free of charge will be fully auctioned by Member States.

70 Specifically, for the third trading period, which begins in 2013, allocations for free will be phased out progressively and auctioning will start for the various industries, with the exception of the aviation sector. Member States are required to auction 15% of their allowances for aviation by the end of 2012 and to maintain this percentage in the years ahead.

71 OECD, *Costs and Effectiveness of the Copenhagen Pledges: Assessing Global Greenhouse Gas Emissions Targets and Actions for 2020*, May 2010.

72 European Commission Communication of 26 May 2010, COM(2010) 265 final.

73 See Bank of Greece, *Annual Report 2008*, April 2009, Chapter X, p. 160.

74 See Bank of Greece, *Monetary Policy 2009-2010*, March 2010, Special Feature 2.F, p. 132.

75 Ministry of Environment, Energy and Climate Change, Press release of 21 June 2010.

76 The report includes estimates on the development of the energy sector and the penetration of RES technologies by 2020, as well as measures for the reduction of energy consumption, the use of RES and the development of administrative structures that will speed up this penetration. The above planning is estimated to lead to savings of up to €1.3 billion over the next ten years (see Ministry of Environment, Energy and Climate Change, Press release of 21 July 2010).

77 Ministry of Environment, Energy and Climate Change, Press release of 6 July 2010.

2012-2017 period.[78] Energy-saving actions include two more initiatives. The first initiative regards a call for proposals to improve the energy efficiency of public sector buildings with the use of RES technologies, budgeted at €40 million.[79] These proposals will be financed by the Operational Programme "Environment and Sustainable Development" and involve projects reducing energy needs for heating, cooling, lighting, etc. The second initiative concerns the establishment of the Special Financing Fund "Saving at home".[80] The "Saving at home" programme will mobilise investments of €1 billion in 2010-2012. Total investment will stem from both the resources of the Fund and the mobilisation of resources from the financial sector.[81] Relevant are the provisions of Law 3855/2010 concerning the improvement of end-use energy efficiency, which was adopted in June (implementing Directive EU 2006/32).

Another important step for addressing climate change is Law 3889 regarding the establishment of the Green Fund. The Green Fund has resulted from the merger of the Special Fund for Planning and Urban Development (ETERPS), the Forest Fund and the Blue Fund. The integration of the above funds will enable the amounts collected from fines for environmental and other violations to be recorded and earmarked as "green resources", which will be then utilised to support environmental protection projects of third parties. Such support can take the form of grants, loans, equity or other capital injections, without excluding the possibility of co-financing by other resources, whether public or private, European or domestic.

The Memorandum of Economic and Financial Policies (Law 3845/2010), as well as the updated Memorandum of 6 August 2010 suggest, among the fiscal policies aimed at increasing revenues, the imposition of "green taxes". Specifically, the fiscal consolidation measures included in the Economic Adjustment Programme for 2011 are expected to yield revenues amounting to €300 million (0.1% of GDP) from "green levies". The structural policies contained in the Memorandum include, inter alia, the adoption of measures with a view to mobilising investments related to green growth. In particular, measures will be taken to facilitate direct foreign investment in innovation and strategic sectors, such as green industries. This will be achieved with the revision of the Investment Law and the adoption of measures facilitating public private partnerships (PPPs). Furthermore, according to the progress report on the economic adjustment programme submitted to the EU[82] by the Greek government, tax incentives aimed at supporting environmental protection actions are envisaged in the context of the tax system reform. Finally, the measures included in the draft budget for 2011 include the imposition of a "green tax" on carbon dioxide emissions, which is expected to generate, as mentioned above, revenues of €300 million in 2011.[83]

2 GREEN TAX POLICY

2.1 The need for green taxation

Global climate change is currently one of the most acute problems facing humanity; for this reason, various tools and policies have been

78 The criteria applied to the preliminary site planning of offshore wind farms aim at: (a) excluding areas where the development of offshore wind farms is incompatible with other uses, (b) excluding areas where the sea is deeper than 50 metres, (c) avoiding sites with a major environmental impact and (d) minimising visual impact. On the basis of the above criteria, the eligible areas that were selected are: Ai Stratis, Alexandroupoli, Thassos, Karpathos, Corfu, Kryoneri, Kimi, Lefkada, Limnos, Petalioi, Samothraki, Fanari.

79 Ministry of Environment, Energy and Climate Change, Press release of 19 July 2010.

80 Ministry of Environment, Energy and Climate Change, Press release of 20 July 2010. See also Bank of Greece, *Annual Report 2009*, April 2010, p. 168.

81 The public resources of the programme for 2010 amount to €396 million and will come from the following Operational Programmes (OP) under the National Strategic Reference Framework (NSRF): (a) OP "Competitiveness and Entrepreneurship" (€200 million), (b) Regional OP of Attica (€100 million), (c) Regional OP of Macedonia-Thrace (Central Macedonia - €35 million), (d) Regional OP of Thessaly-S Epirus (€25 million), (e) Regional OP of Macedonia-Thrace (Western Macedonia - €15 million), (f) Regional OP of Crete and the Aegean islands (€6 million), and (g) OP "Environment and Sustainable Development" (€15 million).

82 Hellenic Republic-Ministry of Finance, *The economic adjustment programme for Greece*, July 2010.

83 *Draft State Budget for 2011*, Table 2.2, p. 25 (in Greek).

proposed with a view to reducing greenhouse gas emissions, particularly those of carbon dioxide. The proposed measures also include the introduction of environmental or green taxes.[84] Green taxes are defined as the taxes imposed on products or services with a proven harmful impact on the environment. Environmental taxes can be divided into the following broad categories:

(a) Energy taxes: they include taxes on energy products used for transport (e.g. oil, petrol) and other purposes (e.g. mineral fuel, natural gas, coal, electricity);

(b) Transport taxes: taxes imposed on means of transport (e.g. taxes on motor vehicles), and;

(c) Pollution/resource taxes: taxes on polluting activities (e.g. taxes on gas emissions, raw materials and waste).[85]

The introduction of these taxes aims to internalise some of the environmental and social costs into production costs, mainly the costs of energy production, and to artificially burden output prices. *The ultimate goal is to incentivise energy saving, cleaner energy sources and innovative technologies, with a view to achieving the abatement of emissions and pollution.* Besides, the basic idea behind green taxes is to shift the tax burden from production and labour to the use of natural resources and environmentally harmful goods and activities, thus broadening the tax base to include a new field. Furthermore, environmental taxes are fairer, as they effectively apply the "polluter pays" principle, meaning that the polluter should bear the cost of measures required to prevent environmental damage or to maintain pollution below threshold levels. Nevertheless, a successful green tax policy should yield visible results and include simple, efficient measures accompanied by a mix of tools and policies, such as the implementation of regulatory measures and standards on environmental issues, initiatives on and commitments to the adoption of anti-pollution technologies, measures for improving energy efficiency, investment in new technologies, etc.[86]

2.2 Developments in EU countries

An increasing number of countries have been introducing environmental tax reforms since the 1990s. In EU Member States, green tax reforms have had varying success. Among others, Denmark, Finland, Germany, the Netherlands, Sweden and the United Kingdom introduced green tax reforms over the past decade. They increased environment-related taxes and used additional revenues to finance tax cuts on personal income. At the same time, they have taken measures, in the form of rate reductions or refund schemes, to protect producers from any negative effect on competitiveness arising from increases in input costs (due to environmental taxes). Some new Member States have followed suit; one example is Slovenia, where a carbon dioxide tax has been introduced on all energy products since 1997. In Estonia, the increases in excise duties have been used to finance substantial cuts of personal income taxes. The Czech Republic introduced an environmental tax reform in 2008, which would increase the tax rates of most energy products over the period 2008-2012 and would use the tax revenues to support the state employment policy.

Despite this interest, environmental tax revenues have not been growing but, on the contrary, they have followed a continuous downward path in recent years. In 2008, revenues from environmental taxes in EU-27 accounted, on average, for 2.4% of GDP and 6.1% of total taxes, compared with 2.7% and 6.8%, respectively, in 2000 (see Table VII.6.A). When examining green *taxes as a percentage of GDP* in EU-27 in 2008, one can observe that most countries tend to fall in a band ranging from 2% to 3% of GDP. Only four countries show

84 See also OECD, *Taxation, Innovation and the Environment*, October 2010.
85 European Commission, *Taxation trends in the European Union*, 2010.
86 ACCA's position papers, *Green Taxation in a Recession*, 2009.

Table VII.6.A Environmental taxes in EU-27 Member States

	Environmental taxes as a percentage of GDP						Environmental taxes as a percentage of total taxes					
	1995	2000	2005	2006	2007	2008	1995	2000	2005	2006	2007	2008
Austria	2.1	2.4	2.6	2.5	2.4	2.4	5.2	5.6	6.2	6.0	5.8	5.6
Belgium	2.2	2.3	2.3	2.2	2.1	2.0	5.1	5.0	5.2	4.9	4.8	4.4
Bulgaria	n/a	2.5	3.1	3.1	3.4	3.5	n/a	7.5	9.0	9.3	10.0	10.6
Cyprus	2.9	2.7	3.5	3.3	3.4	3.1	10.7	8.9	9.9	9.0	8.2	8.0
Czech Republic	2.9	2.6	2.7	2.6	2.5	2.5	8.0	7.6	7.3	7.0	6.7	6.8
Denmark	4.5	5.3	6.0	6.2	5.9	5.7	9.3	10.7	11.8	12.4	12.0	11.9
Estonia	1.0	1.7	2.3	2.2	2.3	2.4	2.7	5.5	7.4	7.1	7.0	7.3
Finland	2.9	3.1	3.1	3.0	2.7	2.7	6.4	6.6	7.0	6.9	6.4	6.3
France	2.8	2.5	2.3	2.3	2.2	2.1	6.5	5.6	5.3	5.2	5.0	4.9
Germany	2.3	2.4	2.5	2.4	2.2	2.2	5.8	5.7	6.3	6.1	5.7	5.7
Greece	3.1	2.3	2.1	2.0	2.0	2.0	10.7	6.8	6.6	6.3	6.3	6.0
Hungary	2.9	3.0	2.7	2.8	2.8	2.7	7.2	7.6	7.3	7.6	7.0	6.7
Ireland	3.1	2.9	2.5	2.5	2.5	2.4	9.2	9.1	8.2	7.7	7.8	8.3
Italy	3.5	3.1	2.7	2.7	2.6	2.4	8.8	7.4	6.7	6.4	6.0	5.7
Latvia	1.2	2.4	2.7	2.4	2.1	1.9	3.7	8.1	9.2	7.9	6.8	6.7
Lithuania	1.9	2.4	2.3	1.8	1.8	1.7	8.0	8.1	8.1	6.1	6.0	5.5
Luxembourg	3.0	2.8	2.9	2.6	2.5	2.5	8.0	7.1	7.8	7.3	7.1	7.0
Malta	3.2	3.7	3.3	3.4	3.8	3.5	11.9	13.1	9.8	10.0	10.9	10.2
Netherlands	3.6	3.9	3.9	4.0	3.8	3.9	9.1	9.8	10.5	10.3	9.8	9.9
Poland	1.8	2.1	2.7	2.8	2.7	2.6	5.0	6.4	8.1	8.2	7.7	7.5
Portugal	3.5	2.7	3.1	3.0	2.9	2.6	10.9	8.0	8.7	8.3	8.0	7.2
Romania	1.9	3.4	2.0	1.9	2.1	1.8	6.4	11.4	7.2	6.8	7.1	6.3
Slovakia	2.3	2.2	2.4	2.3	2.1	2.0	5.8	6.5	7.6	7.8	7.2	6.8
Slovenia	4.2	2.9	3.2	3.0	3.0	3.0	10.8	7.9	8.3	7.9	8.0	8.1
Spain	2.2	2.2	1.9	1.9	1.8	1.6	6.7	6.5	5.4	5.1	4.9	4.9
Sweden	2.8	2.8	2.9	2.8	2.7	2.7	5.8	5.4	5.8	5.6	5.5	5.8
United Kingdom	2.9	3.0	2.5	2.4	2.5	2.4	8.3	8.1	6.9	6.5	6.7	6.5
EU-27[1]	**n/a**	**2.7**	**2.6**	**2.5**	**2.5**	**2.4**	**n/a**	**6.8**	**6.6**	**6.4**	**6.2**	**6.1**

Source: European Commission, *Taxation trends in the European Union*, 2010.
1 Weighted averages.
n/a: data not available.

levels below 2% of GDP, while in four other countries these levels exceed or are equal to 3.5% of GDP. Specifically, in 2008 Denmark displays by far the highest level (5.7%) of green taxes, followed by the Netherlands (3.9%), while the lowest environmental tax revenues in relation to GDP are found in Spain (1.6%), Lithuania (1.7%), Romania (1.8%) and Latvia (1.9%).

