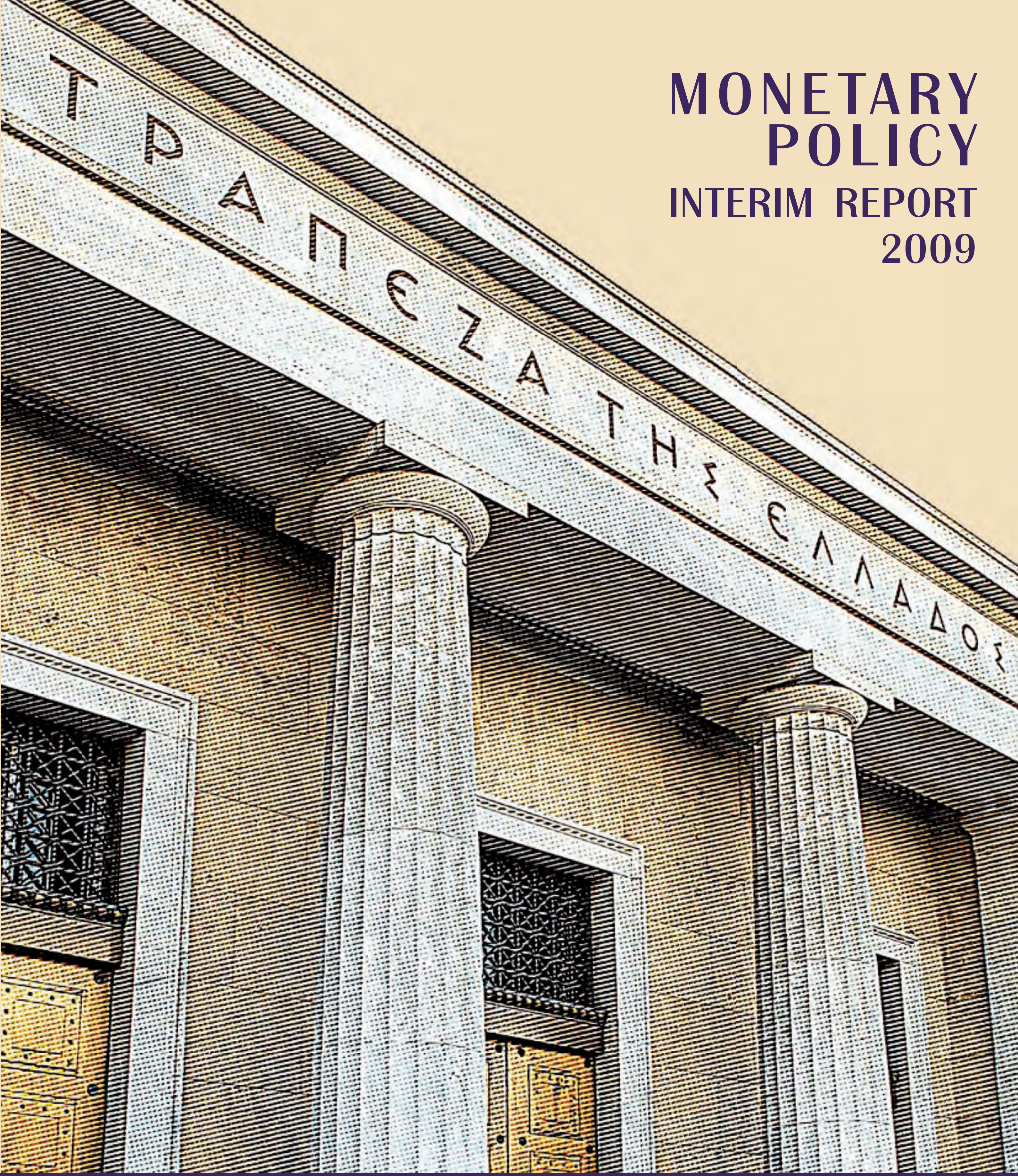
MONETARY POLICY
INTERIM REPORT 2009



OCTOBER
2009

BANK OF GREECE
EUROSYSTEM

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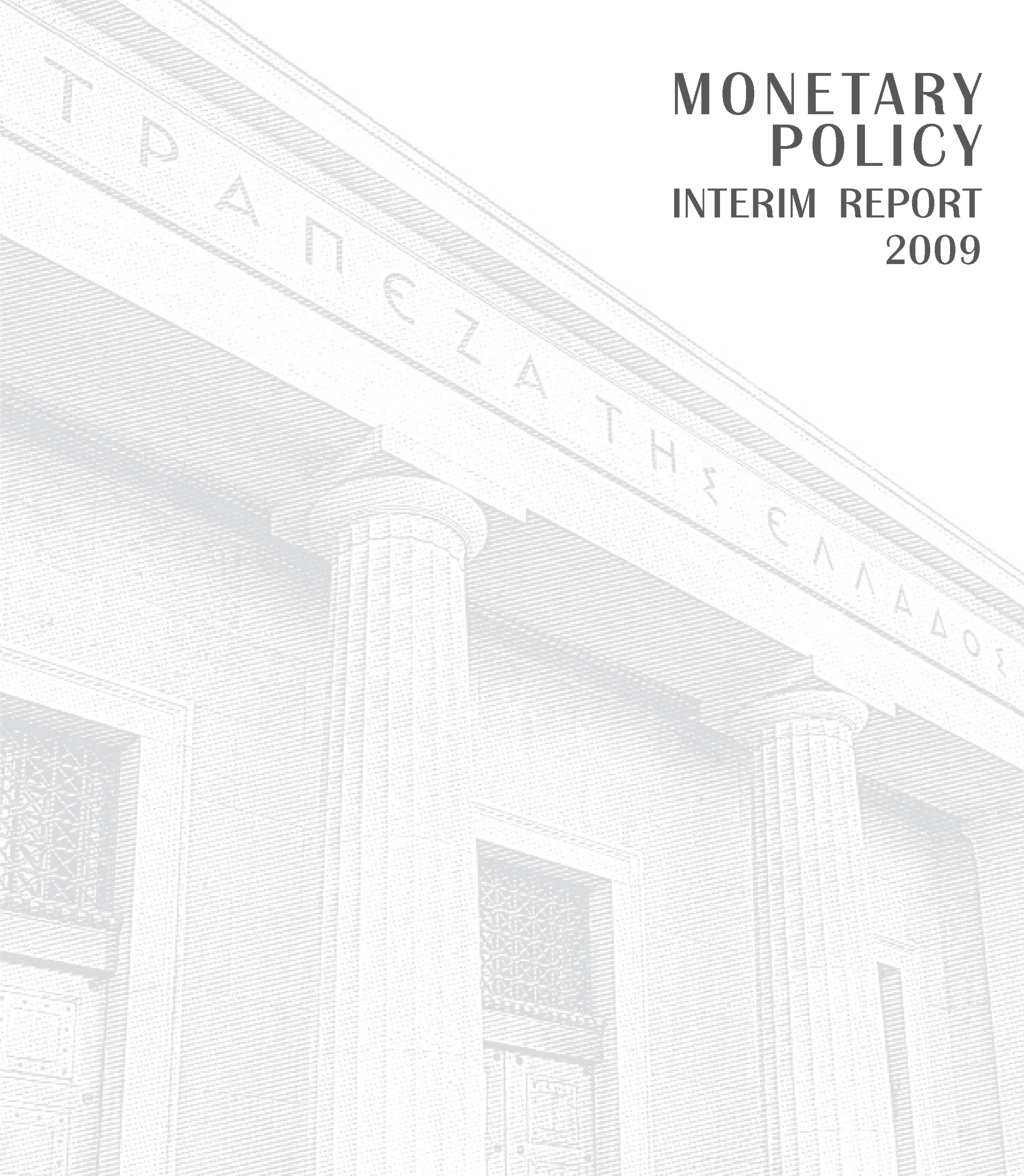

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BANK OF GREECE
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To the Greek Parliament
and the Cabinet

In accordance with its Statute, the Bank of Greece hereby submits its Interim Report on Monetary Policy 2009 to the Greek Parliament and the Cabinet.

The Report points out that the financial and economic crisis has revealed the pre-existing large macroeconomic imbalances and structural weaknesses of the Greek economy, the most important manifestations of which are the large "twin" deficits (the budgetary deficit and the current account deficit) and debts (public debt and external debt).

In March 2009, the Excessive Deficit Procedure was initiated against Greece. The general government deficit stood at 5.6% of GDP in 2008 (according to NSSG estimates) and is expected to increase further this year, as clearly indicated by the evolution of the net general government borrowing requirement on a cash basis during the nine-month period from January to September, when the deficit reached 9.9% of annual GDP (compared with 4.9% of GDP in the same period last year). The general government debt is also projected to rise significantly this year (from 99.2% of GDP in 2008 and 95.6% of GDP in 2007), as it already stood at 111.5% of annual GDP at end-June.

Countries like Greece with twin deficits and debts face an increased risk of a more difficult and, therefore, slow exit from the crisis and a protracted period of subdued growth. For this reason, there is an urgent need to establish and implement immediately a reliable medium-term plan envisaging bold but necessary reforms. This plan's top priority should be fiscal consolidation combined with (a) a restructuring of public expenditure towards financing activities that are more growth-enhancing and can help support the most vulnerable social groups; and (b) structural reforms, in particular those having zero or low budgetary cost, which can immediately boost growth prospects.

Given the current very high levels of general government deficit and debt in Greece, fiscal consolidation efforts from 2010 and for a number of years thereafter should target a reduction in the structural deficit of 1.5-2% of GDP per year. In fact, to achieve a sustainable, marked and fast improvement and reverse the negative climate, even stronger efforts will be required during 2010-2011, i.e. a cumulative reduction in the structural deficit of 4-5 percentage points of GDP. Such an improvement is feasible, considering that there is room for cutting expenditure by reducing the squandering of public funds and for increasing revenues by mobilising the tax collection mechanism and curbing tax evasion.

The central message of the Report can thus be summarised in the motto "halt deficits – speed up structural reforms". With these policy options, it will be possible to effectively address the fundamental problem of how to achieve fiscal stabilisation and consolidation in a manner that would not impair but instead boost the growth prospects of the Greek economy – both in the short term, so as to ensure the fastest possible exit from the crisis, and over the medium-to-long term, so as to safeguard the international competitiveness of the economy, reduce social inequalities and improve the standard of living.

According to the Report, we should reorient ourselves towards a multi-dimensional concept of development that would also encompass environmental protection and improved income distribution, in line with the most recent international considerations. The Bank of Greece will systematically monitor the issues of environmental protection and income distribution and will take concrete initiatives to promote research in these fields.

The Report discusses extensively developments and prospects of the global and the Greek economy.

According to the Report, although there are signs of recovery in the global economy, risks continue to exist. These positive signs are attributed mostly to the extraordinary policy measures that have been taken and are still necessary. At present, recovery remains slow and fragile; it is uncertain whether it will be lasting and stable; and unemployment is still on the rise. At the same time and in order to ensure macroeconomic stability, it is absolutely necessary to formulate as soon as possible an appropriate strategy to phase out the extraordinary measures, and to implement this policy when recovery conditions are established.

In the euro area, the unprecedented interventions of the ECB, involving interest rate reductions and provision of large amounts of liquidity to financial markets, have yielded considerable positive results. The ECB chose to enhance liquidity in the economy by providing credit institutions with liquidity, because in Europe the mechanism providing financing to enterprises is bank-based (while in the US, capital markets play the principal role).

The real performance of the Greek economy deteriorated under the influence of the adverse global environment. The growth rate fell sharply to 2% in 2008 (from 4.5% in 2007), while, according to provisional NSSG estimates, in the first half of 2009 it was zero. Throughout 2009, according to Bank of Greece estimates, GDP reduction could reach or even exceed 1%. Total employment will decline by 1-1.5%, while the unemployment rate will rise to about 9%. HICP inflation will decline to 1.1-1.3%, while core inflation will show a more moderate decline (to 2.1%), remaining at a higher level than in the euro area, which means that the international price competitiveness of the Greek economy will continue to decline. Mostly as a result of the marked reduction of imports, the current account deficit is expected to shrink to about 11% of GDP given the current conjuncture, remaining, however, among the highest in EU-27.

With regard to financial developments in Greece, the deceleration of credit expansion to the private sector is expected to continue in the next months, as demand for loans is still negatively influenced by the weakening of economic activity, while credit standards applied by banks are expected to remain tight. However, ECB measures intended to enhance financing will continue to support loan supply from banks, while some other national measures taken in the past few months —in addition to the provisions of Law 3723/2008— will also make a positive contribution. Demand for loans will be positively influenced by the relatively low interest rates on bank loans, which continue to fall. The annual rate of credit expansion to the private sector may reach 4% at the end of 2009.

Finally, the stability of the Greek banking system has been preserved, but non-performing loans continue to rise demanding constant vigilance. In view of the changes in the supervisory framework, the Bank of Greece will exercise its supervisory functions even more actively.

The Report includes data available up to 9 October 2009.