However, as regards the *share of green taxes in total taxation*, considerable differences are observed between EU Member States, as in certain countries this share increased (Bulgaria, Denmark, Estonia, Poland), while in other countries it remained stagnant or decreased (France, Greece, Malta, Romania, Slovenia). In 2008 relative to 2000, the largest increase was recorded in Bulgaria, where the share of environmental taxes in total taxes increased by three percentage points to 10.6%, i.e. quite higher than the European average. Respectively, the largest decrease was recorded in Romania (by 5 percentage points, to 6.3%). In terms of the share of green taxation in total taxation, Denmark (12%), Bulgaria (11%) and Malta (10%) were ranked at the three first positions in 2008 while Belgium and France registered the lowest percentages (4% and 5% respectively).

With regard to environmental taxes broken down by category, energy taxes are by far the most significant category (1.7% of GDP and 4.4% of total taxes in 2008 for EU-27, against 2.1% and 5.1%, respectively, in 2000), with fuel taxes representing the most important subcategory. The second most important category, albeit with a considerably smaller contribution, is transport taxes (0.6% of GDP and 1.4% of total taxes in 2008 for EU-27), while the category of pollution/resource taxes displays the lowest shares (accounting for 0.1% and 0.3%, respectively). It is noted that the contribution of the last two categories remained stable during the reviewed period (see Table VII.6.B). The predominance of energy taxes over the other tax categories is common to most EU-27 Member States in 2008. However, in some countries the contribution of transport taxes is equally important. For instance, in Ireland, Cyprus and Malta they account for almost 50% of total environmental taxes. It should also be noted that only a few countries (Denmark, the Netherlands and Estonia) raise significant tax revenues from pollution/resource taxes (see Table VII.6.C).

2.3 Green tax policy in Greece

In Greece, green tax policy is not as developed as in other European countries. However, there are certain taxes that can be included in the category of environmental taxes, with the most important being fuel tax, followed by vehicle excise duties, the RES duty collected through the Public Power Corporation (DEH) bills, and the "green levy" for the settlement of building code violations. Fuel taxes were raised three times during 2010. Namely, the first increase took effect by virtue of Law 3828/2010 (9 February 2010), with the excise taxes on petrol and diesel oil increasing by 29.3% and 16.6%, respectively. The second increase (under Law 3833/2010, with effect from 4 March 2010) amounted to about 15.1% for petrol and 8.5% for diesel oil, while the corresponding increases under Law 3845/2010 (with effect from 3 May 2010) were 9.8% and 7.9%.

As regards vehicle excise duties, a legislative act[87] that was signed on 5 November 2009 modified environmental taxes payable by engine size and age of vehicle, with a view to shifting the burden from cars with a smaller engine capacity to more energy-consuming cars with a bigger engine capacity. In addition, in order to address air pollution from road traffic, vehicle excise duties were readjusted on the basis of the classification of vehicles in four bands, depending on the environmental burden

87 Legislative Act, "Environmental levies, abolition of the car scrappage scheme, abolition of the green traffic ring", Government Gazette No 219, 2009.

Table VII.6.B Environmental taxes per category in EU-27[1] and Greece

	Environmental taxes as a percentage of GDP					Environmental taxes as a percentage of total taxes				
	2000	2005	2006	2007	2008	2000	2005	2006	2007	2008
EU-27										
Energy taxes	2.1	1.9	1.9	1.8	1.7	5.1	4.9	4.7	4.5	4.4
– Transport fuel taxes	n/a	1.5	1.5	1.4	1.4	n/a	3.9	3.7	3.6	3.6
Transport taxes (without fuel taxes)	0.6	0.6	0.6	0.6	0.6	1.4	1.5	1.4	1.5	1.4
Pollution/resources taxes	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.3
Greece										
Energy taxes	1.6	1.2	1.2	1.2	1.2	4.6	3.9	3.7	3.7	3.6
– Transport fuel taxes	n/a	1.1	1.1	1.1	1.1	n/a	3.5	3.4	3.5	3.3
Transport taxes (without fuel taxes)	0.8	0.9	0.8	0.8	0.8	2.2	2.7	2.6	2.6	2.4
Pollution/resources taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: European Commission. *Taxation trends in the European Union*, 2010.
1 Weighted averages.
n/a: data not available.

Table VII.6.C Environmental taxes per category in EU-27 Member States in 2008

	As a percentage of environmental taxes			As a percentage of total taxes		
	Energy taxes	Transport taxes (without fuel taxes)	Pollution/ resources taxes	Energy taxes	Transport taxes (without fuel taxes)	Pollution/ resources taxes
Austria	67.7	31.2	1.1	3.8	1.8	0.1
Belgium	63.4	29.1	7.5	2.8	1.3	0.3
Bulgaria	86.7	9.4	3.9	9.2	1.0	0.4
Cyprus	50.1	49.9	0.0	4.0	4.0	0.0
Czech Republic	92.7	6.4	0.9	6.3	0.4	0.1
Denmark	36.9	32.4	30.7	4.4	3.8	3.6
Estonia	83.7	1.8	14.5	6.1	0.1	1.1
Finland	64.8	33.2	2.0	4.1	2.1	0.1
France	67.9	27.4	4.7	3.3	1.3	0.2
Germany	82.4	15.9	1.7	4.7	0.9	0.1
Greece	60.2	39.8	0.0	3.6	2.4	0.0
Hungary	72.6	21.5	5.9	4.9	1.4	0.4
Ireland	52.4	47.4	0.2	4.3	3.9	0.0
Italy	78.3	20.4	1.3	4.4	1.2	0.1
Latvia	85.1	11.8	3.1	5.7	0.8	0.2
Lithuania	93.3	2.8	3.9	5.1	0.2	0.2
Luxembourg	93.2	6.8	0.0	6.6	0.5	0.0
Malta	42.8	48.3	9.0	4.4	4.9	0.9
Netherlands	49.7	33.6	16.8	4.9	3.3	1.7
Poland	87.1	9.7	3.2	6.6	0.7	0.2
Portugal	72.8	27.2	0.0	5.2	2.0	0.0
Romania	79.2	20.3	0.6	5.0	1.3	0.0
Slovakia	89.9	7.9	2.3	6.1	0.5	0.2
Slovenia	78.7	15.8	5.5	6.4	1.3	0.4
Spain	80.0	19.1	1.0	3.9	0.9	0.0
Sweden	80.4	18.7	0.9	4.7	1.1	0.1
United Kingdom	74.1	22.2	3.7	4.8	1.4	0.2
EU-27	**72.1**	**23.0**	**4.9**	**4.4**	**1.4**	**0.3**

Source: European Commission, *Taxation trends in the European Union*, 2010.

caused by their engines.[88] By the end of 2011, according to Article 17 of Law 3888/2010, a new framework for the calculation of road taxes will be adopted, which will abolish the four classification bands to apply the criterion of engine size and to incorporate a separate vehicle excise duty on large engine capacity. The new calculation system of road taxes will apply for cars first registered on 1 November 2010. Furthermore, for all passenger cars and

88 The classification of vehicles on the basis of environmental burden caused by their engines is the following: Band A: vehicles with low or zero emissions, first registered on 1.1.2005 (€4.5); Band B: vehicles with moderate emissions, first registered on 1.1.2000 (€3); Band C: vehicles with high emissions, first registered on 1.1.1996 (€2); and Band D: vehicles with very high emissions, first registered before 1.1.1996 (€1).

small public service vehicles (taxis), registered after 1 November 2010, road taxes are to be based on theoretical carbon dioxide emission rates per kilometre (CO_2 g/km). This provision applies for all of the above-mentioned vehicles, irrespective of their technology (petrol-driven cars, hybrid vehicles, diesel cars, etc.) and is to urge consumers to use "cleaner" vehicles.

Furthermore, the tax law 3842/2010 provides for tax incentives to support environmental protection actions. Specifically, a 10% tax refund is envisaged regarding eligible expenses for eco-friendly refurbishing of buildings, following an energy audit.[89] Finally, Law 3843/2010 (Identification of buildings, construction violations and changes of use, urban regeneration and other provisions) provides for the possibility of settling building code violations with the imposition of a "green levy". Revenues from this fine are rendered to the Special Fund for Planning and Urban Development (under the item "Environmental Balance Fund") and are used, among other things, for the implementation of programmes and actions for environmental and urban rehabilitation.

89 These interventions regard: (a) the replacement of oil tanks with teleheating or a system using RES, (b) the change of central heating plants using fuel from oil to natural gas, (c) the purchase and installation of solar panels, (d) the purchase and installation of decentralised systems for producing electricity from RES (e.g. photovoltaic systems, small wind generators), (e) heat insulation in existing buildings, and (f) the costs for the conduct of energy audits by a competent auditor. Furthermore, under the tax law, 50% of the costs incurred by manufacturing industries over the same fiscal year for the reduction of their environmental footprint shall be deducted from their net taxable income.

MONETARY POLICY MEASURES OF THE EUROSYSTEM

14 JANUARY 2010

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

18 JANUARY 2010

The Governing Council of the ECB decided, in agreement with the Swiss National Bank, to stop conducting one-week Swiss franc liquidity-providing swap operations after 31 January 2010.

27 JANUARY 2010

The Governing Council of the ECB decided, in agreement with the Federal Reserve, the Bank of England, the Bank of Japan and the Swiss National Bank, to stop conducting US dollar liquidity-providing operations after 31 January 2010.

4 FEBRUARY 2010

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

4 MARCH 2010

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

The Governing Council decided to continue conducting its main refinancing operations (MROs) as fixed rate tender procedures with full allotment for as long as necessary, and at least until the end of this year's ninth maintenance period on 12 October 2010. Furthermore, the Governing Council also decided, in line with its decision on the 12-month longer-term refinancing operation (LTRO) of 16 December 2009, to fix the rate in the 6-month LTRO to be allotted on 31 March 2010 at the average minimum bid rate of the MROs over the life of this operation. The Governing Council also decided to return to variable rate tender procedures in the regular 3-month longer-term refinancing operations (LTROs), starting with the operation to be allotted on 28 April 2010. Allotment amounts in these operations will be set with the aim of ensuring smooth conditions in money markets.

Finally, in order to smooth out the liquidity effect of the 12-month LTRO maturing on 1 July 2010, the Governing Council decided to carry out an additional six-day fine-tuning operation with announcement, allotment and settlement on 1 July and maturity on 7 July, the latter date coinciding with the settlement day of the next MRO. The fixed rate tender procedure with full allotment will be used in this operation as well, with the same fixed rate as the prevailing MRO rate.

8 APRIL 2010

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

The Governing Council of the ECB decided to keep the minimum credit threshold for marketable and nonmarketable assets in the Eurosystem collateral framework at investment-grade level beyond the end of 2010. More precisely, the long-term rating of assets is BBB+/BBB/BBB- by Fitch or Standard & Poor's, Baa1/Baa2/Baa3 by Moody's or BBBH/BBB by DBRS.

Furthermore, it was decided that the following instruments, which were fist included in eligible collateral in October 2008, will no longer be eligible as collateral after the end of 2010: (1) marketable debt instruments denominated in currencies other than the euro, i.e. the US dollar, the pound sterling and the Japanese yen, and issued in the euro area; (2) debt instruments issued by credit institutions, which are traded on the accepted non-regulated markets; and (3) subordinated debt instruments when they are protected by an acceptable guarantee.

Finally, the Governing Council announced that in July 2010 a schedule of graduated valuation haircuts will be determined in relation to the assets rated in the BBB+ to BBB- range (or equivalent), excluding government debt instruments. For government debt instruments and debt instruments issued by central banks and rated in the BBB+ to BBB- range, this haircut will be calculated as a 5% add-on over the haircut that would apply to similar assets with a higher credit quality (in the AAA and A- range).

3 MAY 2010

The Governing Council of the ECB decided to suspend the application of the minimum credit rating threshold in the collateral eligibility requirements for the purposes of the Eurosystem's credit operations in the case of marketable debt instruments issued or guaranteed by the Greek government. The Eurosystem will provide financing against these instruments regardless of their rating, as the Governing Council of the ECB has assessed the economic and financial adjustment programme for the Greek economy and found it appropriate and as the Greek government has strongly committed to fully implement the programme.

6 MAY 2010

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

10 MAY 2010

The Governing Council of the ECB decided to temporarily conduct interventions in the euro area public and private debt securities markets (Securities Markets Programme) to ensure depth and liquidity in those market segments which are dysfunctional on account of concerns on the fiscal condition of some euro area Member States. In order to sterilise the impact of the above interventions, specific operations will be conducted to re-absorb the liquidity injected through the Securities Markets Programme. This will ensure that the monetary policy stance will not be affected.

In order to address recent severe tensions in the financial markets, the Governing Council of the ECB also decided:

(i) To conduct a 6-month LTRO with full allotment on 12 May 2010, at a rate which will be fixed at the average minimum bid rate of the MROs over the life of this operation.

(ii) To adopt a fixed-rate tender procedure with full allotment in the regular 3-month LTROs to be allotted on 26 May and on 30 June 2010.

(iii) To reactivate, in coordination with other central banks, the temporary liquidity swap lines with the Federal Reserve, and resume US dollar liquidity-providing operations at terms of 7 and 84 days. These operations will take the form of repurchase operations against Eurosystem-eligible collateral and will be carried out as fixed rate tenders with full allotment.

10 JUNE 2010

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

The Governing Council of the ECB also decided to adopt a fixed rate tender procedure with full allotment in the regular three-month LTROs to be allotted in July, August and September 2010.

8 JULY 2010

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

28 JULY 2010

The Governing Council of the ECB reviewed the risk control measures in the framework for assets eligible for use as collateral in Eurosystem market operations rated in the BBB+ to BBB- range (or equivalent), excluding government debt instruments and determined a new haircut schedule, which will enter into force on 1 January 2011.

5 AUGUST 2010

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

2 SEPTEMBER 2010

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

Moreover, the Governing Council decided to conduct the 3-month LTROs to be settled at the end of October, November and December 2010 as fixed rate tender procedures with full allotment. The rates in these 3-month operations will be fixed at the average rate of the MROs over the life of the respective LTRO.

It also decided to continue to conduct its MROs as fixed rate tender procedures with full allotment for as long as necessary, and at least until 18 January 2011. The fixed rate tender procedure with full allotment will also remain in use for the special-term refinancing operations with a maturity of one maintenance period, which will continue to be conducted for as long as needed and at least until the end of 2010.

The Governing Council further decided to carry out three additional fine-tuning operations when the remaining 6-month and 12-month refinancing operations mature: one six-day operation with announcement, allotment and settlement on 30 September 2010; one six-day operation with announcement, allotment and settlement on 11 November 2010; and one 13-day operation with announcement, allotment and settlement on 23 December 2010. The fixed rate tender procedure with full allotment will also be used in these three operations, the rate being the same as the MRO rate prevailing at that time.

7 OCTOBER 2010

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

STATISTICAL APPENDIX

TABLES

Table 1 Consumer price index: general index and basic sub-indices

Period		General index		Goods		Services		CPI excluding fresh fruit/vegetables and fuel		CPI excluding food and fuel	
		(2005=100)	Percentage change over previous year	(2005=100)	Percentage change over previous year	(2005=100)	Percentage change over previous year	(2005=100)	Percentage change over previous year	(2005=100)	Percentage change over previous year
2006		103.2	3.2	103.4	3.4	103.0	3.0	102.7	2.7	102.5	2.5
2007		106.2	2.9	105.9	2.5	106.5	3.5	105.7	2.9	105.5	3.0
2008		110.6	4.2	110.5	4.3	110.7	3.9	109.3	3.4	108.6	3.0
2009		111.9	1.2	109.9	-0.5	114.7	3.6	111.9	2.4	111.5	2.6
2009	I	110.5	1.5	108.4	-0.5	113.5	4.3	110.7	3.2	110.0	3.3
	II	112.1	0.7	110.7	-1.5	114.1	3.7	112.0	2.3	111.6	2.5
	III	111.5	0.7	109.0	-1.2	114.9	3.3	111.4	2.1	110.9	2.3
	IV	113.6	2.0	111.7	1.0	116.3	3.2	113.4	2.0	113.3	2.4
2010	I	113.9	3.0	111.4	2.8	117.3	3.3	112.6	1.7	112.3	2.1
	II	117.9	5.2	117.5	6.2	118.5	3.8	115.7	3.3	115.9	3.8
	III	117.7	5.5	116.3	6.7	119.5	4.0	115.5	3.7	115.5	4.1
2008	Jan.	108.6	3.9	108.4	4.3	108.8	3.4	107.2	2.6	106.5	2.0
	Feb.	107.7	4.4	107.1	5.3	108.6	3.3	106.1	3.0	105.1	2.4
	March	110.2	4.4	111.2	5.3	108.9	3.2	108.6	3.1	107.9	2.5
	Apr.	110.9	4.4	111.9	5.4	109.5	3.2	109.0	3.2	108.3	2.6
	May	111.7	4.9	112.7	5.6	110.3	3.9	109.7	3.8	109.1	3.1
	June	111.6	4.9	112.3	5.7	110.5	3.9	109.8	3.6	109.2	3.1
	July	110.7	4.9	110.5	5.4	111.0	4.1	109.0	3.7	108.3	3.2
	Aug.	109.7	4.7	108.6	5.2	111.1	4.0	108.1	3.6	107.2	3.2
	Sept.	111.8	4.6	111.9	4.8	111.7	4.4	110.4	3.7	109.9	3.4
	Oct.	111.8	3.9	111.6	3.5	112.0	4.4	110.8	3.5	110.3	3.4
	Nov.	111.5	2.9	110.8	1.7	112.4	4.5	111.1	3.5	110.6	3.5
	Dec.	111.0	2.0	109.2	0.0	113.4	4.6	111.6	3.4	111.2	3.5
2009	Jan.	110.5	1.8	108.1	-0.3	113.7	4.5	110.8	3.3	110.1	3.4
	Feb.	109.4	1.6	106.6	-0.4	113.3	4.3	109.5	3.2	108.5	3.3
	March	111.6	1.3	110.3	-0.8	113.5	4.2	111.9	3.1	111.4	3.2
	Apr.	112.0	1.0	110.5	-1.3	114.0	4.2	111.9	2.7	111.5	2.9
	May	112.2	0.5	110.8	-1.6	114.1	3.5	112.0	2.1	111.7	2.4
	June	112.2	0.5	110.7	-1.5	114.2	3.3	112.0	2.1	111.7	2.3
	July	111.3	0.6	109.0	-1.3	114.5	3.1	111.2	2.0	110.7	2.2
	Aug.	110.5	0.8	107.4	-1.1	114.8	3.3	110.4	2.1	109.7	2.3
	Sept.	112.6	0.7	110.5	-1.2	115.4	3.3	112.7	2.1	112.4	2.3
	Oct.	113.2	1.2	111.2	-0.4	115.8	3.4	113.0	2.0	112.8	2.3
	Nov.	113.7	2.0	112.0	1.1	116.1	3.2	113.4	2.0	113.3	2.4
	Dec.	113.9	2.6	111.7	2.3	117.0	3.1	113.9	2.0	113.8	2.4
2010	Jan.	113.1	2.4	110.2	2.0	117.0	2.9	112.6	1.6	112.2	1.9
	Feb.	112.5	2.8	109.2	2.4	117.0	3.3	111.2	1.5	110.6	1.9
	March	116.0	3.9	114.7	4.0	117.8	3.8	114.2	2.0	114.2	2.5
	Apr.	117.4	4.8	116.7	5.7	118.3	3.7	115.2	2.9	115.2	3.4
	May	118.3	5.4	118.2	6.6	118.5	3.8	116.0	3.6	116.2	4.1
	June	118.0	5.2	117.6	6.2	118.6	3.9	116.0	3.6	116.2	4.1
	July	117.4	5.5	116.1	6.4	119.4	4.3	115.4	3.8	115.5	4.3
	Aug.	116.6	5.5	114.6	6.7	119.5	4.0	114.4	3.6	114.2	4.1
	Sept.	118.9	5.6	118.3	7.0	119.7	3.6	116.8	3.6	117.0	4.0

Source: Calculations based on ELSTAT data.