Athens, October 2009

George Provopoulos
Governor

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1 INTRODUCTION

There are signs of a global economic recovery, but downside risks remain

After the intensification of the economic and financial crisis in the last four months of 2008 and the first quarter of 2009, global economic activity has shown signs of stabilisation and/or of slight recovery since the start of the second quarter of this year, while the functioning of the financial markets is gradually returning to normal. These first encouraging signs are, however, mainly the result of the macroeconomic stimulus and financial sector support measures that were internationally coordinated and unprecedented in scale. The recovery is still slow and fragile, as unemployment continues to rise, the process of impaired assets relief for banks worldwide has not been finalised and the economic outlook remains clouded in uncertainty. Moreover, the length and strength of the incipient recovery are far from certain, as the surge in public debt in the advanced economies will call for fiscal consolidation starting within the next two years and lasting several years thereafter. Against this background, it is of crucial importance to ensure that growth rates do not fall to very low levels or, worse yet, return to negative territory. In order to safeguard macroeconomic stability, it is absolutely necessary to design now the proper exit strategies to be implemented as the recovery gains traction. It is worth noting in this respect that, as suggested by the latest forecasts, gross public debt in the EU-27 and the euro area should rise by 20 percentage points of GDP between end-2007 and end-2010. Moreover, *based on current trends* (i.e. without a policy change), the gross public debt ratio would come close to 100% of GDP in the euro area by 2014, roughly 30 percentage points up from its end-2007 level.[1]

The real performance of the Greek economy deteriorated against the backdrop of an adverse global environment

The global crisis has had a negative impact on the Greek economy, especially from September 2008 onwards, when the crisis intensified dramatically. The GDP growth rate, which had been steadily strong since the mid-1990s, dropped sharply to 2% in 2008, from 4.5% in 2007 and —according to provisional estimates from the National Statistical Service of Greece, expected to be revised— was zero in the first half of 2009. Worsening conditions in global financial markets and declining business and household confidence caused consumption, on the one hand, and housing and business investment, on the other, to drop, while prompting banks to tighten their credit standards. Thus, demand and supply of credit were both adversely affected, leading to a substantial slowdown in credit expansion to businesses and households, with negative feedback effects on economic activity. At the same time, the global economic downturn and shrinking world trade volumes took a toll on Greek exports of goods and (mainly tourism and shipping) services. The stagnation or even decline in activity was accompanied by lower employment and a higher rate of unemployment in the first half of 2009. In turn, the weakness of activity and incomes, coupled with the rise in unemployment, had a negative impact on the quality of banks' loan portfolios, thereby indirectly impairing their ability to extend credit to businesses and households.

For 2009 as a whole, according to Bank of Greece estimates, the decline in GDP is likely to come close to or even exceed 1%; total employment should contract by 1-1.5%, while the rate of unemployment should rise above 9%; inflation (as measured by the Harmonised Index of Consumer Prices – HICP) should fall to 1.1-1.3%, mainly on account of the lower prices of oil and food commodities and the slack in demand; core inflation is projected to decline at a more moderate pace, but —at 2.1%— will remain above the euro area aver-

* **The cut-off date for the data included in this report was 9 October 2009.**

1 See European Commission, "Economic crisis in Europe: causes, consequences and responses", *European Economy*, 7/2009 (provisional version), 25.9.2009, and IMF, *World Economic Outlook – October 2009*, 1.10.2009, Statistical Appendix, Table A8.

age, thereby causing a further erosion in the Greek economy's international price competitiveness. On the other hand, mainly owing to the sharp drop in imports, the current account deficit is expected to be contained to about 11% of GDP, still remaining very high and one of the highest in EU-27.

The twin deficits and debts reflect the Greek economy's inherent and permanent macroeconomic imbalances and structural weaknesses

The financial and economic crisis has brought to the fore the pre-existing large macroeconomic imbalances and structural weaknesses of the Greek economy, which culminated in the large twin deficits (the fiscal deficit and the current account deficit) and debts (the public debt and the external debt). The global crisis has also weakened the factors which had supported strong growth for a number of years, possibly also generating complacency about the medium-term prospects of the economy, even though these factors had already begun to unwind before the crisis. Furthermore, the crisis has increased market concerns about the prospects of the Greek economy, especially in terms of its future fiscal developments. These concerns centre mainly on the large public debt and the failure of successive governments to achieve sustainable fiscal consolidation, even during the period of strong growth from the mid-1990s onwards. The general government deficit, which was markedly above 3% in both 2007 and 2008 (causing the Excessive Deficit Procedure to be initiated a second time against Greece), came to 5.6% of GDP in 2008 (according to the NSSG estimates notified to Eurostat on 2 October 2009) and is expected to rise much further this year. This projection is supported by the fact that in the nine-month period from January to September the central government net borrowing requirement on a cash basis doubled to 9.9% of annual GDP (from 4.9% of GDP in the respective period of 2008). This development is one factor underlying the projection that the general government debt (which turned out at 99.2% of GDP in 2008, up from 95.6% in 2007) will register a strong increase this year (by end-June 2009, the general government debt had already reached 111.5% of estimated annual GDP, and the central government debt 122%). The markets are also concerned about Greece's persistent current account deficit and the slow pace of structural reforms, especially those that would raise public sector efficiency, improve the business environment, encourage investment, enhance productivity and international competitiveness and address the future budgetary implications of population ageing.

Tax evasion, the diffusion of an "easy profit" culture and consumerism lead to negative net national saving

The huge fiscal deficit and the high and growing public debt also have broader implications. Extensive tax evasion —which is part of the fiscal problem— erodes the country's social fabric, exacerbates social disparities and tensions, and insofar as it is easier in certain activities (typically in the services sector), favours the gradual diversion of resources towards sectors of non-internationally tradable goods, thereby contributing to high trade deficits. Services generated 77.3% of gross value added (defined as GDP less net indirect taxes) in 2008, compared with 72.3% in 2000. The services sector, of course, also encompasses non-tradable service industries such as tourism and shipping, high- technology branches such as telecommunications, and branches with considerable international activity (e.g. banks). However, new business ventures in Greece remain shallow, with more than half (51.3%, compared with 35% in the EU as a whole) being focused on the consumer end of the value chain and mostly concentrated in the subsector of "retail, wholesale trade and restaurants-cafés".[2]

Meanwhile, the diffusion of an "easy profit" culture promotes anti-productive and anti-

2 See Ioannidis S. and A. Tsakanikas (2008), *Entrepreneurship in Greece 2007-2008*, IOBE, [in Greek], which points out that new entrepreneurial activity is ineffective in improving the value chain in Greece as it focuses on the last link: the end consumer.

social standards of behaviour, which are far from the fundamental values that underlie progress in developed countries, i.e. education, productive work and healthy entrepreneurship geared towards medium- and long-term goals. Furthermore, the deregulation of the banking system and the easier access of households to borrowing, although in principle contributing to smoothing consumption over time and freeing it from dependence on short-term income fluctuations, could not in the end avoid contributing to the diffusion of a value system that encourages overconsumption and leads to the squandering of resources on non-productive uses. As a result, national saving has shrunk and current account deficits have soared. It is indicative that net national saving (i.e. national saving minus depreciation of physical capital) has been negative for most of the years between 2001 and 2008, and that gross national saving (i.e. before depreciation), though positive, was very low, at merely 7.1% of GDP in 2008, compared with about 21% for the euro area as a whole. As for households, the sector's gross saving has been negative for a number of years.[3]

A credible medium-term plan geared toward "halting deficits – speeding up structural reforms" is urgently needed

Undoubtedly, *all* countries need to implement appropriate macroeconomic and structural policies in order to exit the crisis. However, countries like Greece that have large twin deficits and debts incur a greater risk of a slower and much more difficult exit from the crisis and, therefore, of a protracted period of low growth. This is why the immediate implementation of a medium-term plan that will include bold but necessary reforms is so urgently needed. *The plan's top priority should be fiscal consolidation combined with (a) a reallocation of public expenditure in favour of activities that have the highest growth impact and can help support vulnerable social groups; and (b) structural reforms, in particular those that entail zero or low budgetary costs but can immediately boost growth prospects. Thus, a prima facie restrictive fiscal policy could help secure lower government borrowing rates and —combined with structural reform— ultimately have an expansionary effect.*

The structural fiscal deficit must be reduced by 4-5% of GDP cumulatively over 2010-2011 and thereafter by 1.5-2% of GDP per annum for a number of years

In the case of Greece, given the very high levels of deficit and debt, fiscal consolidation should, for a number of years starting in 2010, target reductions in the structural deficit[4] averaging 1.5-2% of GDP per annum, i.e. much more than the Stability and Growth Pact benchmark of 0.5% of GDP per annum or even 1% of GDP which in the euro area is seen as a minimum for countries with a high public deficit and debt. *In fact, to achieve a credible, marked and fast improvement that would reverse the negative climate, even more intense efforts will be needed in the two-year period 2010-2011, i.e. a cumulative reduction in the structural deficit of 4-5 percentage points of GDP. Such a target is judged feasible considering that there is room for cutting expenditure by reducing the squandering of public funds and for increasing revenue by mobilising the tax collection mechanism and capturing part of the tax evasion.* The annual reduction in the structural deficit must also be large enough to keep the public debt dynamics from worsening. Finally, reducing the debt-to-GDP ratio to below the reference value of 60% within 10 years will require large primary surpluses, in the order of 5.5-6.5% of GDP per annum.

These policy choices, which can be summed up by the motto *"halt the deficits – speed up structural reforms", can help in effectively addressing the key challenge of economic policy today, i.e. how to achieve fiscal consolidation in a manner that does not impair, but rather boosts*

3 *Detailed* national accounts data on household saving are not yet available.
4 The structural deficit is calculated net of cyclical and temporary effects on revenue and expenditure.

the growth prospects of the Greek economy – both in the short term, so as to ensure the fastest possible exit from the crisis, and over the medium- to long-term, so as to enhance international competitiveness, reduce social inequalities and raise the standard of living.

We must reorient ourselves towards a multi-dimensional concept of growth that will also incorporate environmental protection and a better distribution of income

Reinforcing green investment and investment that can improve the country's energy production pattern should have a prominent place in the reform agenda. This crucial policy option, the budgetary cost of which would be comparatively low, could help protect the environment, tackle climate change and enhance competition in the energy sector, encouraging business start-ups and job creation, while reducing the country's oil dependency and the associated part of the current account deficit.

This comprehensive approach to growth, enriched to include the fight against inequality, environmental protection and a better quality of life, is in line with recent considerations (e.g. of the European Commission, the United Nations, the OECD, and the French government), as well as with earlier quests (as expressed e.g. by Prof. Xenophon Zolotas thirty years ago) about the need for a broader measure of economic and social progress.[5] Sharing these concerns, the Bank of Greece will systematically monitor issues pertaining to the environment and the distribution of income, and will take concrete research initiatives in these fields.

The crisis represents a challenge, but also an opportunity for the comprehensive reorientation of economic policy and can act as a catalyst for an effective and fruitful dialogue in the society at large

The crisis should be seen as both a challenge and an opportunity for the comprehensive reorientation of economic policy and for the promotion of new growth dynamics (as described in earlier Bank of Greece reports in October 2008, February and April 2009). The main elements of a cohesive economic policy geared towards stability and growth have been pointed out on several occasions in the past two decades, starting with the Angelopoulos Report in 1990[6] and continuing through more recent reports not only by the Bank of Greece, but also by the OECD, the IMF, the European Commission and other Greek and international institutions. Obviously, there is no shortage of proposals. Rather, what is missing is the acceptance of these proposals by policy makers and citizens and their effective and timely implementation.

At the present juncture and for the first time in years, the Greek society is becoming aware of the big and chronic problems that could lead to disastrous developments in the future, if not addressed in a timely manner. It is also becoming all the more apparent that there is no leeway for delay or half-measures, if Greece is to find a way out of the current deadlock and if confidence in the prospects of the economy is to be restored. The global crisis and the critical economic situation can act as a catalyst for an *open and meaningful dialogue* with the social partners on the reforms of the public sector (public administration, fiscal management, social security, education) and of prod-

5 See *GDP and beyond: measuring progress in a changing world*, Communication from the European Commission to the Council and the European Parliament, 20.8.2009. In France, a "Commission on the measurement of economic performance and social progress", under Joseph Stiglitz, Amartya Sen and Jean-Paul Fitoussi, was set up on the initiative of the President of France, with the mandate to identify the limits of GDP as an indicator of economic performance and social progress (see Report by the Commission on the Measurement of Economic Performance and Social Progress, 14.9.2009, www.stiglitz-sen-fitoussi.fr). The United Nations has devised a Human Development Index (see United Nations Development Programme – UNDP, Human Development Report 2009, 5.10.2009). See also Xenophon Zolotas, *Economic growth and declining social welfare*, Bank of Greece, 1981.

6 In December 1989, the then Prime Minister Xenophon Zolotas assigned a committee chaired by the Athens Academy Member Prof. Angelos Angelopoulos and with Evangelos Voloudakis, Anastasios Giannitsis, Constantinos Drakatos, Stavros Thomadakis, Maria Constantopoulou, Lucas Papademos and George Provopoulos as members, with the task of preparing a medium-term plan for the stabilisation and recovery of the Greek economy. The Committee submitted its recommendations in April 1990 (see *Report of the Angelopoulos Committee on the Stabilisation and Development of the Greek economy*, Hellenic Industrial Development Bank, 1990, in Greek).

uct and labour markets; such reforms are a prerequisite for attaining the above-mentioned objectives. A dialogue that gets to the heart of the matter would be a first step towards making up for our past failures to communicate effectively, while also strengthening civil society and enhancing respect for institutions, which has been insufficient until now.