Table 2 Harmonised index of consumer prices: general index and basic sub-indices

Period		General index (2005=100)	General index: Percentage change over previous year	Unprocessed food (2005=100)	Unprocessed food: Percentage change over previous year	Processed food (2005=100)	Processed food: Percentage change over previous year	Non-energy industrial goods (2005=100)	Non-energy industrial goods: Percentage change over previous year
2006		103.3	3.3	101.9	1.9	105.2	5.2	101.6	1.6
2007		106.4	3.0	104.2	2.2	109.1	3.7	103.8	2.2
2008		110.9	4.2	108.3	4.0	114.6	5.0	105.9	2.0
2009		112.4	1.3	112.5	3.9	116.5	1.6	106.7	0.8
2009	I	110.9	1.8	114.6	5.8	115.8	2.0	105.4	2.1
	II	112.6	0.8	115.3	5.9	117.0	1.6	107.8	0.3
	III	111.9	0.8	109.8	4.9	116.5	1.5	104.7	0.3
	IV	114.1	2.0	110.5	-0.8	116.8	1.5	109.1	0.4
2010	I	114.3	3.0	112.7	-1.7	116.9	1.0	105.0	-0.3
	II	118.4	5.1	113.3	-1.8	122.9	5.0	110.4	2.4
	III	118.2	5.6	112.0	2.0	124.6	6.9	107.6	2.8
2008	Jan.	108.9	3.9	108.8	3.8	112.7	4.5	103.3	0.3
	Feb.	107.8	4.5	108.2	4.8	113.6	5.7	99.6	1.6
	March	110.3	4.4	108.0	3.7	114.3	6.0	106.8	1.9
	Apr.	111.2	4.4	111.0	5.2	114.9	6.1	107.0	2.2
	May	112.0	4.9	109.7	4.5	115.6	6.7	107.6	2.3
	June	111.9	4.9	105.8	3.7	115.0	6.1	107.7	2.2
	July	111.1	4.9	103.8	2.4	115.0	6.1	104.6	2.2
	Aug.	109.8	4.8	104.3	1.3	114.8	5.8	100.8	2.5
	Sept.	112.2	4.7	106.0	1.2	114.8	5.1	107.7	2.2
	Oct.	112.2	4.0	109.8	3.9	114.9	3.7	108.5	2.2
	Nov.	112.0	3.0	112.8	7.5	115.1	2.6	108.6	2.3
	Dec.	111.6	2.2	111.7	5.6	114.9	2.3	108.7	2.2
2009	Jan.	111.0	2.0	114.6	5.4	115.2	2.2	105.5	2.1
	Feb.	109.8	1.8	114.1	5.5	115.7	1.8	101.9	2.3
	March	112.0	1.5	114.9	6.4	116.5	1.9	108.9	2.0
	Apr.	112.5	1.1	116.1	4.6	117.1	1.9	107.7	0.7
	May	112.8	0.7	116.7	6.4	117.2	1.4	107.8	0.2
	June	112.7	0.7	113.0	6.8	116.8	1.5	107.8	0.2
	July	111.8	0.7	110.9	6.9	116.7	1.5	104.9	0.2
	Aug.	110.9	1.0	108.3	3.9	116.5	1.5	101.3	0.5
	Sept.	113.0	0.7	110.2	3.9	116.4	1.4	107.9	0.2
	Oct.	113.6	1.2	110.4	0.5	116.6	1.4	108.4	0.0
	Nov.	114.3	2.1	111.3	-1.3	116.9	1.5	109.4	0.7
	Dec.	114.5	2.6	110.0	-1.5	116.8	1.6	109.4	0.7
2010	Jan.	113.6	2.3	110.9	-3.2	117.0	1.6	105.2	-0.3
	Feb.	112.9	2.9	113.1	-0.9	117.0	1.1	100.9	-1.0
	March	116.4	3.9	114.0	-0.8	116.7	0.2	109.0	0.2
	Apr.	117.8	4.7	115.1	-0.9	120.3	2.7	109.9	2.0
	May	118.7	5.3	113.9	-2.4	124.0	5.8	110.7	2.7
	June	118.5	5.2	110.8	-2.0	124.5	6.6	110.7	2.6
	July	118.0	5.5	110.0	-0.7	124.8	7.0	107.6	2.6
	Aug.	117.2	5.6	112.2	3.6	124.7	7.0	104.0	2.6
	Sept.	119.4	5.7	113.7	3.1	124.3	6.8	111.3	3.1

Source: Calculations based on ELSTAT data.

Table 2 Harmonised index of consumer prices: general index and basic sub-indices *(continued)*

Period		Energy (2005=100)	Energy Percentage change over previous year	Services (2005=100)	Services Percentage change over previous year	HICP excluding unprocessed food and energy (2005=100)	HICP excluding unprocessed food and energy Percentage change over previous year
2006		109.4	9.4	103.1	3.1	102.9	2.9
2007		111.8	2.1	106.9	3.7	106.2	3.2
2008		127.2	13.8	111.0	3.8	109.8	3.4
2009		111.8	-12.1	114.6	3.2	112.2	2.2
2009	I	103.1	-17.8	113.4	4.1	111.1	3.1
	II	109.4	-18.2	114.1	3.3	112.5	2.0
	III	115.3	-15.1	114.7	2.8	111.6	1.7
	IV	119.2	4.7	116.0	2.8	113.8	1.8
2010	I	130.9	27.0	116.8	3.0	112.8	1.5
	II	148.5	35.8	117.8	3.2	116.1	3.2
	III	150.2	30.2	118.8	3.6	115.9	3.9
2008	Jan.	123.1	21.4	109.1	3.3	107.7	2.5
	Feb.	124.8	21.6	108.7	3.2	106.4	3.1
	March	128.2	20.7	109.0	3.0	109.1	3.1
	Apr.	130.1	17.9	109.9	3.0	109.7	3.2
	May	134.3	18.7	110.7	3.9	110.4	3.8
	June	137.0	20.9	111.0	4.0	110.5	3.7
	July	138.0	22.2	111.3	3.9	109.6	3.7
	Aug.	135.2	21.1	111.4	3.9	108.4	3.8
	Sept.	134.3	19.9	112.0	4.4	111.0	3.8
	Oct.	124.9	9.2	112.3	4.4	111.4	3.6
	Nov.	114.0	-6.5	112.6	4.4	111.6	3.4
	Dec.	102.7	-15.6	113.8	4.5	112.2	3.4
2009	Jan.	102.6	-16.7	113.9	4.4	111.2	3.3
	Feb.	103.5	-17.0	113.1	4.1	109.7	3.1
	March	103.2	-19.5	113.3	3.9	112.3	3.0
	Apr.	106.9	-17.8	114.1	3.8	112.4	2.5
	May	109.0	-18.8	114.2	3.2	112.5	1.9
	June	112.3	-18.0	114.2	2.8	112.5	1.8
	July	114.3	-17.2	114.4	2.7	111.5	1.7
	Aug.	116.8	-13.6	114.6	2.9	110.4	1.9
	Sept.	114.9	-14.4	115.1	2.7	112.9	1.7
	Oct.	118.5	-5.1	115.4	2.8	113.2	1.7
	Nov.	120.3	5.5	115.8	2.9	113.8	2.0
	Dec.	118.9	15.7	116.8	2.6	114.3	1.8
2010	Jan.	123.0	20.0	116.7	2.5	112.8	1.4
	Feb.	129.3	24.9	116.6	3.0	111.3	1.4
	March	140.3	36.0	117.2	3.5	114.3	1.8
	Apr.	145.7	36.3	117.8	3.3	115.5	2.7
	May	150.4	38.0	117.7	3.1	116.3	3.4
	June	149.5	33.1	117.9	3.2	116.5	3.6
	July	150.6	31.8	118.7	3.8	115.9	3.9
	Aug.	150.1	28.5	118.8	3.6	114.6	3.9
	Sept.	150.0	30.5	118.9	3.3	117.1	3.8

Source: Calculations based on ELSTAT data.

Table 3 Industrial producer price index (PPI) for the domestic market: general index and basic sub-indices

Period		PPI – domestic market (General index) (2005=100)	Percentage change over previous year	Energy (total) (2005=100)	Percentage change over previous year	Fuel (2005=100)	Percentage change over previous year	General index excl. energy (2005=100)	Percentage change over previous year
2006		107.3	7.3	108.6	8.6	113.9	13.9	106.5	6.5
2007		111.7	4.1	115.4	6.3	117.0	2.7	109.4	2.7
2008		123.0	10.0	135.2	17.1	145.8	24.7	116.4	6.4
2009		115.8	-5.8	115.0	-15.0	104.2	-28.6	116.3	-0.1
2009	I	113.4	-5.2	109.1	-15.6	87.3	-38.0	115.7	1.1
	II	114.7	-8.8	112.9	-21.0	102.3	-39.3	115.7	-0.7
	III	116.9	-9.1	117.3	-21.0	111.1	-34.3	116.7	-1.0
	IV	118.4	0.4	120.6	0.4	116.1	10.5	117.2	0.4
2010	I	120.7	6.4	127.5	16.9	128.0	46.6	117.0	1.1
	II	123.3	7.5	135.2	19.7	142.5	39.3	117.0	1.1
2008	Jan.	118.0	11.0	127.2	22.2	136.0	47.7	113.1	5.9
	Feb.	119.6	11.7	128.8	21.3	140.1	43.3	114.6	7.3
	March	121.1	11.9	131.6	20.9	146.2	40.1	115.5	7.5
	Apr.	122.8	11.3	135.9	20.4	153.4	36.5	115.8	6.6
	May	126.2	13.8	144.3	26.3	171.3	46.8	116.4	7.0
	June	128.3	15.5	148.9	29.4	180.9	52.9	117.3	7.9
	July	130.5	16.7	154.1	32.6	182.1	51.4	117.8	7.9
	Aug.	128.3	14.3	147.4	26.9	166.8	42.9	118.0	7.5
	Sept.	126.9	11.8	143.8	22.0	158.1	30.2	117.8	6.3
	Oct.	122.7	6.7	132.2	9.8	129.8	2.7	117.5	5.2
	Nov.	117.5	0.5	119.5	-5.2	103.3	-26.6	116.5	3.8
	Dec.	113.6	-3.2	108.7	-14.4	82.0	-40.0	116.2	3.5
2009	Jan.	114.0	-3.4	110.1	-13.4	88.4	-35.0	116.1	2.6
	Feb.	113.3	-5.3	108.9	-15.4	87.1	-37.9	115.6	0.8
	March	112.9	-6.8	108.2	-17.8	86.5	-40.9	115.3	-0.1
	Apr.	113.2	-7.9	108.8	-19.9	93.3	-39.2	115.5	-0.3
	May	114.3	-9.4	111.9	-22.5	100.4	-41.4	115.7	-0.6
	June	116.7	-9.1	118.1	-20.6	113.3	-37.4	115.9	-1.2
	July	116.0	-11.1	115.6	-25.0	107.4	-41.0	116.2	-1.3
	Aug.	117.8	-8.1	120.2	-18.5	117.2	-29.7	116.6	-1.2
	Sept.	116.9	-7.9	116.2	-19.2	108.6	-31.4	117.3	-0.5
	Oct.	118.0	-3.8	119.6	-9.6	114.0	-12.2	117.1	-0.4
	Nov.	118.4	0.8	121.0	1.3	117.2	13.5	117.1	0.5
	Dec.	118.7	4.5	121.2	11.4	116.9	42.6	117.4	1.0
2010	Jan.	120.0	5.2	125.8	14.2	124.5	40.9	116.8	0.6
	Feb.	120.2	6.2	126.2	15.9	125.3	43.9	117.0	1.2
	March	121.8	7.9	130.6	20.7	134.2	55.2	117.1	1.5
	Apr.	123.5	9.1	135.1	24.1	142.6	52.7	117.2	1.5
	May	122.7	7.3	133.8	19.6	140.0	39.4	116.8	1.0
	June	123.8	6.1	136.7	15.7	145.1	28.0	116.8	0.8
	July	122.3	5.5	132.2	14.4	135.9	26.5	117.0	0.7
	Aug.	122.6	4.0	132.3	10.1	136.5	16.4	117.3	0.7

Source: Calculations based on ELSTAT data.