The dialogue between the social partners and the government should focus, among other things, on the equitable distribution of the medium-term burdens and benefits, as well as of the sacrifices entailed by an exit from the crisis. With the proper policies, these sacrifices would, for the most part, be temporary. This would help build social consensus and win significant political backing to ensure that the reforms do not remain on paper and are actually implemented. Policy adjustment and implementation would, of course, have to be accompanied by measures to mitigate the adverse impact on the economically weaker sections of the population. At the same time, however, it will be necessary to overcome the resistance of interest groups that have managed to impede progress by taking advantage of the large number and complexity of laws, red tape and lack of transparency.

A well-functioning public administration is essential for the effective implementation of reforms

Inefficient bureaucracy, today, compounded by the existence of numerous and complex laws, foments tax and contribution evasion, corruption and lack of transparency; it also contributes to a wasting of limited public resources, thus obstructing innovative entrepreneurship and degrading the level of service provided by the state. Furthermore, the state is over-bloated and not rationally organised, in the sense that it has expanded beyond its fundamental role, which is to provide public goods and services, as well as monitor and oversee economic activities. This non-rational organisation is illustrated by the fact that a squandering of public resources in certain segments of the government sector co-exists with shortages in other key sectors (for instance, shortage of paramedical or fire-fighting personnel). Finally, accountability in certain large parts of the public sector, when not inexistent, is generally insufficient.[7]

Therefore, the effective implementation of reforms hinges upon:[8]

- the acceptance of their necessity by the social partners and by society in general and

- the existence of a smooth-running public administration.

2 GREECE'S EXTERNAL ENVIRONMENT

The global economy has been showing signs of recovery, but there are still serious downside risks ahead

The global economy has been showing signs of recovery from the worst economic crisis since the 1930s. Global economic activity —after declining rapidly in the last quarter of 2008 and the first quarter of 2009— has shown signs of stabilising and even of increasing slightly in

7 On the problems of the public administration and corruption, see: (a) Inspector General of Public Administration, *Annual Report 2008*, June 2009; (b) the Greek Ombudsman, *Annual Report 2008*, 26.3.2009; (c) World Bank, *Governance matters 2009 – Worldwide governance indicators 1996-2008 – Country data report for Greece, 29.6.2009;* (d) Transparency International Greece, "National survey on corruption in Greece – results", Press release, 17.2.2009 (in Greek). The report of the Inspector General of Public Administration makes the following points: Greece's public sector suffers mainly from maladministration and corruption, which are detrimental to the functioning not only of the state, due to red tape and inefficiency, but also of the private sector, hampering economic growth and social and cultural development. Fighting corruption and maladmininstration would require proper control mechanisms, with effective support from the judiciary as well as from the society at large. This fight will be long and difficult, and will, above all, require unwavering political resolve and sustained effort on the part of the authorities. The Ombudsman's Report, in its chapter on state-citizen relations, enumerates several aspects of maladmininstration, such as: piecemeal legislation and policy inconsistencies; erratic exercise of discretion; ignorance, poor implementation and misinterpretation of the law; refusal to comply with court decisions; disregard for decisions made by other government sector bodies; and insufficient harmonisation with European norms.

8 Valuable insights into structural reform methodologies are provided by a recent OECD study, see *The political economy of reform: Lessons from pensions, product markets and labour markets in ten OECD countries*, 2009. See also IMF, *Greece - Selected Issues*, Chapter III: "Structural Reforms in Greece: Lessons from Other Countries", August 2009.

several advanced economies, while economic growth seems to be already picking up in certain major emerging economies, China in particular. For the first time since 2007, international organisations have begun to revise their economic forecasts upwards. According to the latest IMF forecasts (October 2009), world GDP will decrease by only 1.1% in 2009, after increasing by 3.0% in 2008, while the global economy is expected to make a 3.1% rebound in 2010. These developments, however, are mainly the result of the concerted and unprecedented mobilisation of governments and central banks worldwide and their provision of liquidity and support to the financial sector, which has been seriously affected in several countries and runs the risk of collapsing, as well as to the real economy. The gradual return to normality, which still hinges largely upon the support of economic policy measures, varies greatly from one economy to another and remains subject to considerable uncertainty. Meanwhile, an adequate exit strategy from the extraordinary measures must be implemented in the medium term so as to avoid risks to macroeconomic and financial stability from the unprecedented increase in monetary liquidity, as well as from the fiscal deficits that these measures have led to. Driven by these concerns, the IMF in its recent analysis of global developments has concluded the following:

- A premature withdrawal of fiscal and monetary stimulus would hurt the recovery process;

- Addressing the structural problems of the financial sector must remain a top priority;

- As the propensity to save increases in the US, countries with presently large current account surpluses need to focus on increasing their domestic demand;

- Developed countries need to scale up their assistance to low-income countries, and

- Finally, reshaping the global economy in the post-crisis world must be based on three core principles: broad international policy collaboration, better regulation of the financial sector and a strengthened international monetary system.[9]

More specifically, as mentioned in the latest IMF report:

- The advanced economies are projected to see their GDP contract by 3.4% in 2009, after its increase by 0.6% in 2008, and recover by a moderate 1.3% in 2010. Continued banking system deleveraging, limited credit expansion, the decline in asset prices (as a result of adverse developments in the real estate and stock markets) and rising unemployment are expected to dampen domestic demand in these countries. In greater detail, the US is projected to see its GDP drop less (-2.7% against +0.4% in 2008) and to recover faster (1.5%) than the other advanced economies in 2010, as the impact of the crisis seems to have been mitigated by the unprecedented economic policy measures put in place. CPI inflation is projected to decline significantly to 0.1% in 2009, from the previous year's high level of 3.4%.

- In the euro area, GDP is projected to contract by a substantial 4.2% in 2009 (-3.8% to -4.4% according to ECB staff projections), after increasing by 0.7% in 2008, and to recover by a modest 0.3% (-0.5% to +0.9%, according to ECB staff projections) in 2010. After the strong negative growth rates recorded, quarter-on-quarter, in the fourth quarter of 2008 and the first quarter of 2009 (-1.8% and -2.5%, respectively), GDP fell by only 0.2% in the second quarter this year. Meanwhile, the contribution of net exports turned positive, public consumption continued to grow, the negative contribution of investment declined and the contribution of private

9 See "Transcript of a Press Conference by International Monetary Fund Managing Director Dominique Strauss-Kahn with First Deputy Managing Director John Lipsky and External Relations Director Caroline Atkinson", 2.10.2009, and IMF Press Release, 2.10.2009 ("IMF Managing Director Dominique Strauss-Kahn Points to Three Principles to Reshape the Global Economy in the Post-Crisis World").

consumption, from negative, became zero. In the short term, the euro area economy should continue to benefit from the expansionary macroeconomic policy and financial stimulus measures. A risk to the stabilisation of recovery in the euro area could come from a stronger negative feedback between the real economy and the financial sector —which remains somewhat fragile— against a backdrop of deteriorating labour market conditions, as the unemployment rate (9.6% in August) is projected to near 12% in 2010. Inflation in the euro area decelerated noticeably from 4.0% in July 2008 to negative levels during June-September 2009 – mainly on account of lower international oil and other raw material prices, as well as of weaker economic activity. According to ECB staff projections, average annual inflation should be between 0.2% and 0.6% in 2009 and between 0.8% and 1.6% in 2010, gradually returning to a level which is consistent with price stability, though remaining below it.

- In emerging and developing economies, GDP growth is projected to slow to 1.7% in 2009 (down from 6.0% in 2008) and to rebound to 5.1% in 2010. The rebound should be particularly strong in emerging and developing Asia (with anticipated growth rates of 6.2% in 2009 and 7.3% in 2010), mainly due to the macroeconomic policy measures taken by China and India to bolster their domestic demand. By contrast, developments in the emerging economies of Central and Eastern Europe will be particularly adverse, with GDP projected to contract by 5.0% in 2009 and to recover by 1.8% in 2010. In the Commonwealth of Independent States (including Russia), GDP is projected to contract by 6.7% in 2009 and to recover by 2.1% in 2010.

- In the emerging economies of South-Eastern Europe, excluding Turkey, GDP is expected to contract by 7.5% in 2009 (after increasing by 6.1% in 2008) and to shrink marginally further in 2010. Turkey's GDP is projected to contract by 6.5% in 2009, but to recover by 3.7% in 2010.

Exit strategies from the emergency stimulus measures are being prepared, but the time for their implementation has not yet come

The coordinated action taken by governments and central banks to tackle the crisis —ranging from interest rate cuts to demand-stimulating macroeconomic policies, bank bailout packages and non-standard monetary policy measures— was enormous in scale and unparalleled, and led to an unprecedented build-up of liquidity and fiscal deficits. Governments, central banks and international organisations alike have therefore widely recognised the need for the timely implementation of an exit strategy as soon as financial conditions and the macroeconomic environment have sustainably improved, in order to avoid downside risks to macroeconomic and financial stability. At the G-20 Summit in Pittsburgh on 24-25 September 2009, the heads of state agreed, inter alia, that extraordinary stimulus measures will not be withdrawn until sustainable recovery is secured, but that exit strategies must be developed so that the support can be withdrawn in a cooperative and coordinated way, maintaining the commitment to fiscal responsibility.

As regards *fiscal policy*, the European Council (18-19 June 2009) determined that an exit strategy from the current high deficits and public debt must include the adoption of credible medium-term fiscal consolidation plans, which, where necessary, should include pension system reforms. The timeframe and pace of fiscal consolidation should take into account the economic conditions in each Member State and the level of its structural deficit and debt. At the informal ECOFIN meeting (Göteborg, 1-2 October), it was determined that it is still too early to withdraw the stimulus measures and that extraordinary support should remain in place until recovery is secured. At the same time, *fiscal* exit strategies must be designed now and include further structural fiscal consolidation of more than 0.5% of GDP per year, as well as comprehensive structural reforms aimed at strengthening employment and potential growth. As for the exit strategy from the non-standard *monetary policy* measures (or credit support measures), the ECB has come up with a set of principles and specific criteria for their withdrawal, as the macroeconomic environment gradually improves and market conditions return to normal (see Chapter II.1). The profile and timing of the exit strategy will be determined mainly by the need both to ensure price stability over the medium term and to progressively reduce the dependence of the financial system on the extraordinary measures, as financial conditions improve.

3 THE SINGLE MONETARY POLICY

Unprecedented ECB interventions have borne fruit

Following the bankruptcy of Lehman Brothers in September 2008 and the consequent sudden and sharp deterioration of the international financial and macroeconomic environment, risks to financial stability have increased. Taking into consideration these developments and the significant decline in inflationary risks in the euro area and internationally, the ECB and other central banks reacted by reducing interest rates, providing ample liquidity to financial markets and using non-standard measures.[10] During October 2008-May 2009 the ECB reduced the key reference rate by 325 basis points to its current 1%. Such a significant relaxation of the monetary policy in such a short time was unprecedented and points to the exceptional nature of the monetary policy reaction. Equally unprecedented was the provision of liquidity by the ECB to the interbank market, in order to counter banks' unwillingness to lend other banks on account of the sharp increase in "counterparty risk", which was partly fed by the inadequate transparency of banks' capital position. Since October 2008, the ECB has been providing euro area credit institutions with liquidity through regular open market operations conducted as fixed rate tenders with full allotment, against a wide range of eligible collateral. The maximum maturity of open market operations gradually reached one year. An indicator of the size of this liquidity-providing intervention is Eurosystem assets, which increased by around €900 billion from end-June 2007 to end-August 2009, coming to €1.8 trillion (around 10% of euro area GDP).

The ECB chose to enhance liquidity in the economy, as corporate financing in Europe is bank-based (contrary to the US where it is market-based). ECB measures supported the banking system and significantly improved the conditions in money markets. This development has contributed to the financing of real economy, limiting the adverse impact of the financial crisis on economic activity and removing the risk of a reduction, on a permanent basis, in the general price level. During January-September 2009, interest rates on interbank loans with a maturity of over one month continued to decline in the euro area, the US and other developed economies. By end-September 2009, the three-month Euribor fell to 75 basis points (i.e. it was lower than the ECB key intervention rate) and was reduced by around 465 basis points against October 2008. The spread between three-month Euribor and the three-month EONIA swap rate fell too. This spread is an indicator of the default risk premium incorporated in the Euribor. Moreover, the significant drop in policy rates, compared with the unlimited provision of liquidity in the banking system, allowed interest rates on bank loans to households and enterprises to fall considerably. Nevertheless, financial conditions are not smoothed out yet. The volume of transactions in the interbank market remains relatively low, whereas credit flows to the private sector, which had become negative during January-July 2009, turned positive again in August, remaining however at very low levels. This is the result of a decreased demand for loans and also of the ongoing deleveraging in the banking sector.

10 For the ECB, non-standard measures are referred to as "enhanced credit support" and constitute "the special and primarily bank-based measures that are been taken to enhance the flow of credit above and beyond what could be achieved through policy interest rate reductions alone".

4 MACROECONOMIC DEVELOPMENTS IN GREECE AND SHORT-TERM PROSPECTS

Economic activity: GDP is forecast to fall this year by 1% or more

According to Bank of Greece forecasts (which take into account the NSSG temporary estimates for the first half of 2009), the fall in GDP may reach or exceed 1% in 2009, after increases of 2.0% in 2008 and 4.5% in 2007 (according to recently revised NSSG data for these years), reflecting the slowdown of the Greek economy that started at end-2007 and intensified in the course of 2009. Final domestic demand is expected to decrease in 2009 (having been stagnant in 2008), thus making a negative contribution to the rate of change of GDP. By contrast, the change in the real external balance will make a positive contribution, which will be the exclusive result of the anticipated large decrease in the imports of goods and services.

Private consumption is expected to fall by about 1% in 2009, against a rise of 2.3% in 2008. The relative resilience of private consumption can be attributed in part to the estimated increase in the pre-tax income of employees by about 1% (in real terms). On the contrary, a negative influence will be exerted by the decline in the net flow of new loans to households (which reflects the development of both demand and supply of loans) and marginally by the decrease in the value of household assets (house and equity prices). Public consumption is expected to increase at a high rate in 2009, on the basis of the national accounts estimates for the first half of the year, when a significant overrun in ordinary budget forecasts was recorded, and on the back of developments in the third quarter, as these are reflected in the deficit data on a cash basis. Gross fixed capital formation is expected to fall considerably (by about 15%) for second consecutive year (2008: -7.4%), reflecting the continued decrease in residential investment and an even higher decrease in investment in mechanical and transport equipment. Investment in non-residential construction is expected to have a counterbalancing effect, as its growth rate increased markedly in the first half of the year, on account of the acceleration of large infrastructure projects financed by the Public Investment Programme (PIP).

In 2009, a substantial decline (exceeding 15%) is expected in the exports of goods and services (after a 4.0% rise in 2008), as a result, on the one hand, of the sharp decrease in the volume of global trade (-11.9%, according to the IMF) and, on the other, of the cumulative decrease in price competitiveness during the nine-year period 2001-2009, which is estimated in the range of 19-28% (depending on the index used – see Table IV.10). Besides, imports of goods and services are expected to fall by about 20% in 2009 (having been stagnant in 2008), reflecting reduced domestic demand.

A cyclical deceleration of activity was perhaps to be expected, after the long period of continuous growth that had preceded. Moreover, the international crisis has had a significant impact on the Greek economy, although a comparison between the performance of the Greek economy and that of other euro area economies shows that the economic slowdown was less in Greece. Some structural characteristics and chronic weaknesses of the Greek economy, such as the excessively large share in GDP of sectors producing goods that are not internationally tradable and the economy's limited degree of openness to international trade, as well as the rigidities in product and labour markets, may have temporarily mitigated the adverse impact of the international crisis. However, as the crisis still influences activity in Greece, it is certain that the same factors will act in the opposite direction, i.e. as an impediment, which will prevent the Greek economy from following closely the recovery of global economy, once it is confirmed. It is characteristic that, in the course of 2008 and mostly in the first nine months of 2009, fiscal policy has been particularly relaxed, in terms of both revenue and expenditure. This resulted in a considerable widening of the fiscal deficit and, although it actually helped contain the drop in activity, contributed to the accelerated surge of public debt as well.

Employment is declining and the unemployment rate is on the rise – Unskilled workers, young workers with short periods of previous experience and immigrants are the most vulnerable

The slowdown of the annual rate of economic growth, which started in 2007, was accompanied by a deceleration in the growth rate of the number of workers by the end of 2008. Stagnant economic activity in the first half of 2009 led to a reduction of 0.8% in the number of workers across economic sectors and of 1.0% in the average weekly number of hours worked in the private non-agricultural sector, as well as to a significant increase in the number of unemployed persons (by 71 thousand), which was almost double the reduction in the number of workers, given that the number of persons in search of employment (mostly immigrants and women) increased. During the same period, the unemployment rate rose to 9.1% (from 7.7% in the first half of 2008).

The decline in total employment mostly stems from the decrease in the number of workers in construction, manufacturing, hotels and restaurants, as well as financial and insurance services. The decline in employment mostly affected employees (whose number in the private non-agricultural sector fell at an annual rate of 1.6% in the first half of the year). The number of self-employed without personnel fell at a much lower rate, while the number of self-employed with personnel and the number of assistants in family businesses increased. Low-skilled workers, immigrants and young workers with only a few years of previous experience proved more vulnerable to the risk of losing their job. In any case, the rate of unemployment increased for both sexes and across age groups. A significant increase in the rate of unemployment was recorded in respect to men of foreign nationality, due to their concentration in low-skill jobs in the economic sectors that were affected the most (e.g. construction, hotels and restaurants).

An examination of labour market flows shows that the decreased number of employees in the first half of 2009 mainly reflects the large —compared with 2008— decrease in recruitments and, to a lesser extent, the increased layoffs (terminations of contracts) and resignations.

The increased participation of immigrants in the labour force reflects their continued inflow and better recording by the NSSG, while the increased participation of women in the labour force is rather due to the economic difficulties that the households are facing. Increased participation of the active population in the labour market in the initial phase of the crisis can also be observed in other euro area countries. However, if the duration of unemployment is extended, the labour force may start to decrease, as the unemployed become disappointed and give up searching for a job (i.e. they drop out of the labour force).

Compared with the euro area as a whole, the reduction of employment in Greece was less extended in the first half of 2009 (Greece: -0.8%, euro area: -1.5%), as the share of self-employed in total employment is higher in Greece. For the self-employed, the consequences of the crisis mostly take the form of a reduction in the average working hours and in their income.

Despite its conjunctural increase, the current account deficit is still alarmingly high

The current account deficit fell considerably (by €4.9 billion or 22.9%) in the seven-month period from January to July 2009 compared with the same period of 2008. If capital transfers are taken into account, the total deficit, which reflects the economy's external financing requirements, has been reduced by €3.6 billion or 19.1%. For 2009 as a whole, the current account deficit is expected to fall to around 11% of GDP, from 14.7% of the revised GDP in 2008. If capital transfers are taken into account, the total deficit is estimated to fall to about 9.5% of GDP (2008: 12.9%), still remaining higher than the long-term average.

The significant decline in the current account deficit in the first seven months of 2009 mainly stems from the strong decrease in the trade deficit, which is mostly the result of reduced domestic demand. Indeed, payments for the import of goods excluding oil and ships declined by €6.3 billion or 25.5%, i.e. much more than the corresponding export receipts, which declined by €1.3 billion or 17.0%. The income balance also recorded a small decline. The services and current transfer surpluses declined too. These developments reflect the impact of the international financial crisis and the decline in economic activity in Greece.

The high current account deficits reflect the insufficiency of national saving and the low international competitiveness of the economy

This year's containment of the current account deficit is mostly cyclical in nature, *as the main factors which have caused deficits to widen in the past years and reflect the shortfall of national saving against domestic investment spending in the same period, remain strong. At the same time, the international competitiveness of Greek exports of goods and services continues to deteriorate.* This deterioration is not only due to the continued decline in price competitiveness[11] (see Table IV.10), but also to the low level of structural competitiveness, which is measured on the basis of comparative indicators compiled by international organisations (see Chapter IV.4). The key determinants of structural competitiveness are: the importance attached to research and development; encouragement of innovation and qualitative production; development of entrepreneurship; modernisation and expansion of infrastructures; education level; and effectiveness in public administration (degree of red tape and corruption reduction). Moreover, the structural competitiveness of an economy is generally also influenced by (i) how flexible product and factor markets are, as this allows for a better allocation of resources; (ii) the share of productive investment in the GDP; (iii) the introduction and use of new technologies in the production process; (iv) the degree of openness and, last but not least, (v) the tax and financial environments.

As a result of the Greek economy's low structural competitiveness, domestic supply has failed to meet sufficiently and flexibly the composition of domestic and external demand as it changes with time. This failure feeds the high growth rates of imported consumer, intermediate and capital goods (this is not the case, of course, in the current period of economic contraction) and gives the large trade deficit a permanent character. The structural problem of the trade balance magnifies the importance of the services surplus, particularly in the sectors of tourism and shipping. The fact that Greece has a comparative advantage in these two sectors has helped offset a considerable part of the trade deficit, but both travel receipts and receipts from transport services are directly influenced by fluctuations in economic activity and income at the international level. With regard to transports, it must be highlighted that the current account deficit would have been even higher in the past few years, if it weren't for the considerable contribution of net receipts from maritime transport services (in the order of 4-4.5% of GDP in the 2004-2008[12] period and of 3% of GDP this year). However, it is doubtful whether the net receipts in question will return to their pre-crisis levels in the next few years. With regard to tourism, it is necessary to take advantage of the ample room for substantial improvement in both price competitiveness

11 As mentioned in Section IV.3, however, the competitiveness indicator based on the relative unit labour cost is not expected to decline in 2009, at least not in comparison with Greece's partners in the euro area. Competitiveness indicators that are based on the relative consumer prices still suggest a deterioration, though.

12 See Bank of Greece, *Annual Report 2008*, April 2009, Box VIII.1, p. 123.

and "quality" competitiveness of the Greek tourism product.

It should be noted that since 2008 the European Commission has set the goal of improving the coordination and surveillance of the EU Member States' economic policies, so that it extends beyond fiscal policy to cover macroeconomic imbalances, including the widening of current account deficits.[13]

The drop in inflation stems from the fall in oil prices and reduced demand

The annual inflation rate (based on the Harmonised Index of Consumer Prices – HICP), which had been falling since August 2008, continued to decline up to July 2009, when it stood at 0.7%. In August, inflation increased slightly to 1.0% to decline again in September to 0.7%, against 4.7% in September 2008. In addition, from October 2008 to July 2009 core inflation, which does not include energy and non-processed food, also declined (July 2009: 1.7%), but in August it rose slightly to 1.9% and declined anew in September to 1.7%, against 3.8% 12 months earlier. Although inflation is expected to accelerate gradually in the last months of 2009, it is estimated that the average annual inflation rate will stand at around 1.3% (or even lower, at 1.1-1.2%), compared with 4.2% in 2008. Core inflation is projected to decrease considerably as well, though to a lesser extent than headline inflation, as its average level will stand at around 2.1%, compared with 3.4% in 2008.

The large decline in headline inflation reflects, *inter alia*, the sharp fall in international oil and other commodity prices, which started in mid-2008. Although crude oil prices in the international market have recovered since the beginning of 2009, their *annual rate of change* remained strongly negative up to and including September, continuing to contribute to low inflation. Moreover, the decrease in total demand also contributed significantly to the decline of *core inflation*. Inflationary pressures from the demand side, which had been merely mitigated in 2008, were reversed this year, as there is no excess demand any more. The weakening of demand has been accompanied both by a reduction in the profit margins of enterprises and by a marked deceleration in the growth rate of labour costs, developments that also contribute to the drop in core inflation.

This year, however, core inflation remains higher in Greece than in the euro area as a whole. This suggests, *inter alia*, that in the Greek economy conditions of imperfect competition, which adversely affect price levels, still prevail. Nevertheless, it should be noted that the decline in annual core inflation in the four-month period from April to June (by 1.3 percentage points on the basis of the harmonised index or by 1.1 percentage points on the basis of the national index) is also attributable by 0.1 percentage point to the reduction in the prices of fresh pasteurised milk, as a result of stronger competition in this sector, and by 0.4 percentage point to the fall in passenger car prices, as a result of the temporary indirect tax reduction ("car registration fees"), which was decided with a view to boosting the car market. (This last measure contributed to the decline in inflation, but did not support domestic production, given that cars are imported.)

Moreover, the inflation differential between Greece and the euro area remains positive. In particular, as regards annual HICP inflation, the average differential in 2008 was 0.9 percentage point and remained unchanged in the first nine months of 2009. Regarding core inflation, the average differential, which was 1.0 percentage point in 2008, practically remained at the same level in the first nine months of 2009 (0.9), although it has been recording a decline from the second quarter onwards. These developments entail a continuation of the decline in international price competitiveness.

13 See "Communication from the Commission – EMU@10: successes and challenges after 10 years of Economic and Monetary Union", *European Economy*, No 2, June 2008.

5 FISCAL DEVELOPMENTS AND PROSPECTS

Recording a dramatic increase in fiscal deficit

The State Budget deficit (on a fiscal basis) widened dramatically in the first half of the year (to 7.3% of annual GDP), compared with the corresponding period in 2008 (3.8% of GDP) and the updated target of 5.0% of GDP set for 2009 as a whole.[14] Bank of Greece data on a cash basis show further substantial widening of the central government deficit in the third quarter of the year. In particular, the net central government borrowing requirement (on a cash basis) rose from 7.5% of annual GDP in the first half of the year to 9.9% of GDP during January-September 2009 (against 4.9% of GDP in the corresponding 2008 period).

The large widening of the SB deficit is attributable, on the one hand, to a shortfall in revenue and an overrun in ordinary budget expenditure and, on the other hand, to the expediting of disbursements from the Public Investment Budget. The causes of the shortfall in ordinary budget revenue that was recorded in the first half of the year (a decline of 0.7%, compared with a revised total annual increase of 14.2%) are: the initial overestimation of revenue, the stagnation of economic activity, the continuing lack of organisation and coordination in the tax collection mechanism (characteristically, administrative weaknesses did not allow for the timely implementation of statutory tax measures, e.g. the timely computation and collection of the single tax on real estate for the years 2008 and 2009), as well as increased tax evasion. Moreover, the growth rate of SB primary expenditure (ordinary and investment budget, including tax refunds) in the first half of the year was particularly high (20.2%, against a projected total annual increase of 4.9%), mostly due to the increased expenditure of a social character and the aforementioned expedited disbursements from the Public Investment Budget.