Table 4 Industrial producer price index (PPI) for the external market and import price index in industry

Period		PPI – external market				Import price index		Import price index excl. energy	
		General index		General index excl. energy					
		(2005=100)	Percentage change over previous year	(2005=100)	Percentage change over previous year	(2005=100)	Percentage change over previous year	(2005=100)	Percentage change over previous year
2006		104.8	4.8	103.0	3.0	104.2	4.2	102.7	2.7
2007		108.0	3.0	105.6	2.5	106.9	2.6	105.8	3.0
2008		114.9	6.4	108.9	3.2	114.5	7.1	108.4	2.5
2009		108.0	-6.0	109.4	0.5	112.5	-1.8	108.9	0.5
2009	I	104.4	-7.8	108.4	0.4	108.8	-2.4	108.7	1.4
	II	107.0	-9.5	108.7	-0.1	111.7	-4.4	108.7	0.5
	III	109.5	-8.2	109.9	0.2	114.2	-3.7	108.9	-0.2
	IV	111.0	2.0	110.7	1.5	115.4	3.7	109.1	0.1
2010	I	114.2	9.4	112.3	3.6	117.8	8.3	109.6	0.8
	II	117.9	10.2	113.5	4.5	120.7	8.0	110.2	1.4
2008	Jan.	112.1	8.6	107.3	3.3	110.6	8.6	106.9	2.4
	Feb.	113.2	8.4	108.2	3.8	111.6	8.3	107.4	2.7
	March	114.4	8.5	108.6	3.6	112.2	7.6	107.6	2.4
	Apr.	115.4	7.6	108.5	2.9	114.0	8.0	107.8	2.3
	May	118.4	10.3	108.7	3.3	116.9	10.1	108.1	2.3
	June	120.9	12.2	109.3	3.7	119.6	12.2	108.6	2.4
	July	121.1	11.6	109.5	3.6	121.0	12.4	108.8	2.5
	Aug.	118.7	10.0	109.5	3.6	118.6	10.6	109.1	2.8
	Sept.	117.8	7.9	110.1	3.6	116.0	7.2	109.5	3.0
	Oct.	113.3	2.6	109.7	2.8	114.0	3.8	109.5	2.8
	Nov.	108.9	-3.0	109.2	2.5	111.2	-0.5	108.8	2.2
	Dec.	104.3	-6.9	108.4	1.5	108.7	-2.0	108.6	1.9
2009	Jan.	105.0	-6.3	108.6	1.2	108.8	-1.7	108.7	1.7
	Feb.	104.5	-7.7	108.6	0.4	108.8	-2.5	108.8	1.3
	March	103.8	-9.2	108.0	-0.5	108.7	-3.1	108.7	1.1
	Apr.	105.0	-9.0	108.1	-0.4	109.7	-3.7	108.5	0.7
	May	106.6	-10.0	108.7	0.0	111.6	-4.5	108.7	0.6
	June	109.4	-9.5	109.3	0.0	113.9	-4.8	108.9	0.3
	July	108.2	-10.7	109.2	-0.2	113.3	-6.4	108.9	0.1
	Aug.	110.7	-6.8	110.0	0.4	115.2	-2.9	109.0	-0.1
	Sept.	109.6	-7.0	110.5	0.4	114.0	-1.7	109.0	-0.5
	Oct.	110.6	-2.4	110.7	0.9	115.0	0.9	109.1	-0.3
	Nov.	111.1	2.0	110.5	1.2	115.7	4.0	109.1	0.2
	Dec.	111.3	6.6	111.0	2.4	115.5	6.3	109.1	0.5
2010	Jan.	113.1	7.8	111.8	2.9	116.9	7.4	109.3	0.6
	Feb.	113.6	8.7	112.1	3.2	117.4	7.9	109.6	0.8
	March	115.9	11.6	112.9	4.6	119.1	9.6	109.9	1.1
	Apr.	117.9	12.3	113.3	4.8	120.9	10.1	110.0	1.4
	May	117.5	10.2	113.5	4.5	120.3	7.8	110.1	1.3
	June	118.2	8.1	113.8	4.1	121.0	6.2	110.4	1.4
	July	117.2	8.4	113.6	4.0	120.1	6.0	110.3	1.3
	Aug.	117.8	6.4	114.2	3.9	120.6	4.6	110.5	1.4

Source: Calculations based on ELSTAT data.

Table 5 Employed persons of 15 years and over, by branch of economic activity

(thousands)

	Q2 2010	
	Total employed persons	Salaried employees
Total	**4,427.0**	**2,853.9**
Agriculture, forestry and fishing	551.7	53.9
Mining and quarrying	13.4	12.2
Manufacturing	483.1	355.9
Electricity, gas, steam and air conditioning supply	27.6	26.9
Water supply, sewerage, waste management and remediation activities	32.3	31.6
Construction	330.0	214.1
Wholesale and retail trade; repair of motor vehicles and motorcycles	801.1	448.9
Transportation and storage	204.8	143.9
Accommodation and food service activities	302.2	179.4
Information and communication	87.6	79.6
Financial and insurance activities	115.1	103.7
Real estate activities	6.5	1.2
Professional, scientific and technical activities	215.2	90.3
Administrative and support service activities	74.1	58.6
Public administration and defence; compulsory social security	374.4	374.4
Education	331.1	303.3
Human health and social work activities	247.8	209.9
Arts, entertainment and recreation	49.0	32.8
Other service activities	87.1	45.4
Activities of households as employers	91.3	86.4
Activities of extraterritorial organisations and bodies	1.5	1.5

Source: ELSTAT, Labour Force Survey.

Table 6 Balance of payments

(million euro)

	January-August			August		
	2008	2009	2010	2008	2009	2010
I CURRENT ACCOUNT BALANCE (I.A+I.B+I.C+I.D)	**-21,830.0**	**-16,149.5**	**-15,808.0**	**-414.8**	**-466.9**	**-259.1**
I.A TRADE BALANCE (I.A.1–I.A.2)	***-30,056.1***	***-20,596.0***	***-19,990.2***	***-3,198.7***	***-2,277.8***	***-2,029.5***
Oil trade balance	-8,308.0	-5,131.0	-6,191.3	-1,127.8	-820.0	-724.0
Non-oil trade balance	-21,748.1	-15,464.9	-13,798.9	-2,070.9	-1,457.8	-1,305.6
Ship balance	-3,362.2	-2,441.7	-2,503.7	-388.3	-199.9	-227.0
Trade balance excl. oil and ships	-18,385.9	-13,023.2	-11,295.1	-1,682.6	-1,257.9	-1,078.6
I.A.1 Exports of goods	*13,200.8*	*10,013.8*	*10,694.1*	*1,806.3*	*1,236.3*	*1,358.1*
Oil	2,825.3	1,978.4	2,994.1	454.8	304.2	410.0
Ships (receipts)	1,318.7	556.8	491.4	219.2	32.3	45.2
Other goods	9,056.8	7,478.6	7,208.6	1,132.3	899.8	902.9
I.A.2 Imports of goods	*43,256.9*	*30,609.7*	*30,684.3*	*5,005.0*	*3,514.1*	*3,387.7*
Oil	11,133.3	7,109.5	9,185.5	1,582.6	1,124.2	1,134.0
Ships (payments)	4,680.9	2,998.5	2,995.1	607.5	232.2	272.2
Other goods	27,442.7	20,501.8	18,503.7	2,814.9	2,157.7	1,981.5
I.B SERVICES BALANCE (I.B.1–I.B.2)	***12,744.8***	***9,166.2***	***9,433.8***	***3,403.2***	***2,499.8***	***2,540.9***
I.B.1 Receipts	*23,937.6*	*18,553.9*	*19,615.7*	*4,756.3*	*3,647.3*	*3,751.9*
Travel	8,695.9	7,603.0	7,049.4	2,764.5	2,362.6	2,214.7
Transport	13,192.8	9,065.3	10,441.6	1,761.5	1,079.3	1,278.6
Other services	2,048.9	1,885.6	2,124.7	230.3	205.3	258.6
I.B.2 Payments	*11,192.8*	*9,387.7*	*10,181.8*	*1,353.1*	*1,147.5*	*1,211.0*
Travel	1,752.3	1,646.0	1,501.8	256.6	286.0	213.3
Transport	6,291.7	4,594.7	5,492.0	769.2	534.9	665.4
Other services	3,148.8	3,147.0	3,188.1	327.4	326.5	332.3
I.C INCOME BALANCE (I.C.1–I.C.2)	***-7,103.5***	***-6,225.0***	***-6,172.9***	***-769.5***	***-645.4***	***-634.4***
I.C.1 Receipts	*3,650.9*	*3,016.0*	*2,556.4*	*447.1*	*306.3*	*303.4*
Wages, salaries	237.7	204.2	134.3	24.3	21.7	16.0
Interest, dividends, profits	3,413.2	2,811.9	2,422.1	422.8	284.7	287.4
I.C.2 Payments	*10,754.4*	*9,241.0*	*8,729.3*	*1,216.6*	*951.8*	*937.9*
Wages, salaries	233.6	267.1	251.5	33.5	30.2	30.6
Interest, dividends, profits	10,520.8	8,973.9	8,477.8	1,183.1	921.6	907.3
I.D CURRENT TRANSFERS BALANCE (I.D.1–I.D.2)	***2,584.8***	***1,505.2***	***921.2***	***150.3***	***-43.5***	***-136.1***
I.D.1 Receipts	*5,137.2*	*4,272.5*	*3,855.5*	*443.0*	*310.4*	*228.3*
General government (mainly transfers from the EU)	3,639.5	2,962.4	2,857.7	271.7	187.9	125.6
Other sectors (emigrants' remittances etc.)	1,497.7	1,310.1	997.7	171.2	122.5	102.8
I.D.2 Payments	*2,552.5*	*2,767.3*	*2,934.2*	*292.7*	*353.9*	*364.4*
General government (mainly payments to the EU)	1,620.4	1,821.7	1,905.6	125.2	197.0	215.4
Other sectors	932.1	945.6	1,028.6	167.5	157.0	149.0
II CAPITAL TRANSFERS BALANCE (II.1– II.2)	**2,972.8**	**1,534.2**	**787.4**	**387.4**	**278.0**	**-13.2**
II.1 Receipts	*3,370.1*	*1,739.5*	*970.4*	*410.1*	*303.2*	*11.7*
General government (mainly transfers from the EU)	3,171.2	1,602.0	885.5	400.7	290.8	2.6
Other sectors	198.8	137.5	84.8	9.4	12.5	9.2
II.2 Payments	*397.2*	*205.4*	*183.0*	*22.8*	*25.2*	*24.9*
General government (mainly payments to the EU)	183.2	8.9	12.8	2.0	1.0	0.7
Other sectors	214.1	196.5	170.1	20.7	24.3	24.2
III CURRENT ACCOUNT AND CAPITAL TRANSFERS BALANCE (I+II)	-18,857.1	-14,615.3	-15,020.6	-27.4	-189.0	-272.3
IV FINANCIAL ACCOUNT BALANCE (IV.A+IV.B+IV.C+IV.D)	19,158.9	15,493.0	16,442.6	487.3	-70.1	836.2
IV.A DIRECT INVESTMENT [1]	***1,002.4***	***1,187.9***	***488.7***	***-365.8***	***-5.7***	***-189.8***
By residents abroad	-1,747.8	-651.7	-652.7	-548.6	-52.0	-142.3
By non-residents in Greece	2,750.2	1,839.7	1,141.4	182.7	46.3	-47.5
IV.B PORTFOLIO INVESTMENT [1]	***12,593.1***	***21,085.0***	***-18,077.9***	***4,204.2***	***-2,654.5***	***-11,880.2***
Assets	-5,731.2	-8,708.9	9,637.3	1,985.0	-6,161.8	387.1
Liabilities	18,324.2	29,794.0	-27,715.2	2,219.1	3,507.3	-12,267.2
IV.C OTHER INVESTMENT [1]	***5,482.5***	***-6,758.0***	***33,930.8***	***-3,350.0***	***2,598.0***	***12,902.2***
Assets	-19,486.8	-13,271.2	-4,253.8	-3,935.0	2,472.9	11,767.7
Liabilities	24,969.3	6,513.2	38,184.6	585.0	125.2	1,134.5
(General government loans)	*-427.3*	*-1,859.5*	*18,521.3*	*-28.0*	*-30.3*	*-329.6*
IV.D CHANGE IN RESERVE ASSETS [2]	***81.0***	***-22.0***	***101.0***	***-1.0***	***-8.0***	***4.0***
V ERRORS AND OMISSIONS	-301.8	-877.6	-1,422.1	-459.9	259.1	-563.9
RESERVE ASSETS [3]				***2,411.0***	***3,348.0***	***4,624.0***

Source: Bank of Greece.
1 (+) net inflow, (-) net outflow.
2 (+) decrease, (-) increase.
3 Following Greece's entry into the euro area in January 2001, reserve assets, as defined by the European Central Bank, comprise monetary gold, the "reserve position" in the IMF, "Special Drawing Rights", and Bank of Greece's claims in foreign currency on non-euro area residents. Excluded are euro-denominated claims on non-euro area residents, claims (in foreign currency and in euro) on euro area residents, and the Bank of Greece share in the capital and reserves of the ECB.