The SB deficit as a percentage of GDP will increase further to a very high level by the end of 2009, if account is taken of the aforementioned trends and the fact that revenue from tax measures, the implementation of which is already delayed, may be significantly lower than the initial forecast. Under these circumstances, the general government deficit (on a national accounts basis) will also increase substantially, as clearly indicated by developments in the central government net borrowing requirement on a cash basis during January-September and by the fact that the *surplus* of other general government entities (social security funds and local authorities) was 1-1.5% of GDP on average in the last decade (1.6% of GDP in 2008).

Public debt is alarmingly high and its dynamics are deteriorating

The stable macroeconomic environment after the country's entry into the monetary union in 2001 helped establish favourable conditions for reducing the debt-to-GDP ratio. The high rate of economic growth (around 4.0% on average annually) from 2000 onwards, facilitated the achievement of primary surpluses in certain years of this period, which were nonetheless lower than the ones recorded during 1997-1999. Moreover, government borrowing rates fell continuously until end-2005, standing at historically low levels, while significant amounts were collected because of privatisations. As a result, public debt fell by 7.8 percentage points of GDP during 2000-2007. In 2008, however, this downward trend was reversed due to (i) the high net borrowing requirement of the general government (a deficit of 5.6% of GDP plus a 3.3% "deficit-debt adjustment"), (ii) the deceleration of the growth rate to 2.0% and (iii) the rise in the average government borrowing rate to 4.6% (from 4.4% in 2007). Thus, the debt ratio increased significantly by 3.6 percentage points and stood at 99.2% of GDP.

14 The Budget for 2009 provided for a lower budget deficit, which would stand at 3.4% of GDP, from 5.8% in 2008. Then, in the 2008-2011 Updated Stability and Growth Programme of January 2009, the targets for the SB deficit in 2009 were revised to 5.0% of GDP, and for the general government deficit to 3.7% of GDP (on a national accounts basis), from 2% of GDP.

In 2009, the dynamics of public debt have deteriorated further, as the growth rate of the economy will be negative this year and, based on the implementation of the State Budget thus far, a large primary deficit is estimated to ensue. Moreover, the "deficit-debt adjustment" will exceed 2.0% of GDP, due to the issuance of government bonds with the aim (i) to finance the purchase of bank preference shares (within the framework of the capital injections provided for by Law 3723/2008) and (ii) to strengthen the capital of the Guarantee Fund for Small and Very Small Enterprises (TEMPME).[15] Lastly, the average government borrowing rate was indeed contained to 4.3%, but this development is attributable solely to the exceptionally low interest rates on short-term securities. Under these circumstances, the general government debt reached 111.5% of GDP at the end of June 2009, with the outlook of a further strong increase.

In addition to the increased debt, 2008 also witnessed a strong rise in government-guaranteed loans (mostly to public enterprises), which amounted to €22.2 million or 9.3% of GDP at the end of the year, while in the three-year period 2000-2002 they had remained at around 6.1% of GDP. This type of loans increased substantially in 2009 as well, but the relevant statistical data have not been published yet. Moreover, the public sector has substantial liabilities, mostly due to delayed payments to suppliers (e.g. pharmaceutical and medical suppliers, public works contractors, IT companies, etc.), which may reach or even exceed €12 billion.

Public debt dynamics, considering current trends, are following an unfavourable course: on the one hand, growth rates may remain low for a long period of time and, on the other hand, interest rate developments may be adverse. *In particular, if markets perceive the fiscal adjustment as inadequate, there is the risk of a further widening of the spread between Greek government bonds and the corresponding German reference bonds. Moreover, international long-term interest rates may increase, owing to the increased need for financing the large fiscal deficits in many countries. In any case, the possibility that deficit and debt will remain high would intensify market concerns about the sustainability of the country's fiscal position, probably causing a further increase in government borrowing rates and deteriorating public debt dynamics.* Therefore, in order to break the vicious circle of increasing debt and worsening market expectations, there is obviously the need to adopt a reliable medium-term plan, as mentioned above, with the aim of achieving fiscal consolidation and supporting growth prospects.

The Excessive Deficit Procedure for Greece has been launched

The excessive deficit procedure was initiated against Greece on 24 March 2009, when the European Commission concluded that Greece (among other countries) had exceeded the deficit ceiling and urged the ECOFIN Council to adopt a recommendation for the correction of this excessive deficit. The European Commission concluded that the general government deficit in Greece has been in excess of the 3% reference value in 2007 and 2008 *for reasons not related with any significant decline in economic activity* and noted that the deficit remained above 3% in 2009 and would exceed 4% in 2010, unless there was a policy change. In view of the existing macroeconomic imbalances and the trend to constantly assess risks in the financial markets, i.e. factors that put further pressure on the already high debt, the Commission decided that a rapid correction of the deficit by 2010 seems appropriate.

In accordance with paragraph 6 of Article 104 of the Treaty, the EU General Affairs Council issued on 27 April 2009 a decision on the existence of excessive fiscal deficit in Greece, as well as a recommendation, under para-

15 This issuance is a financial transaction that increases the debt only – not the deficit. Therefore, it is also recorded as a "deficit-debt adjustment".

graph 7 of Article 104 of the Treaty, on its correction.[16] Based on the Commission's forecast published in *January* 2009 (according to which, Greece's GDP would *increase* by 0.2% in 2009 and by 0.7% in 2010), the Council asked Greece to reduce the fiscal deficit below the 3% reference value latest by 2010 (as per the Greek government's commitment). According to the Council recommendation, the Greek government will have to adopt by 27 October 2009 permanent measures for the restraint of expenditure so as to support fiscal adjustment in 2009 and should identify the additional permanent measures that will ensure the correction of the excessive deficit by 2010. Moreover, the Council noted that Greece should make effort to control factors, other than net borrowing, that change public debt levels, and to improve the collection and processing of economic and, particularly, general government data. Finally, it called on Greece to improve the quality and sustainability of its public finances and, with a view to recovering competitiveness losses and addressing the existing external imbalances, to urgently implement bold structural reforms. The Commission's assessment (after 27 October) of whether the Greek authorities undertook effective remedial actions for correcting the excessive deficit, *will take into consideration any changes in the economic conditions compared with the projections that had been the basis of the Council recommendation.*

On 25 June 2009 a package of tax measures was announced, which, according to estimates of the Ministry of Economy and Finance, would contribute to an increase in public revenue by 0.8% of GDP. An additional increase in revenue by 0.2% of GDP would come from combatting tax evasion. These efforts would reduce the general government deficit to 3.7% of GDP (as forecast in the updated Stability and Growth Programme 2008-2011 of January 2009). However, the development of fiscal aggregates in the following months led to a radical reversal of these estimates.

6 MONEY, CREDIT AND CAPITAL MARKETS

Credit expansion to enterprises and households continues to slow

The annual growth rate of the stock of total financing to the economy by domestic Monetary Financial Institutions (MFIs) followed a downward path and reached[17] 9.3% in August (fourth quarter of 2008: 16.6%), after showing signs of stabilisation in the first three months of 2009.This fall mainly reflected the sharp slowdown in financing to the private sector (enterprises and households); by contrast, credit expansion to the general government picked up considerably (August 2009: 28.5%, fourth quarter of 2008: 8.1%).

The annual rate of change of the stock of domestic MFI financing to the private sector was significantly slower in the first eight months of 2009 (August 2009: 6.0%, December 2008: 15.9%), as a result of weaker credit expansion to both enterprises (August 2009: 7.3%, December 2008: 18.7%) and households (August 2009: 4.7%, December 2008: 12.8%). In particular, the annual growth rate of outstanding housing and consumer loans fell to 4.8% in August (from 11.5% and 16.0% respectively in December 2008).

Monthly net flows of new loans[18] to enterprises and households remained very subdued in the reviewed period compared with those before the intensification of the financial crisis. On the loan demand side, this can be explained by the stagnating, or even contracting, economic activity, as well as by a reluctance on the part

16 These Council decisions were the formal publication of texts that were discussed and approved by the Ministers of Finance on 3 April 2009 in their informal meeting in Prague.

17 The *stock* of total bank financing to the general government, enterprises and households is calculated as the sum total of outstanding relevant bank loans, bank holdings of government securities and corporate bonds plus the outstanding amounts of securitised loans and securitised corporate bonds. For more details, see Chapter VI.

18 The net flow of financing in a given period (one or more months) is calculated as the change in the stock of financing during this period, plus loan write-offs and foreign exchange valuation differences from the appreciation of the euro minus corresponding valuation differences from the depreciation of the euro over the same period.

of enterprises and households to take on new loans in the face of uncertainty caused by the global financial and economic crisis. On the supply side, banks have tightened their credit standards due to increasing credit risk, in an effort to reduce their rising non-performing loan (NPL) ratios.

Since credit to enterprises continued to grow faster than *nominal* GDP, the total stock of financing to enterprises as a percentage of GDP rose to 55.2% in August 2009 from 53.2% in August 2008. Excluding non-bank loans, for comparability purposes, the stock of financing falls to 39.1%, i.e. 13.7 percentage points lower than the euro area's. For the same reason (the slower growth of nominal GDP), the stock of MFI financing to households (including securitised loans) increased to 49.4% of GDP in August 2009 from 47.5% in August 2008. Net of securitisations, for comparability purposes, the stock of financing drops to 40.2% of GDP, compared with 54.3% for the euro area.

The deceleration in the annual growth of financing to the private sector, which is being recorded from the beginning of the year, was to be expected, as already pointed out by the Bank of Greece in its recent reports, and is in line with the trends of corresponding aggregates for the euro area as a whole. In the euro area, deeper recession has caused the rate of credit expansion to the private sector to drop to a very low level (August 2009: Greece: 6.0%, euro area: 1.1%). In the first eight months of 2009, the net flow of financing to the private sector (net of MFI holdings of securitised corporate bonds, for comparability purposes) was 79% weaker in Greece and 86% weaker in the euro area than in the corresponding 2008 period.

Key to underpinning credit expansion to the private sector has been the improvement in funding conditions for domestic MFIs. The bulk of their funding comes from deposits – in Greece the loan-to-deposit ratio is lower than in the EU (see Chapter VI.6). Moreover, domestic banks significantly increased their recourse to Eurosystem funds, compensating for their initial difficulty to access international interbank markets, the functioning of which had been impaired. In the first eight months of the year, monthly inflows of funds to domestic MFIs were improved, mainly on account of their recourse to the Eurosystem's standing facilities and the interbank market, as well as on account of capital increases. Furthermore, in recent months, Greek banks have regained access to money and capital markets and have additionally benefited from the credit support measures provided for by Law 3723/2008.

The rate of credit expansion is likely to approach 4% at end-2009

The growth of credit to the private sector is expected to slow further in the coming months, as loan demand remains negatively affected by subdued economic activity and credit standards are expected to remain tight. In addition, the ECB's credit support measures will continue to foster bank lending (see Chapter III), while a positive contribution is expected from the measures that were taken recently at the national level, such as the state guarantee for loans to crisis-hit enterprises, partial state guarantee for housing loans and a support scheme for small and very small enterprises. Loan demand will benefit from the observed relatively low level of bank lending rates. Based on the technical assumption that between September and December 2009 the net monthly flow of financing to the private sector will remain at its August levels, the annual growth of credit to the private sector should be in the order of 4% in December, i.e. much higher than the very small increase anticipated for GDP growth at current prices.

Bank lending and deposit rates declined considerably

Reflecting cuts in key ECB rates and a gradual improvement in funding conditions for Greek banks, bank interest rates on short-term deposits declined considerably in Greece in the eight-month period January-August 2009.

Interest rates on new household deposits (including repos), which depend, of course, on competition between credit institutions, fell across all deposit categories. These declines (except those for overnight rates) were greater than the total reduction (by 150 basis points) in the key ECB interest rates over the same period. The average real interest rate on overnight deposits remained negative during this eight-month period, but rose to -0.28% from -3.31% in the corresponding period of 2008, while the average real interest rate on time deposits with an agreed maturity of up to one year increased to 2.07% (January-August 2008: 0.11%). Deposit rates in the euro area also followed a downward trend, but their fall was comparatively smaller; hence, the positive differential between Greek interest rates and corresponding euro area rates narrowed in all major deposit categories. Nevertheless, the domestic interest rate for the most important category of deposits, i.e. time deposits with an agreed maturity of up to one year, is still among the highest in the euro area. This *prima facie* indicates that Greek banks are still burdened with higher costs for raising funds through deposits than the euro area as a whole. It should be noted, however, that, since April, the share of all types of time deposits (by both households and non-financial corporations) in total deposits has started to shrink.

In the eight-month period January-August 2009, bank interest rates on new loans in Greece recorded a strong decline in almost all loan categories. This was attributable, on the one hand, to the cuts in the key ECB interest rates and the fall in interbank rates and, on the other, to the improvement in funding conditions for domestic MFIs (mainly their refinancing from the Eurosystem). The steepest drops were observed in the interest rates on new loans to non-financial corporations and on new housing loans, while the interest rates on new consumer loans recorded a smaller decrease. The decline in domestic lending rates was generally less pronounced than the total reduction in the key ECB interest rates and the interbank rates, as a result of the higher risk premia incorporated into the lending rates of Greek banks because of the increase in non-performing loans.