Table 7 Monetary aggregates of the euro area[1,2]

(outstanding balances in billion euro, not seasonally adjusted)

End of period		Currency in circulation (1)	Overnight deposits (2)	M1 (3)=(1)+(2)	Deposits with agreed maturity up to two years (4)	Deposits redeemable at notice up to three months (5)	M2 (6)=(3)+(4)+(5)	Repurchase agreements (7)	Money market fund shares/units (8)	Debt securities up to two years (9)	M3[3] (10)=(6)+(7)+(8)+(9)
2005		521.0	2,901.9	3,422.8	1,122.3	1,544.1	6,089.2	236.2	635.5	124.2	7,085.0
2006		578.5	3,108.7	3,687.2	1,411.1	1,554.5	6,652.8	265.6	636.2	195.6	7,750.3
2007		625.7	3,206.2	3,831.9	1,973.6	1,541.5	7,347.0	304.6	685.8	311.7	8,649.1
2008		710.4	3,270.2	3,980.6	2,472.2	1,568.6	8,021.4	350.2	755.2	266.1	9,392.9
2009		755.1	3,737.2	4,492.3	1,890.6	1,805.4	8,188.3	340.2	673.8	131.9	9,334.2
2008	Jan.	629.1	3,220.5	3,849.7	2,053.3	1,539.4	7,442.4	309.0	743.7	292.2	8,787.4
	Feb.	633.6	3,210.0	3,843.6	2,119.1	1,536.6	7,499.3	313.5	748.1	270.8	8,831.7
	March	636.7	3,216.6	3,853.4	2,147.3	1,539.6	7,540.3	314.3	740.4	276.1	8,871.1
	Apr.	642.8	3,201.3	3,844.1	2,239.2	1,540.0	7,623.3	324.4	740.8	267.2	8,955.6
	May	644.7	3,215.7	3,860.4	2,274.0	1,535.9	7,670.3	320.3	739.8	283.4	9,013.8
	June	649.5	3,203.3	3,852.8	2,305.8	1,537.2	7,695.8	329.3	733.5	280.3	9,039.0
	July	650.9	3,180.6	3,831.4	2,391.7	1,532.9	7,756.1	342.5	731.8	284.8	9,115.2
	Aug.	654.7	3,186.4	3,841.0	2,430.2	1,532.8	7,804.1	341.3	746.5	276.0	9,167.9
	Sept.	662.3	3,223.2	3,885.5	2,452.7	1,531.8	7,870.0	339.2	736.8	285.4	9,231.4
	Oct.	699.9	3,283.8	3,983.7	2,495.0	1,535.5	8,014.2	350.0	735.8	275.2	9,375.3
	Nov.	704.5	3,253.6	3,958.1	2,523.7	1,543.6	8,025.4	333.5	745.8	273.5	9,378.2
	Dec.	710.4	3,270.2	3,980.6	2,472.2	1,568.6	8,021.4	350.2	755.2	266.1	9,392.9
2009	Jan.	716.4	3,375.1	4,091.5	2,389.8	1,600.7	8,082.0	324.7	767.4	216.2	9,390.3
	Feb.	721.4	3,409.4	4,130.8	2,353.9	1,623.4	8,108.1	327.7	778.0	214.3	9,428.2
	March	726.1	3,411.2	4,137.3	2,317.0	1,642.4	8,096.7	338.6	777.6	193.8	9,406.7
	Apr.	728.9	3,470.0	4,198.9	2,294.2	1,665.5	8,158.6	334.9	770.4	204.7	9,468.6
	May	730.4	3,471.6	4,202.0	2,250.9	1,681.2	8,134.1	325.9	754.9	197.6	9,412.5
	June	734.2	3,515.2	4,249.4	2,202.4	1,698.0	8,149.8	344.1	742.7	181.2	9,417.9
	July	733.9	3,586.2	4,320.2	2,138.9	1,721.9	8,180.9	330.7	746.9	170.4	9,428.9
	Aug.	742.3	3,635.2	4,377.5	2,089.7	1,742.2	8,209.4	312.4	748.1	155.8	9,425.8
	Sept.	746.4	3,654.5	4,400.9	2,031.6	1,760.1	8,192.6	327.7	746.8	147.8	9,415.0
	Oct.	747.0	3,712.1	4,459.1	1,966.7	1,781.5	8,207.4	308.1	741.7	138.4	9,395.6
	Nov.	753.4	3,706.9	4,460.3	1,925.0	1,792.1	8,177.4	313.0	727.7	133.5	9,351.6
	Dec.	755.1	3,737.2	4,492.3	1,890.6	1,805.4	8,188.3	340.2	673.8	131.9	9,334.2
2010	Jan.	760.7	3,777.4	4,538.1	1,851.9	1,820.5	8,210.6	308.6	658.8	131.8	9,309.8
	Feb.	764.7	3,796.6	4,561.3	1,837.5	1,829.5	8,228.2	323.5	642.0	125.3	9,319.0
	March	775.3	3,792.2	4,567.5	1,824.6	1,836.6	8,228.7	341.6	625.5	134.2	9,330.0
	Apr.	769.1	3,879.7	4,648.7	1,781.0	1,844.1	8,273.8	359.2	624.5	135.9	9,393.3
	May	780.2	3,866.1	4,646.3	1,791.7	1,845.8	8,283.8	358.2	616.2	129.0	9,387.2
	June	785.0	3,875.2	4,660.2	1,798.4	1,841.0	8,299.6	401.9	604.1	122.1	9,427.6
	July	782.2	3,906.9	4,689.1	1,787.6	1,853.9	8,330.6	390.2	585.9	127.4	9,434.1
	Aug.*	791.7	3,945.2	4,736.9	1,798.2	1,873.0	8,408.1	388.0	600.3	125.8	9,522.2

Source: ECB.
* Provisional data.
1 Figures refer to the changing euro area composition.
2 Monetary aggregates comprise monetary liabilities of MFIs and central government (Post Office, Treasury) vis-à-vis non-MFI euro area residents excluding central government.
3 M3 and its components exclude non-residents’ holdings of money market fund shares/units and debt securities of up to two years.

Table 8 The Greek contribution to the main monetary aggregates of the euro area

(outstanding amounts in million euro, not seasonally adjusted)

End of period		Overnight deposits (1)	Sight deposits and current accounts (1.1)	Savings deposits (1.2)	Deposits with an agreed maturity up to two years (2)	Deposits redeemable at notice up to three months[1] (3)	Repurchase agreements (repos) (4)	Money market fund shares/units (5)	Debt securities up to two years[2] (6)	Total[3] (M3 excluding currency in circulation) (7)=(1)+(2)+ +(3)+(4)+ +(5)+(6)	Memo item: Currency in circulation[4]
2005		99,207	24,768	74,439	51,783	4,416	2,728	4,875	419	163,428	12,212
2006		100,108	26,030	74,078	69,301	2,965	1,568	5,808	490	180,240	13,377
2007		98,837	28,290	70,547	97,548	2,261	703	7,918	-1,587	205,680	14,247
2008		90,599	25,916	64,683	137,828	1,882	378	2,266	2,126	235,079	16,318
2009		103,165	31,057	72,109	134,003	3,141	189	1,539	-69	241,968	19,122
2008	Jan.	93,741	25,675	68,066	102,918	2,104	652	7,716	-1,066	206,065	14,188
	Feb.	91,122	24,690	66,432	106,332	2,166	589	7,812	-456	207,565	14,518
	March	93,345	27,160	66,185	107,143	2,133	593	7,807	183	211,204	14,336
	Apr.	92,232	25,439	66,793	110,558	2,125	545	7,623	371	213,454	14,116
	May	90,245	24,444	65,801	114,883	2,030	637	7,432	623	215,850	14,601
	June	93,981	27,435	66,546	115,582	1,999	634	7,280	1,380	220,856	14,619
	July	90,584	24,764	65,820	119,237	1,904	498	6,869	1,867	220,959	15,001
	Aug.	89,530	24,373	65,157	124,158	1,927	477	6,775	2,219	225,086	14,835
	Sept.	91,518	26,500	65,018	126,391	1,950	941	6,276	2,467	229,543	14,929
	Oct.	89,051	24,845	64,206	133,716	2,036	1,082	2,993	2,182	231,060	15,941
	Nov.	86,959	24,516	62,443	138,182	1,982	455	2,549	2,173	232,300	16,007
	Dec.	90,599	25,916	64,683	137,828	1,882	378	2,266	2,126	235,079	16,318
2009	Jan.	87,801	24,904	62,897	141,972	2,085	268	2,052	1,796	235,974	17,735
	Feb.	87,691	24,776	62,916	142,315	2,119	277	1,852	1,635	235,889	17,848
	March	88,511	24,615	63,896	141,971	2,128	225	1,486	1,533	235,854	17,945
	Apr.	93,160	26,919	66,241	140,820	2,438	327	1,512	1,966	240,223	18,194
	May	92,007	25,748	66,259	140,258	2,543	265	1,530	1,887	238,490	18,322
	June	96,990	29,163	67,827	140,655	2,709	251	1,596	1,500	243,701	18,251
	July	96,415	27,771	68,644	137,865	2,889	265	1,682	1,263	240,379	18,557
	Aug.	97,942	28,580	69,362	138,050	2,967	236	1,706	1,239	242,140	18,385
	Sept.	98,853	29,093	69,760	138,804	2,930	232	1,724	1,013	243,556	18,498
	Oct.	97,506	27,964	69,542	137,766	3,080	226	1,656	891	241,125	18,595
	Nov.	98,626	29,498	69,128	135,157	3,087	184	1,599	325	238,978	18,706
	Dec.	103,165	31,057	72,109	134,003	3,141	189	1,539	-69	241,968	19,122
2010	Jan.	100,503	28,653	71,850	130,888	3,214	174	1,500	-75	236,204	18,859
	Feb.	99,124	27,983	71,141	128,366	3,138	150	1,306	-73	232,011	19,022
	March	98,051	27,253	70,798	126,866	2,918	169	1,167	-75	229,096	19,111
	Apr.	96,950	27,364	69,586	123,047	2,800	136	1,031	-48	223,916	19,254
	May	95,559	26,934	68,625	121,701	2,872	123	966	-17	221,203	19,376
	June	96,129	28,884	67,245	119,750	3,531	106	895	-7	220,404	19,640
	July	93,396	26,700	66,696	118,345	3,289	138	894	2	216,064	19,839
	Aug.	92,649	26,362	66,287	119,948	3,267	128	899	-9	216,882	19,732

Source: Bank of Greece.
1 Including savings deposits in currencies other than the euro.
2 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 up to two years issued by euro area MFIs.
3 As in all other euro area countries, Greece's M3 can no longer be calculated accurately, since part of the quantity of euro banknotes and coins in circulation in each country is held by residents of other euro area countries (as well as non-euro area residents). Owing to these technical problems, the compilation of the Greek M0, M1, M2 and M3 was discontinued in January 2003.
4 Since January 2002, banknotes in circulation are calculated on the basis of Greece's key for subscription to the ECB's capital, excluding the percentage (8%) of issued banknotes assigned to the ECB.