Unlike what was the case with deposit rates, the drop in lending rates was more marked in the euro area as a whole than in Greece for most loan categories. As a result, the positive differential between Greek corporate and household lending rates and the comparable euro area ones widened further, with the exception of consumer loans with an initial rate fixation of over one and up to five years. Indicative in this respect is the fact that, for the first time since early 2006, domestic interest rates on all types of housing loans were higher —albeit slightly— than those of the euro area as a whole. Furthermore, the interest rate on consumer loans without a defined maturity, including loans through credit cards, dropped less than in the euro area as a whole. This resulted in a widening of the differential between the two rates (to 507 basis points) in August. Although this differential represents the last five years' peak, the rate for this loan category is not among the highest in individual euro area Member States. In this respect, it should be noted that in almost all major loan categories (except for consumer loans), the *real interest rates* in Greece are either equal to, or lower than, the comparable average euro area rates.

The interest rate margin, i.e. the difference between the weighted average bank interest rate on new loans and the corresponding interest rate on new deposits increased by 40 basis points in the eight months January-August 2009 and stood at 3.85% in August. The widening of the Greek interest rate margin, the first after a decade of almost uninterrupted decline, reflected the fact that the fall in lending rates was less pronounced than the fall in deposit rates in this eight-month period, partly as a result of the higher risk premium incorporated in the former in the face of increased credit risk. The interest rate margin remains higher in Greece than in the euro area (August 2009: 2.39%) and the difference between the two rates has in fact almost doubled compared with end-

2008. As has been repeatedly noted, the reasons why this occurs relate to the relatively large number of small depositors and borrowers, the higher borrowing cost for Greek banks at the interbank market, the higher (vis-à-vis the euro area) ratio of non-performing loans (NPLs) to total loans and the correspondingly higher provisions made, as well as the longer time needed for the realisation of collateral. Furthermore, the higher margin also relates to the different composition of loans and deposits in Greece vis-à-vis the euro area.[19] Had the composition of loans and deposits in Greece been the same as in the euro area, the interest rate margin in Greece would have been 3.54%, in August, and its differential vis-à-vis the euro area margin would have declined by about one-fifth.

The climate in the bond markets is gradually improving after its initial deterioration

Greek government bond yields in the secondary market increased between early October 2008 and early March 2009, as the increasing impact of the financial crisis on the real economy, the surge in uncertainty, and the resulting risk aversion on the part of investors, all favoured German bonds which enjoy the highest credit rating and are the most liquid among all euro area government bonds (with the exception of yields on Greek government bonds with shorter maturities of up to three years, which fell in the aftermath of cuts in the key ECB interest rates). From mid-March 2009, however, amid a gradual improvement in investment climate in money and capital markets, investors moved into riskier assets, such as emerging market securities and shares or government and corporate bonds of lower credit rating. This turnaround had a significant dampening effect on Greek government bond yields, particularly at the short and medium maturities.

These developments were also reflected in the yield spread of the 10-year Greek government bond over the German bond, which widened substantially after October 2008, reaching 314 basis points on 6 March 2009 – the highest level recorded since Greece's entry to EMU. Subsequently, however, this spread was reduced and reached 127 basis points by end-September 2009. Factors such as public debt servicing and the expected burden on public finances from future rises in pension expenditure are thought to explain, to a great extent, the yield spread between Greek and German bonds in the first half of 2009, as also suggested by a recent study.[20]

The average daily value of transactions in the Electronic Secondary Securities Market (HDAT) registered a year-on-year drop of 18% in the nine-month period to September. This was accompanied, however, by a parallel narrowing of the average bid-ask spread for bonds, reflecting improving conditions in the secondary market. Developments in the primary market for government paper were mainly characterised by a substantial increase in the funds raised, as a consequence of the significant rise in fiscal deficit and principal payments, and of the expedited implementation of the government's borrowing programme. The nominal value of the securities issued almost doubled year-on-year, amounting to €66.5 billion (€59.6 billion if three and six-month Treasury bills maturing in 2009 are not taken into account).

In 2009, a marked increase in Treasury bill issues was recorded, while bond issues were concentrated exclusively on maturities of up to ten years. The Greek government adopted this policy so that it could benefit from the strong demand for shorter maturities without burdening the long-term debt servicing with the higher interest rates that are charged for longer-maturity bonds. As a result, the weighted average maturity of new debt issues declined significantly in the reviewed period.

While interest rates on bond issues remained high in the first months of 2009, because of rising yields in the secondary market, those on

19 For instance, the share of loans without a defined maturity (including loans through credit cards, which have the highest interest rates), in total consumer loans is greater in Greece than in the euro area as a whole.
20 See David Haugh, Patrice Ollivaud and David Turner, "What drives sovereign risk premiums? An analysis of recent evidence from the euro area", OECD Economics Department Working Paper No. 718, 22.7.2009.

Treasury bills dropped to historic lows during the year. On balance, Greek government borrowing costs fell on average to approximately 4.3% year-on-year between January and September, on account of the much stronger share of Treasury bills in new borrowing.

Despite the pressure on Greek government bonds during the current crisis, investors' interest in the primary market for Greek government paper was keener than in 2008. Demand for auctioned Treasury bills outstripped supply by about six times and there was also strong demand for syndicated issues.

Stock prices rebound from mid-March onwards

Although the Athens Exchange (Athex) composite share price index remained on a declining path until early March 2009, it rebounded vigorously thereafter and up until the end of September 2009. The funds raised registered a remarkable increase in this nine-month period, reaching €3.3 billion, compared with just €0.4 billion in the corresponding period of 2008, owing almost exclusively to the financial sector.

In line with developments in international stock markets, stock prices followed a downward trend from early 2009 and up to the first ten days of March. This trend is associated with investors' risk aversion amid heightened uncertainty about the impact of the crisis on corporate profitability and the economy as a whole. Further pressures on Athex stock prices came from foreign investors' disinvestment, which was partly due to their repatriating funds in order to meet obligations in their home countries. Thereafter, however, the Athex composite index bounced back strongly, as also did most of the other international stock price indices. The recovery in international stock markets was associated with a turnaround in investors' risk appetite. In the case of the *domestic* market, it was additionally facilitated by two factors: first, the resilience of Greek banks during the crisis on account of the soundness of their key aggregates and, second, the fact that the economic downturn was milder in Greece than in the euro area. Another positive contribution was made by the increased investment activity of both foreign and domestic investors – as regards the former, in April 2009 net inflows were recorded for the first time since July 2008. As a result of these developments, at end-September 2009, the Athex composite index was 49% higher than at the end of 2008. Of course, as in the nine-month period January-September 2009 it remained, on average, 46% lower than in the corresponding period of 2008, the average daily value of transactions also registered a decline of 47% at the same time.

The stability of the Greek financial system was safeguarded, but increasing non-performing loans warrant constant vigilance

The Greek banking system faced important challenges in the first half of 2009, which did not, however, undermine its stability. In fact, the progressive normalisation of international money and capital market conditions from March 2009 onwards, in conjunction with the credit support measures provided for by Law 3723/2008, contributed to the resilience of the banking system. Notwithstanding that, the estimated contraction of economic activity in Greece and in other South Eastern European countries, where Greek banks are active, warrants constant vigilance, as it affects the quality of banks' loan portfolios and their profitability. Given that, in the current environment of stagnating or slightly contracting GDP, non-performing loans increased markedly in the first half of the year and a further rise is expected by the end of 2009, it is likely that, if growth remains weak in 2010-2011, the upward trend of non-performing loans will continue, affecting banks' profitability adversely. This in turn could prompt banks to undertake capital increases. In view of the changes in the supervisory framework, the Bank of Greece will exercise its supervisory functions even more acutely.

In particular, the further deterioration of real economy in Greece (and in other countries where Greek banks are active) has had a bearing on the financial condition of enterprises and households. As a result, the ratio of non-performing loans to total loans (NPL ratio) increased to 6.8% at the end of the first half of 2009, from 5% at end-2008. Another negative development was the drop, from 48.9% in December 2008 to 41.1% in June 2009, in the ratio of accumulated provisions to non-performing loans. Although this ratio does not take into account the sizeable guarantees and collateral held by Greek banks, its steady decline should be given due consideration when banks draw up their provisioning policy. Greek banks' exposure to market risk also rose owing to their increased bond holdings; however, capital requirements for market risk still represent only a small proportion of total capital requirements.

In contrast with the abovementioned risks, liquidity risk declined. In the first half of 2009, the loan-to-deposit ratio of Greek banks and banking groups improved from its end-2008 level, (end-June 2009: banks: 104.1%, banking groups: 111.7%; end-December 2008: banks 108.4%, banking groups: 115.1%) and remained significantly lower than the EU-27 average ratio (2008: 121.5%). Both the liquid asset ratio and the asset/liability maturity mismatch ratio remained above the regulatory minimum and even edged up marginally. Liquidity risk was reduced on account of the liquidity support measures provided for by Law 3723/2008, the rise in deposits, moderated credit expansion, a progressive normalisation of money and capital market conditions in the second quarter of 2009, and the restoration of investor confidence in Greek banks.

The profitability of Greek banks and banking groups deteriorated significantly in the first half of 2009, compared with the same period of 2008, mainly because the provisions for credit risk more than doubled and, to a lesser extent, because of a decline in net interest and fee income. By contrast, profitability was favoured by profits from financial operations and investment portfolios, as well as by the relatively limited rise in operating costs. The key profitability indicators of banks also registered a decline, leading to a narrowing of the net interest rate margin. A sharp deterioration was also recorded in respect of return on equity (ROE) and return on assets (ROA), compared with the first half of 2008.

By contrast, both the Capital Adequacy Ratio (CAR) and the Tier 1 ratio improved considerably thanks to a strong increase in banks' regulatory capital, driven by the issuance of preference shares that were disposed to the government under Law 3723/2008, as well as by the successful completion of capital increases in certain banks. Risk-weighted assets remained almost unchanged, as slower credit expansion helped keep capital requirements for credit risk at moderate levels.

As regards the implementation of Law 3723/2008, there has been significant recourse to the capital support measures (€3.8 billion out of the earmarked €5 billion) and to the liquidity-providing measures through the issuance of special Greek government bonds (€4.5 billion out of the earmarked €8 billion). By contrast, only a small fraction (€3 billion) has been used out of the total €15 billion earmarked for bank loan guarantees, given that these measures entail high costs for banks and that the normal functioning of euro area money and capital markets is gradually being restored. Therefore, of the total amount of €28 billion provided for by Law 3723/2008, only €11.3 billion —which corresponds to a utilisation rate of 40%, roughly the same as in the euro area and the EU-27 (43% and 40% respectively)— has been used so far. Furthermore, this amount of €28 billion corresponded to 11.7% of GDP in 2008, i.e. it was lower than the euro area average (26.5%) and the EU-27 average (23%) for the same year.

7 THE MEDIUM- AND LONG-TERM PROSPECTS OF THE GREEK ECONOMY AND THE CHALLENGES FOR ECONOMIC POLICY

As mentioned earlier, in the introduction to this chapter, there is an urgent need to elaborate and start implementing a credible medium-term plan that will include bold but necessary reforms. *The top priority must be fiscal consolidation, combined with (i) the restructuring of public expenditure, in favour of those that affect growth the most and contribute to supporting weaker social groups, and (ii) structural reforms that entail zero or low budgetary costs and can immediately boost growth prospects.* Adopting a credible medium-term plan is necessary in order to avoid, *inter alia*, the vicious circle of increasing debt and worsening market expectations on the country's fiscal position.

Fiscal consolidation is imperative in order to prevent the stalling of the country's economic prospects

The current high levels of the government deficit and debt, as well as the constant reassessing of risks by investors in financial markets worldwide, call for a fast and decisive correction of deficits, in order to considerably reduce the debt-to-GDP ratio. According to empirical studies on economies with extremely high public debt (e.g. above 100% of GDP), conducting any expansionary fiscal policy (beyond the operation of automatic fiscal stabilisers) during a downturn would be entirely ineffective, as the markets perceive that, under these circumstances, a widening fiscal deficit and further increases in public debt reflect an inability to control fiscal developments and therefore judge that the fiscal situation is unsustainable. Thus, markets demand higher insurance premia, causing further increases in the cost of borrowing and a greater difficulty in refinancing the existing debt. Since a large part of Greece's debt is held by international investors, Greece is exposed to the risk of a sharp change in their stance. For countries with extremely high debt levels, a number of studies have shown that the conduct of a restrictive fiscal policy, which entails a decrease in the deficit and the debt, can help improve expectations about the future fiscal position and boost economic activity.[21]

Fiscal consolidation is also warranted in view of demographic developments and prospects, which are particularly adverse for Greece and will put additional pressure on public finances after 2015. As these future developments are expected to have a dramatic impact on public debt, irrespective of the current crisis, it is absolutely necessary to achieve fiscal adjustment and to reform the social security system. A recently published IMF study reveals the true size of Greece's fiscal problem, (i) if demographic trends and their future impact are taken for granted and (ii) in the absence of bold decisions in the fields of fiscal and structural policy. The main conclusion is that there is an urgent need for essential fiscal consolidation and for the advancement of structural reforms that increase the potential rate of growth and address the impact of population ageing effectively.[22]

21 See IMF Staff Position Note "Fiscal implications of the global economic and financial crisis", 9 June 2009. Also, (i) A. Alesina and R. Perroti, "Fiscal Expansions and Adjustments in OECD Countries", Economic Policy, XXI, 1995, pp. 205-48, (ii) "Reducing Budget Deficits" in *Swedish Economic Policy Review*, 3, 1996, pp. 113-34, and (iii) C.J. McDermott and R.F. Wescott, "An Empirical Analysis of Fiscal Adjustments", *IMF Staff Paper*, No. 4, Vol. 43, December 1996, pp. 726-27. These findings were also corroborated by the recent paper of W. Koehler-Toeglhofer and M. Zagler, "Public Debt Dynamics During Different Fiscal Policy Regimes", p. 24 (presented at the conference on government debt, held by Banca d' Italia in Perugia on 1-3 April 2004).