Table 9 Greece: deposits of domestic firms and households with OMFIs,[1] by currency and type

(outstanding balances in million euro, not seasonally adjusted)

End of period		Total deposits	Breakdown by currency: In euro	Breakdown by currency: In other currencies	Breakdown by type: Sight deposits	Breakdown by type: Savings deposits	Breakdown by type: Time deposits
2005		156,857	135,797	21,060	22,180	79,800	54,876
2006		173,370	151,321	22,048	23,525	77,858	71,987
2007		197,233	173,493	23,739	25,014	73,561	98,657
2008		227,246	200,631	26,614	21,819	67,328	138,098
2009		237,788	217,649	20,139	26,320	75,811	135,657
2008	Jan.	196,029	171,471	24,558	21,730	70,740	103,558
	Feb.	197,402	172,633	24,769	21,120	69,152	107,129
	March	200,449	176,402	24,046	23,638	68,859	107,950
	Apr.	202,569	177,766	24,803	22,180	69,469	110,919
	May	204,884	179,218	25,666	21,494	68,386	115,003
	June	209,079	183,406	25,673	23,992	69,113	115,973
	July	209,789	182,926	26,862	21,779	68,266	119,743
	Aug.	213,380	183,997	29,383	21,087	67,628	124,665
	Sept.	217,309	187,754	29,555	22,865	67,505	126,938
	Oct.	222,016	191,243	30,772	21,220	66,784	134,011
	Nov.	223,573	192,418	31,154	20,110	64,962	138,501
	Dec.	227,246	200,631	26,614	21,819	67,328	138,098
2009	Jan.	228,575	200,330	28,245	20,677	65,526	142,371
	Feb.	229,135	201,123	28,011	20,830	65,570	142,734
	March	230,077	205,500	24,577	20,745	66,556	142,774
	Apr.	233,781	209,547	24,233	22,923	69,222	141,636
	May	232,033	208,321	23,711	21,702	69,329	141,001
	June	237,260	214,261	22,999	24,853	71,093	141,313
	July	234,280	211,612	22,667	23,691	72,079	138,509
	Aug.	236,154	212,681	23,473	24,540	72,881	138,733
	Sept.	237,583	214,967	22,615	24,676	73,232	139,675
	Oct.	235,263	213,527	21,736	24,091	73,104	138,068
	Nov.	234,252	213,048	21,204	25,339	72,720	136,192
	Dec.	237,788	217,649	20,139	26,320	75,811	135,657
2010	Jan.	232,640	212,296	20,343	24,346	75,628	132,665
	Feb.	229,361	209,743	19,618	23,904	74,853	130,604
	March	227,199	208,686	18,513	23,565	74,292	129,342
	Apr.	221,977	204,301	17,676	23,395	72,943	125,639
	May	219,719	201,007	18,711	23,189	72,068	124,461
	June	216,314	196,772	19,542	24,475	70,594	121,245
	July	212,129	193,829	18,299	22,636	69,796	119,696
	Aug.	212,878	193,865	19,013	22,316	69,371	121,191

Source: Bank of Greece.
1 Other Monetary Financial Institutions (OMFIs) comprise credit institutions (other than the Bank of Greece) and money market funds.

Table 10 Money market interest rates

(percentages per annum, period averages)

Period		Overnight deposits[1]	1-month deposits[2]	3-month deposits[2]	6-month deposits[2]	9-month deposits[2]	12-month deposits[2]
2005		2.09	2.14	2.18	2.23	2.28	2.33
2006		2.83	2.94	3.08	3.23	3.35	3.44
2007		3.87	4.08	4.28	4.35	4.41	4.45
2008		3.87	4.28	4.64	4.73	4.76	4.83
2009		0.71	0.89	1.22	1.43	1.54	1.61
2008	Jan.	4.02	4.20	4.48	4.50	4.50	4.50
	Feb.	4.03	4.18	4.36	4.36	4.35	4.35
	March	4.09	4.30	4.60	4.59	4.59	4.59
	Apr.	3.99	4.37	4.78	4.80	4.81	4.82
	May	4.01	4.39	4.86	4.90	4.94	4.99
	June	4.01	4.47	4.94	5.09	5.23	5.36
	July	4.19	4.47	4.96	5.15	5.25	5.39
	Aug.	4.30	4.49	4.97	5.16	5.23	5.32
	Sept.	4.27	4.66	5.02	5.22	5.29	5.38
	Oct.	3.82	4.83	5.11	5.18	5.21	5.25
	Nov.	3.15	3.84	4.24	4.29	4.33	4.35
	Dec.	2.49	2.99	3.29	3.37	3.42	3.45
2009	Jan.	1.81	2.14	2.46	2.54	2.59	2.62
	Feb.	1.26	1.63	1.94	2.03	2.09	2.14
	March	1.06	1.27	1.64	1.77	1.84	1.91
	Apr.	0.84	1.01	1.42	1.61	1.69	1.77
	May	0.78	0.88	1.28	1.48	1.57	1.64
	June	0.70	0.91	1.23	1.44	1.54	1.61
	July	0.36	0.61	0.97	1.21	1.33	1.41
	Aug.	0.35	0.51	0.86	1.12	1.24	1.33
	Sept.	0.36	0.46	0.77	1.04	1.16	1.26
	Oct.	0.36	0.43	0.74	1.02	1.14	1.24
	Nov.	0.36	0.44	0.72	0.99	1.12	1.23
	Dec.	0.35	0.48	0.71	1.00	1.12	1.24
2010	Jan.	0.34	0.44	0.68	0.98	1.11	1.23
	Feb.	0.34	0.42	0.66	0.96	1.10	1.23
	March	0.35	0.41	0.64	0.95	1.09	1.22
	Apr.	0.35	0.40	0.64	0.96	1.10	1.23
	May	0.34	0.42	0.69	0.98	1.12	1.25
	June	0.35	0.45	0.73	1.01	1.15	1.28
	July	0.48	0.58	0.85	1.10	1.25	1.37
	Aug.	0.43	0.64	0.90	1.15	1.29	1.42
	Sept.	0.45	0.62	0.88	1.14	1.29	1.42

Source: Bloomberg.
1 Euro overnight index average (EONIA).
2 Euro interbank offered rates (EURIBOR).

Table 11 Greek government bond yields

(percentages per annum, period averages)

Period		3-year	5-year	7-year	10-year	15-year	20-year[1]	30-year
2005		2.65	2.92	3.22	3.59	3.80	3.92	4.14
2006		3.58	3.72	3.87	4.07	4.16	4.23	4.42
2007		4.21	4.30	4.34	4.50	4.67	–	4.81
2008		4.27	4.51	4.54	4.80	5.18	–	5.30
2009		3.12	4.22	4.49	5.17	5.61		5.83
2008	Jan.	3.88	4.02	4.17	4.40	4.76	–	4.95
	Feb.	3.68	3.83	4.09	4.36	4.79	–	4.99
	March	3.92	4.10	4.24	4.42	4.95	–	5.16
	Apr.	4.15	4.31	4.32	4.54	5.05	–	5.20
	May	4.35	4.46	4.46	4.74	5.08	–	5.21
	June	4.97	5.08	4.96	5.17	5.37	–	5.40
	July	4.94	5.04	4.98	5.15	5.38	–	5.44
	Aug.	4.53	4.64	4.63	4.87	5.15	–	5.25
	Sept.	4.42	4.65	4.65	4.88	5.26	–	5.36
	Oct.	3.97	4.48	4.53	4.93	5.22	–	5.26
	Nov.	4.12	4.65	4.70	5.09	5.49	–	5.52
	Dec.	4.28	4.89	4.76	5.08	5.67	–	5.82
2009	Jan.	3.93	5.22	5.26	5.59	6.21	–	6.46
	Feb.	3.91	5.19	5.25	5.70	6.13	–	6.26
	March	4.05	5.08	5.16	5.87	6.11	–	6.28
	Apr.	3.63	4.72	4.71	5.50	5.78	–	5.86
	May	3.10	4.14	4.53	5.22	5.54	–	5.71
	June	3.05	4.20	4.55	5.33	5.73	–	5.93
	July	2.57	3.62	3.99	4.89	5.40	–	5.70
	Aug.	2.52	3.41	3.77	4.52	4.93	–	5.26
	Sept.	2.26	3.36	3.77	4.56	4.91	–	5.31
	Oct.	2.26	3.37	3.78	4.57	4.97	–	5.39
	Nov.	2.45	3.63	4.06	4.84	5.51	–	5.65
	Dec.	3.72	4.67	5.01	5.49	6.10	–	6.11
2010	Jan.	4.72	5.40	5.61	6.02	6.50		6.36
	Feb.	5.92	6.30	6.21	6.46	6.58	–	6.47
	March	5.51	5.84	5.83	6.24	6.45	–	6.47
	Apr.	7.91	7.87	7.87	7.83	7.46	–	7.08
	May	8.28	8.59	8.39	7.97	8.28	–	7.69
	June	9.41	9.50	9.57	9.10	9.68	–	9.11
	July	11.17	10.85	10.94	10.34	10.34	–	9.08
	Aug.	11.65	11.33	11.18	10.70	10.36	–	9.00
	Sept.	11.63	11.65	11.76	11.34	10.49	–	8.89

Source: Bank of Greece.
1 As of May 2007, there is no bond in the market with a residual maturity close to 20 years.

Table 12 Domestic MFI loans to the domestic private sector by branch of economic activity[1,2]

(balances in million euro)

End of period		Grand total	Firms						Sole pro-prietors	Individuals and private non-profit institutions			
			Total	Agricul-ture	Industry[3]	Trade	Tourism	Other		Total	Housing	Consumer credit	Other
2005		149,903	81,010	2,976	17,933	21,321	4,349	34,431	-	68,894	45,420	21,825	1,649
2006		179,452	93,576	3,185	19,515	23,712	4,800	42,364	-	85,877	57,145	26,597	2,135
2007		215,405	111,289	3,304	21,488	27,672	5,883	52,942	-	104,116	69,363	31,942	2,811
2008		249,661	132,458	3,856	24,873	32,985	7,032	63,713	-	117,203	77,700	36,435	3,068
2009		253,429	133,795	3,962	23,685	33,519	7,358	65,270	-	119,635	80,559	36,044	3,032
2008	Jan.	217,682	112,572	3,396	21,628	27,826	5,950	53,773	-	105,109	70,032	32,311	2,767
	Feb.	221,161	114,445	3,552	22,122	28,101	6,208	54,462	-	106,716	70,834	33,070	2,812
	March	225,312	117,396	3,585	22,455	28,955	6,308	56,094	-	107,916	71,661	33,367	2,888
	Apr.	226,983	118,261	3,708	22,485	29,280	6,499	56,290	-	108,722	72,271	33,678	2,774
	May	230,680	120,639	3,776	23,263	30,045	6,595	56,959	-	110,042	73,007	34,196	2,839
	June	235,808	124,189	3,842	23,778	30,938	6,771	58,861	-	111,619	74,064	34,606	2,948
	July	238,349	125,440	3,858	24,134	31,227	6,817	59,404	-	112,909	74,830	35,133	2,947
	Aug.	240,860	127,250	3,901	24,320	31,558	6,888	60,583	-	113,609	75,204	35,483	2,922
	Sept.	244,062	128,963	3,915	24,490	32,045	7,037	61,476	-	115,098	76,055	36,037	3,006
	Oct.	247,990	131,808	3,967	24,774	32,314	7,024	63,729	-	116,182	76,854	36,282	3,046
	Nov.	248,676	132,136	4,019	25,168	32,953	6,948	63,048	-	116,540	77,003	36,492	3,044
	Dec.	249,661	132,458	3,856	24,873	32,985	7,032	63,713	-	117,203	77,700	36,435	3,068
2009	Jan.	250,266	132,994	3,879	24,944	33,245	7,081	63,846	-	117,272	77,813	36,449	3,010
	Feb.	250,438	132,951	3,933	25,001	33,454	7,148	63,415	-	117,487	78,003	36,513	2,971
	March	249,960	132,575	3,827	24,491	33,708	7,154	63,395	-	117,384	78,066	36,369	2,949
	Apr.	250,464	133,056	3,940	24,530	34,057	7,197	63,332	-	117,408	78,235	36,245	2,928
	May	250,865	133,182	3,974	24,640	34,176	7,312	63,080	-	117,683	78,396	36,318	2,970
	June	249,676	131,690	3,989	24,380	33,745	7,406	62,170	-	117,986	78,734	36,281	2,971
	July	250,473	132,140	4,011	24,363	33,773	7,380	62,612	-	118,334	79,042	36,384	2,908
	Aug.	250,707	132,234	3,913	24,232	33,322	7,196	63,572	-	118,472	79,145	36,445	2,883
	Sept.	251,820	132,924	3,970	24,042	33,775	7,192	63,944	-	118,896	79,560	36,392	2,944
	Oct.	251,378	132,633	3,987	23,886	33,454	7,172	63,934	-	118,945	79,670	36,329	2,946
	Nov.	251,698	132,796	4,028	23,892	33,207	7,249	64,220	-	119,103	79,958	36,166	2,978
	Dec.	253,229	133,795	3,962	23,685	33,519	7,358	65,070	-	119,635	80,559	36,044	3,032
2010	Jan.	253,732	134,376	4,076	23,859	33,408	7,428	65,406	-	119,556	80,704	35,875	2,977
	Feb.	254,737	135,285	4,063	23,926	33,183	7,512	66,401	-	119,652	80,878	35,791	2,984
	March	254,623	135,155	3,987	23,934	33,203	7,639	66,191	-	119,669	81,173	35,489	3,007
	Apr.	254,533	135,279	4,014	23,881	33,104	7,665	66,415	-	119,453	81,125	35,327	3,002
	May	255,615	136,262	4,012	23,938	33,088	7,640	67,584	-	119,353	81,110	35,193	3,050
	June	263,642	130,009	2,200	26,289	26,724	7,376	67,420	13,855	119,778	81,355	36,279	2,239
	July	262,311	129,064	2,190	25,858	26,716	7,346	66,954	13,898	119,349	81,258	35,948	2,143
	Aug.	262,085	128,968	2,191	25,530	26,632	7,348	67,267	13,754	119,363	81,374	35,886	2,103

Source: Bank of Greece

1 Including loans, corporate bonds held by MFIs, securitised loans and securitised corporate bonds.

2 As of June 2010, loans to sole proprietors are presented separately and are no longer included in credit to enterprises. Also, in June 2010, both outstanding loans (total credit) and loans to certain branches (shipping, other business sectors, consumer credit and other loans to households) are affected by reclassifications of loans between sectors and branches due to changes in the reporting of data by banks.

3 Comprising manufacturing and mining.

Table 13 Greece: bank rates on new euro-denominated deposits of euro area residents

(percentages per annum, period averages unless otherwise noted)

Period		Deposits by households			Deposits by non-financial corporations		
		Overnight deposits[1,2]	Savings deposits[2]	Deposits with agreed maturity up to one year	Overnight deposits[2]	Deposits with agreed maturity up to one year	Repurchase agreements (repos)
2005		0.91	0.88	2.23	0.60	2.09	2.00
2006		1.02	0.98	2.86	0.79	2.81	2.67
2007		1.22	1.14	3.95	1.03	3.94	3.70
2008		1.25	1.17	4.87	1.09	4.48	3.93
2009		0.63	0.56	2.74	0.50	1.65	0.68
2008	Jan.	1.24	1.16	4.35	1.09	4.13	3.87
	Feb.	1.25	1.16	4.30	1.12	4.19	3.88
	March	1.25	1.17	4.42	1.06	4.44	4.01
	Apr.	1.25	1.17	4.68	1.06	4.41	3.98
	May	1.24	1.16	4.73	1.07	4.39	3.99
	June	1.25	1.17	4.85	1.06	4.51	4.44
	July	1.26	1.17	5.09	1.15	4.59	4.20
	Aug.	1.26	1.18	4.99	1.13	4.69	4.22
	Sept.	1.28	1.19	5.11	1.09	4.80	4.76
	Oct.	1.27	1.20	5.37	1.18	4.71	4.26
	Nov.	1.27	1.19	5.22	1.05	4.51	3.08
	Dec.	1.24	1.16	5.36	0.96	4.36	2.52
2009	Jan.	1.15	1.05	4.89	0.92	3.53	1.65
	Feb.	0.98	0.88	3.87	0.73	2.36	1.33
	March	0.79	0.74	3.25	0.58	2.03	1.11
	Apr.	0.69	0.62	2.84	0.51	1.85	0.79
	May	0.58	0.50	2.58	0.48	1.67	0.71
	June	0.53	0.45	2.55	0.44	1.45	0.58
	July	0.52	0.46	2.34	0.46	1.25	0.43
	Aug.	0.50	0.45	2.24	0.40	1.12	0.34
	Sept.	0.48	0.43	2.08	0.38	1.14	0.30
	Oct.	0.43	0.37	2.08	0.37	1.16	0.27
	Nov.	0.43	0.37	2.01	0.41	1.08	0.32
	Dec.	0.43	0.37	2.10	0.35	1.18	0.34
2010	Jan.	0.43	0.37	2.18	0.37	1.21	0.30
	Feb.	0.44	0.38	2.35	0.36	1.29	0.37
	March	0.43	0.38	2.61	0.38	1.61	0.42
	Apr.	0.43	0.37	2.98	0.36	1.71	0.47
	May	0.42	0.37	3.42	0.38	2.06	0.56
	June	0.43	0.38	3.61	0.32	3.37	-
	July	0.43	0.38	3.71	0.31	3.40	-
	Aug.	0.44	0.39	3.66	0.32	3.11	-

Source: Bank of Greece.
1 Weighted average of the current account rate and the savings deposit rate.
2 End-of-month interest rate.

Table 14 Greece: bank rates on new euro-denominated loans to euro area residents

(percentages per annum, period averages unless otherwise noted)

Period		Loans to individuals and private non-profit institutions[1]: Loans without an agreed maturity[2,3]	Consumer loans: With a floating rate or an initial rate fixation of up to one year	Consumer loans: Average rate on total consumer loans	Housing loans: With a floating rate or an initial rate fixation of up to one year	Housing loans: Average rate on total housing loans	Loans to non-financial corporations[1,5]: Loans without an agreed maturity[3,4]	With a floating rate or an initial rate fixation of up to one year: Up to €1 million	With a floating rate or an initial rate fixation of up to one year: Over €1 million	Loans to sole proprietors without an agreed maturity[4,5]
2005		13.36	8.47	9.06	4.06	4.15	6.90	5.08	3.62	-
2006		13.45	7.89	8.57	4.24	4.30	7.18	5.76	4.37	-
2007		14.09	7.70	8.46	4.57	4.46	7.54	6.57	5.32	-
2008		14.80	8.65	8.96	5.10	4.81	7.61	6.82	5.71	-
2009		14.39	8.59	9.33	3.52	3.94	6.07	4.62	3.52	-
2008	Jan.	14.48	8.09	8.49	4.61	4.39	7.50	6.66	5.48	-
	Feb.	14.48	8.28	8.60	4.67	4.40	7.50	6.62	5.32	-
	March	14.46	8.57	8.59	4.77	4.47	7.55	6.65	5.68	-
	Apr.	14.52	8.79	8.72	4.83	4.50	7.62	6.79	5.66	-
	May	14.48	8.73	8.88	4.94	4.57	7.62	6.83	5.64	-
	June	14.49	8.41	8.78	5.05	4.68	7.59	6.91	5.82	-
	July	14.98	9.10	9.01	5.30	4.83	7.79	7.03	6.05	-
	Aug.	15.16	8.73	8.99	5.34	4.98	7.78	7.11	5.82	-
	Sept.	15.15	8.77	9.08	5.45	5.03	7.94	7.24	6.04	-
	Oct.	15.28	8.64	9.38	5.92	5.35	7.81	7.40	6.31	-
	Nov.	15.24	8.88	9.50	5.35	5.30	7.49	6.41	5.59	-
	Dec.	14.83	8.76	9.46	4.92	5.21	7.13	6.18	5.07	-
2009	Jan.	14.81	9.15	9.82	4.55	4.97	6.66	5.45	4.24	-
	Feb.	14.72	8.84	9.81	4.16	4.65	6.63	4.99	4.12	-
	March	14.46	8.62	9.71	3.83	4.32	6.38	4.71	4.10	-
	Apr.	14.44	9.17	9.72	3.64	4.11	6.11	4.36	3.79	-
	May	14.31	8.54	9.14	3.52	3.97	6.10	4.56	3.59	-
	June	14.32	7.59	8.93	3.46	3.86	6.06	4.59	3.33	-
	July	14.44	8.36	9.09	3.27	3.68	5.87	4.33	3.44	-
	Aug.	14.33	8.54	8.99	3.27	3.72	5.83	4.41	3.22	-
	Sept.	14.31	8.43	9.25	3.19	3.57	5.82	4.44	3.23	-
	Oct.	14.20	9.06	9.46	3.15	3.56	5.79	4.43	2.96	-
	Nov.	14.22	8.59	9.13	3.14	3.49	5.80	4.49	2.99	-
	Dec.	14.08	8.18	8.94	3.08	3.41	5.81	4.70	3.24	-
2010	Jan.	14.05	8.69	8.96	3.05	3.44	5.72	4.52	3.23	-
	Feb.	14.14	8.65	9.36	3.08	3.42	5.87	4.72	3.37	-
	March	13.84	8.94	9.27	3.21	3.53	5.93	4.98	3.71	-
	Apr.	13.94	8.69	9.30	3.32	3.62	6.13	5.21	3.55	-
	May	13.92	8.48	9.30	3.36	3.63	6.29	5.56	3.77	-
	June	14.28	10.31	9.45	3.26	3.50	5.98	5.47	3.89	8.96
	July	14.29	10.88	9.78	3.54	3.78	6.33	5.74	4.73	9.07
	Aug.	14.31	10.92	9.86	3.67	3.89	6.56	5.87	4.51	9.11

Source: Bank of Greece.
1 Associated costs are not included.
2 Weighted average of the rates on loans to households through credit cards, on open account loans and on overdrafts from current accounts.
3 End-of-month interest rate.
4 Weighted average of the rates on corporate loans via credit lines and on overdrafts from sight deposit accounts.
5 As of June 2010, loans to sole proprietors are presented separately and are no longer included in credit to enterprises.

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