22 In this study (IMF, Greece-Selected Issues, chapter II: "A Fiscal Early Warning System Based on the Comprehensive Public Sector Balance Sheet", August 2009), the IMF presents a more complete methodology with regard to Greece's future fiscal obligations. More specifically, it adopts a public sector balance sheet approach and estimates the current net worth (NW) of the public sector based on estimates for assets, liabilities and net capital stock. The IMF study, which is based on a long-term (spanning as far as 2060) macroeconomic and fiscal scenario (that takes into consideration, *inter alia*, population ageing as well), estimates the net present value (NPV) of future primary surpluses/deficits. This NPV reflects the accumulation of assets and liabilities that stem from the current fiscal and structural policies and the effects of the anticipated population ageing. By adding NW to the NPV of future primary surpluses/deficits, the IMF calculates the comprehensive net worth (CNW) and its future change on an annual basis. According to the IMF estimates, the current NW in 2008 was -21.9% of GDP, the NPV of future primary deficits was -373.2% of GDP, and the sum total of the two, i.e. the CNW, was -395.1% of GDP. Given the current fiscal and structural policies and IMF estimates on economic growth, it is estimated that in 2014 the current NW will amount to -53.8% of GDP, the NPV of future primary deficits to -480.2% of GDP, and the CNW to -533.9% of GDP. In other words, whereas the public debt on a national accounts basis (the recorded liabilities) came to 99.2% of GDP in 2008 (according to recently revised data), if one takes into account the future fiscal impact of current policies as well, then the real total debt burden (recorded or not) of the Greek government in 2008 was 395.1% of GDP. And, if the stance of fiscal and structural policy does not change, then in five years from now, this burden will have bloated to 533.9% of GDP. It should, of course, be mentioned that the application of this method yields similar results for other countries too.

Large primary surpluses are also needed in order to reduce public debt substantially within a reasonable time span

Containing fiscal imbalances and bringing the debt-to-GDP ratio below the reference value set in the Maastricht Treaty (60%) will require a strong fiscal effort. According to indicative estimates, achieving this goal within a reasonable time span (e.g. within 10 years) would require large primary surpluses in the order of 5.5-6.5% of GDP per annum, assuming that the growth rates will be low and that the rates on government borrowing will remain at today's levels or increase (for reasons already mentioned).[23] Therefore, the fiscal plan will have to be consistent with the achievement of large primary surpluses in the medium term. In any event, the targets for the general government deficit in 2010 and the consequent years will have to involve a substantial decrease in the "structural" deficit (i.e. the deficit remaining after the deduction of cyclical and temporary effects on revenue and expenditure). Taking into consideration the dangerous dynamics of public debt, given its level, *the target of fiscal consolidation should be to reduce the "structural" fiscal deficit by 1.5-2% of GDP per annum*, i.e. markedly more than the minimum of 0.5% of GDP per annum anticipated by the Stability and Growth Pact or the minimum of 1% of GDP per annum deemed necessary for countries with high deficit and debt levels. Furthermore, as mentioned previously, *a stronger effort (i.e. an overall reduction in the structural fiscal deficit by 4-5% of GDP) will have to be put in over the two-year period 2010-2011.*

The necessary multi-annual plan for fiscal consolidation must be finalised and made public as soon as possible, so that markets can know from the start what the authorities intend to do (and how they intend to do it) once the economy gets back on track. *It is of vital importance to convey to the markets the message that Greece remains firmly committed to the medium-term target of a sound fiscal position*, as provided for in the Stability and Growth Pact. *This would enhance the country's credibility in international markets and create positive expectations.* As shown in a recent OECD study,[24] even *unsubstantiated expectations* about an increase in a country's public debt are capable of contributing to the widening of the yield differential between that country's bonds and their corresponding German securities (reference bonds). It is also characteristic that Germany, whose government securities are considered a "safe haven" for investors, amended its constitution and incorporated stringent provisions in order to limit annual public borrowing and the time for the repayment of public debt.[25] In this way, Germany aims to instil the "appropriate" expectations in the markets that, as soon as the crisis ends, it will resume its prudent fiscal policy. The negative implications for the Greek economy from the high public deficit and government debt are analysed in great detail in the Annex to Chapter V.

Fiscal consolidation must be combined with a reallocation of public expenditure, in order, *inter alia*, to support weaker social groups, and with structural reforms that entail zero or low budgetary costs but can immediately boost growth prospects

At the same time, fiscal adjustment must be carried out cautiously, so as to avoid hurting the weaker social groups that have already been hit by the crisis and to ensure favourable conditions for business activity and economic recovery. A fiscal adjustment of such a scale could be achieved if the effectiveness of the tax collection system is improved and part of the huge tax evasion can be combatted, while reducing the squandering of public funds and increasing their efficient use through a rational restructuring of expenditure.

23 More specifically, it was assumed that the rate of increase in nominal GDP would be only 3.5% and that the average rate for government borrowing would be in the area of 4.5%-5.5%.
24 See footnote 20 above.
25 Kremer J. and D. Stegarescu, "New budgetary rules for Germany: On the role of forecasting errors regarding cyclically adjusted tax revenue", June 2009. This paper was presented at a Public Finance Workshop held by the ECB in Cyprus on 3 July 2009.

A favourable impact on growth could also come from the expedition of reforms which entail no budgetary cost but can immediately help improve productivity, e.g. by reducing red tape, eliminating corruption and strengthening competition. The European Economic Recovery Plan, which was adopted by the European Council in December 2008 and relates to all EU Member States, includes ten actions for structural interventions over a two-year horizon, which could stimulate demand and bolster the resilience of European economies. These actions are of paramount importance for Greece.

A well-balanced but also robust fiscal consolidation would build confidence in the economy's medium-term prospects and thereby restore the optimism that is necessary for the rational programming of consumption over time and the undertaking of far-reaching investment initiatives. Such a fiscal consolidation would also reduce the cost of borrowing for the State (affecting the private sector's cost of borrowing), as well as debt-servicing outlays, thus releasing funds needed to support the more vulnerable social groups and promote productive public investment. At the same time, *quick-yielding structural reforms, which improve total factor productivity and increase the economy's potential output, will mitigate the impact of the crisis and ensure that the recovery will start soon, proceed at a fast pace and be sustainable. Averting a fiscal deadlock and triggering a structural reorientation are both key to the implementation of the much-needed multi-annual adjustment plan.*

Key orientations of a multi-annual fiscal adjustment plan

The economic crisis has brought to the fore the chronic structural fiscal weaknesses and imbalances of the Greek economy, such as the total ineffectiveness of the tax and social security contribution collection mechanisms, extensive tax evasion, the inability to contain public expenditure combined with an inefficient and non-transparent public sector and the sustainability problems that the social security system is faced with. These weaknesses have contributed to high fiscal deficits over long periods of time, interrupted only temporarily by unfinished fiscal consolidation efforts. This resulted in the accumulation of an extremely high public debt. Moreover, this debt does not fully reflect the size of the fiscal problem, since it does not contain the future fiscal burden from population ageing, which will be particularly severe in the case of Greece. Also, as mentioned previously, debt figures do not include government guarantees on loans or the government's outstanding liabilities to third parties.

In order for the effort to reduce high public debt to bear fruit, expedited fiscal consolidation will be required in the forthcoming years. Because of the economic crisis and the possibility of a slow or delayed recovery, a substantial reduction in the debt levels cannot stem from the favourable relationship between real interest rates and real GDP growth this time. Therefore, a substantial reduction in public debt can only come from the achievement of high primary surpluses. *International experience shows that a fiscal consolidation strategy based mainly on cutting back and rationalising expenditure is more likely to succeed and to help boost growth. This is the case because such a policy implies a more efficient utilisation of public resources, leaves room for an alleviation of the tax burden, thus encouraging both business activity and labour supply (provided that it reduces tax evasion and expands the tax base) and enhances overall the credibility of medium-term fiscal objectives.* On the contrary, when fiscal consolidation is based mainly on revenue, there is a lesser chance of success, not only because tax-payers, anticipating an increase in their tax burden, tend to cut back on spending, but also because such a policy can have an adverse impact on productivity, due to the distortions it causes to financial incentives and international competitiveness.

In the period prior to the crisis, substantial reforms in several countries (e.g. Finland, Ireland, the Netherlands, etc.) had contained public consumption outlays and transfer payments, creating substantial primary surpluses and making it possible to drastically reduce public debt.[26] Turning to the present, it would be useful to compare the recent developments in Greece and in Ireland. According to the IMF,[27] the Irish economy has been in a recession since 2008, when its GDP fell by 3.0% and its deficit reached 7.3% of GDP. Negative growth rates have been projected to continue both this year and in 2010 (-7.5% and -2.5%, respectively), while the deficit is projected to climb to 12.1% of GDP this year and to 13.3% of GDP in 2010. Although the economic crisis was much worse in Ireland than in Greece, the Irish government drew up a supplementary budget in April 2009 focused on containing expenditure (including a 10% cut in wage outlays) and increasing taxes, so as to contain the fiscal deficit. The decisive stance of the Irish authorities and the social consensus that was achieved as far as the necessity of the fiscal consolidation effort was concerned, even under extremely adverse economic conditions, are a very instructive example.

Taking the above into consideration, *in the case of Greece, two-thirds of fiscal consolidation should come from the expenditure side and the remaining one-third from the revenue side (i.e. by tackling tax evasion and broadening the tax base).* Furthermore, considering that the fiscal deficit in Greece has widened disproportionally to the drop in economic activity, thereby confirming the impact of strong structural factors, it is obvious that *necessary fiscal consolidation will have to include bold actions of a structural nature.*

The squandering of public funds is widespread in the public sector – Tax evasion is also rife and worsening

To provide a measure of the squandering of public funds and of the extent of tax evasion, we indicatively note that:

- According to a working paper published by the ECB in 2003, the *same* amount and quality of public goods and services could be provided in Greece with nearly 30% *less* public expenditure.[28] Assuming that this continues to be the case, putting an end to squandering could save the State Budget some €18 billion primary expenditure.

- An earlier paper had estimated that tax evasion ("taxes not paid") in 1997 amounted to 14.6% of GDP or roughly 60% of the tax revenue of the ordinary budget.[29] Other studies have estimated that VAT evasion is as high as 38%[30] and direct tax evasion as high as 26%.[31] Based on the simplified assumption that these percentages continue to apply, a *total* eradication of tax evasion would yield revenue in the range of €13 to €35 billion.

Therefore, if the squandering of public funds and tax evasion are gradually combatted within the next 10 years, the estimated fiscal gains could be in the area of €3 to €5 billion or 1.2% to 2.2% of GDP *per annum*.

Priority must be given to containing public spending and increasing its efficiency

As shown by both international and national experience, fiscal consolidation is more likely to be sustainable, if based on a permanent containment of primary expenditure and an increase in their efficiency, especially in personnel outlays (mainly by reducing the number of new recruitments) and the expenditure for transfer payments. By contrast, a containment

26 Ireland has reduced its public debt by 69.2 percentage points of GDP between 1994 and 2006, the Netherlands reduced theirs by 32.9 percentage points between 1994 and 2007 and Finland reduced its public debt by 24.4 percentage points between 1995 and 2008 (ECB, *Monthly Bulletin*, September 2009, Box 10, "Experience with government debt reduction in euro area countries").
27 IMF, *World Economic Outlook*, October 2009.
28 See Afonso A., L. Schuknecht and V. Tanzi, "Public sector efficiency: an international comparison", ECB Working Paper No. 242, July 2003, pp. 20-22.
29 Tatsos, N. (2001), *Underground Economy and Tax Evasion in Greece*, Foundation for Economic and Industrial Research (IOBE), Papazisis Publishers [in Greek], p. 94.
30 Kanellopoulos, K., I. Kousoulakos and V. Rapanos. (1995), *The shadow economy and tax evasion in Greece: estimates and economic implications*, Centre for Planning and Economic Research, Report 15 [in Greek].
31 Matsaganis, M. and M. Flevotomou (2009), "Distributional implications of income tax evasion: the case of Greece", Athens University of Economics and Business, in press.

of expenditure through reduced interest payments (for instance, by means of financial operations that essentially postpone interest payments) is temporary and easily reversible. *In the meantime, public expenditure must be restructured in favour of areas that promote economic growth, such as expenditure for education, R&D and infrastructures.* In the past few years, these areas, especially expenditure for public investment, have declined as a percentage of GDP. *This restructuring would improve the "quality" of public finances.* The findings of the latest survey on the quality of public finances in the EU are quite revealing when it comes to Greece. More specifically, Greece ranks last (27th) in respect to the overall composition of its spending, 24th with regard to expenditure for R&D and 21st with regard to expenditure on education. In other words, the "quality" of public finances in Greece is one of the lowest in the EU. Therefore, there is considerable room, and an imperative need, to contain public expenditure significantly and at the same time to restructure it with a view to improving the "quality" of Greece's public finances.[32]

As highlighted in earlier Bank of Greece reports, a very useful way to effectively control government expenditure is to establish numerical fiscal rules (preferably by law of superior status) as regards the level (either in absolute terms or relative to GDP) or the annual growth rate of public expenditure. Greece is the only country in the EU, which has not enacted such national regulations, the purpose of which is to complement and strengthen the respective rules of the Maastricht Treaty and the Stability and Growth Pact.

The effectiveness of these budgetary rules is directly linked to transparency. The budgetary target variables must be very accurately set, their evolution systematically monitored and the outcome must be measurable. The rules must be considered permanent and, apart from the central government, must also cover all general government sectors (e.g. public administration, hospitals, local governments, universities, etc.), while annual targets must be tied to relevant medium-term targets. The existence of a proper institutional framework for the application of budgetary rules is considered equally crucial. Measures of this sort would include the preparation of multi-annual budgets, the use of techniques for monitoring the spending efficiency when drafting the budget (for instance, zero-based budgeting), the timely elaboration and submission of the budget to Parliament along with detailed data, broken down by "code", the structuring of the budget per project and the compilation of sectoral budgets, so as to cover all the respective general government sub-sectors (social security funds, local governments, public hospitals, universities, etc.).[33] Since the local governments have reported substantial and widening deficits over the past 15 years, the implementation of an "internal stability and growth pact" between the central government and local governments would be advisable, in parallel with the establishment of effective inspection mechanisms. International experience has also shown the need for independent bodies (research centres, institutes, "fiscal councils", etc.) that could monitor a country's fiscal performance and fiscal policy stance.[34]

It is necessary to substantially enhance the efficiency of the tax system focusing on the overhaul of the tax collection mechanism

While cutting back on spending, every possible effort must be made to enhance the efficiency of the tax system and increase tax revenue (i) by improving the tax collection mechanism, with a focus on curbing tax evasion and (ii) by eliminating unjustified tax exemptions and other arrangements, thereby broadening the tax base. *To the extent that this is achieved, tax*

32 See European Commission, *Public Finances in EMU – 2009*, June 2009, pp. 71-86.
33 See also V. Rapanos (2007), "Preparation and implementation of the state budget: European experience and Greek reality", IOBE.
34 See European Commission, *Public Finances in EMU – 2006*, pp. 122-168. Also, ECB, *Monthly Bulletin*, September 2009, Box 9, "Domestic fiscal rules and institutions as a complement to the EU fiscal framework", p. 84.

rates could then be lowered, helping Greece cope with the strong tax competition from other countries.

According to indications, tax evasion has taken on serious proportions in the past 10 months or so, in spite of the measures enacted[35] in August 2007 and at the beginning of 2008. This development can be attributed to the economic downturn only in part. Irrespective of any conjunctural upsurge, tax evasion in Greece remains a structural problem, the dimensions of which obstruct a fair distribution of the tax burden and an efficient allocation of resources. Achieving sustainable fiscal adjustment cannot be expected without substantial reining in tax evasion. What is more, tax evasion exacerbates the existing income inequality and makes it necessary for the government to resort to high (nominal) tax rates, which impact adversely on the competitiveness of Greek products and services and lead to even greater tax evasion. The unfairness of the tax system becomes all the more pronounced whenever extraordinary taxes (e.g. extraordinary contributions) estimated on the basis of the declared revenue are imposed or whenever tax amnesties are given. The widespread belief that wage earners and pensioners account for the largest share of extraordinary tax contributions has been shown to be well-founded.[36] The need to stamp out tax evasion is therefore not only dictated by fiscal motives, but is a necessary step towards improving the competitiveness of the Greek economy and restoring equity among taxpayers.

Extensive tax evasion in Greece is the most tangible proof of the malfunctioning and inefficiency of the tax collection mechanism. *Any attempt to curb tax evasion must therefore be focused on overhauling the tax collection mechanism* and could be supported by further progress in computerisation, the simplification of tax provisions and the substantial enhancement of presumptive taxation (combined with stricter penalties for tax evasion), as well as an effective control of corruption. The tax collection mechanism is the only link between the tax base and (i) tax legislation, on the one hand, (ii) tax revenue, on the other. Even though improvements in tax legislation can simplify the work of tax collection authorities, they can not make up for the inefficiency of the tax collection mechanism.

The conditions that have prevailed in Greece over the past 60 years have particularly fostered tax evasion. The prospect of eradicating tax evasion is considered unlikely and has in fact grown more remote over the past 30 years. Repeated recourse to such measures as "the settlement of pending tax cases with favourable terms for the taxpayer" or "the collection of overdue taxes with favourable terms for the taxpayer" seriously or totally undermines the imposition of enacted sanctions or fines and fosters expectations among the citizens who owe taxes of even more advantageous arrangements in the future, while giving tax authorities the impression that their fight against tax evasion is a lost cause.

There are other factors that are conducive to tax evasion and its extent in Greece. Taxpayers' impression that the taxes they pay are not used efficiently, the complexity and ambiguity of tax provisions and, first and foremost, the impression that the tax burden is not fairly distributed are only some of the arguments used as an excuse for tax evading. To put matters simply, all the conditions are in place for extensive tax evasion in Greece.

The reform of the social security system must also proceed at a bold step

In the long run, what probably poses the most serious structural problem is the fiscal burden

35 The aim of the measures against tax evasion (Law 3610/2007), enacted in the summer of 2007, was to give consumers an incentive to demand receipts, especially from small- and medium-sized service businesses. The equalisation of taxation on heating oil and diesel oil on 15 February 2008 aimed at beating tax evasion of the special consumption tax on fuel.

36 It would be very interesting to investigate how many of the 128,000 payers of the extraordinary contribution in 2009 owned expensive vehicles with large engine capacity (2,500 cc and above), of which there are half a million in circulation in Greece, as well as how many of them were wage earners and pensioners.

of population ageing. According to recent estimates from the European Commission (EU Ageing Working Group),[37] Greece's future liabilities on account of population ageing will increase by 15.9 percentage points of GDP between 2007 and 2060, compared with 4.7 percentage points of GDP for the EU-25 on average. Addressing this structural issue in a timely and effective manner will be crucial to achieving sustainable fiscal consolidation. *Compared to other EU countries, Greece has been slow in adopting a comprehensive social security reform with a long-term outlook.*

The latest social security law (Law 3655/2008), which mainly addressed the piecemeal pension system by unifying a large number of social security funds, was a positive step towards reforming the system, even though a number of problems, even at the organisational level, still need to be resolved. The aim of this law was to cut high administrative costs, create the right conditions for a more efficient management of social security fund assets and simplify convoluted social security legislation. An additional aim was to reduce early retirement by increasing the retirement age for specific categories of workers and gradually aligning it with the age limit set in the general provisions.[38] However, hazardous occupations and the retirement age for these occupations still need to be redefined. Early retirement has, to some extent, been responsible for worsening the system's already low rate of return on contributions, by depriving the funds of contributions and at the same time burdening them with the payment of pensions to the early retirees. However, the increased rate of return on contributions that was achieved by the reduction of the number of early retirees is marginal in relation to the magnitude of the problem.

In the case of Greece, improving the rate of return on contributions would discourage and help curb contribution evasion, which —like tax evasion— appears to have reached alarming proportions. In a funded system, employees have a strong incentive to ensure that both their contributions and their employer's contributions have been paid.

The need to address the expected burden on the budget from population ageing in a timely manner and to reduce the debt-to-GDP ratio has recently acquired another dimension, as the EU Council decision of 9 October 2007 is entering into force. According to this decision, "implicit liabilities" in the budget will be incorporated into each country's medium-term fiscal objective, which is included, in turn, in the Updated Growth and Stability Programme for each year. These are mainly social security liabilities, which are long-term by their nature. Against this backdrop, the European Commission has devised a way of assessing the medium-term budgetary objective, as well as fiscal sustainability, explicitly taking into account: (a) the level of public debt, (b) the intensity of the effort to reduce it, and (c) the estimated level of future liabilities for pension and healthcare. In order to mitigate the fiscal impact from population ageing, the decision provides for the establishment of a reserve —to be completed by around 2030, starting from now— which will cover part of the future liabilities.[39] A first pilot trial by the Commission[40] of the new assessment method (before the fiscal aggregates deteriorated on account of the crisis) showed that *Greece, with the second highest debt and the highest expected increases in pension expenditure in the EU-27, should have the most ambitious medium-term budgetary objective of the entire EU to ensure the sustainability of its public finances.* In accordance with the Council's decision, the implicit liabilities will be first incorporated in December 2009 when the Updated Growth and Stability Programme 2009-2012 will be submitted.

37 "The 2009 Ageing Report: economic and budgetary projections for the EU-27 member states (2008-2060)", *European Economy*, No. 2, 2009 (May).
38 Apart from the retirement age, the decision to retire early also depends on the minimum number of years worked that is required to qualify for pension, as well as on the amount of the early pension.
39 See European Commission C-2/D(2008), *Incorporating implicit liabilities into the medium-term budgetary objectives (MTO): A new proposal*, Brussels, 12.6.2008.
40 Op. cit., p. 3.

A series of structural reforms must be urgently implemented in order to enhance the potential growth rate of the economy and employment

The economic crisis, apart from its immediate impact on GDP and per capita income, can also have a negative medium-term impact on the rate of change in a given economy's potential growth rate, on account of the impairment of existing fixed assets (for instance, in cases where production has been discontinued), the slowdown of capital accumulation (as a result of heightened uncertainty and increased cost of capital), a drop in the employment rate (due, among other factors, to the permanent withdrawal of certain individuals from the labour market), etc.[41] The slowdown of the potential growth rate would reduce the ability to avoid a build-up of excess demand (positive output gap) and thereby of inflationary pressures in an economy, thereby making it more difficult for monetary policy to safeguard price stability.

In the case of Greece, the weakening of the potential growth rate, combined with a persistently high general government deficit, a public debt that was already high before the onset of the crisis and the expected impact of demographic trends (a decline in the percentage of active population aged between 15 and 64), makes the need for structural reforms all the more pressing.

There is a need for policy measures that will improve the responsiveness of supply to the changes of demand and to ongoing technological advances. The success of these measures will depend on their consistent implementation and —given that the gains will only become visible in the medium term— on consensus-building with regard to their necessity. The perception (and the practice) that the state should always come to the rescue and the frequent cases of non-compliance with enacted laws (under pressure from interest groups) imply that the adoption of certain measures does not, by itself, guarantee their success.

The positive trade-off from the necessary changes would be an increase in potential output growth over the medium term and, as a result, of employment. However, gains would also be reaped in the short term, in the form e.g. of better borrowing terms for the Greek government[42] and for private enterprises.

As already mentioned, the present downturn is an opportune moment to proceed with structural reforms. As far as enterprises are concerned, the economic crisis favours the introduction of innovations, as opportunity costs are low. For the economy as a whole, the cost of non-action would be much higher in the medium term.

The Greek economy's rigidities are clearly reflected in the limited changes in the composition of economic activity and the country's ever-expanding public sector. It is indicative that employment rates in individual manufacturing sectors have not changed significantly since the early 1990s. Even though certain activities are declining, owing to such factors as technological advances and globalisation, resistance to the dropping of unsustainable activities and the presence of obstacles to the setting up of new enterprises do not create the necessary prerequisites for substantial changes to the composition of economic activity. Also, as already mentioned, extensive tax evasion —which is easier in certain activities (for the most part in the services sector)— favours the gradual transfer of resources to sectors of non-internationally tradable goods. Besides, *the effort to maintain jobs even in enterprises with*

41 See also IMF, *World Economic Outlook*, October 2009, Chapter 4. In addition: European Commission, "Economic crisis in Europe: causes, consequences and responses", *European Economy*, 7/2009 (provisional version), 25.9.2009, pp. 24-34. In this report, the European Commission estimates that potential growth in the euro area may decrease, as a result of the crisis, from 2% to 1-1.5% per annum in 2009-2013, whereas in Greece it may fall from some 3.5% over 1999-2008 to less than 2% in the period 2009-2013.

42 According to a recent OECD study (see footnote 20), Greek government bond yields increased substantially in the past year over the corresponding German ones and in fact increased more than the yields of bonds from other countries with a similar public debt-to-GDP ratio, on account of the debt increase expected in the medium term as a result of the government's social security obligations. Proceeding with structural reforms could therefore lead to a decrease in yields and, thereby, in borrowing costs.

poor prospects of survival may support employment in the short term, but ultimately sentences these firms —and, consequently, the regions where they are located— to economic decline over the medium term. Job creation (of questionable advisability) in the public sector only masks the problem of limited job creation in the private sector. Besides, there is no room whatsoever for a further expansion of the already oversized public sector.

It is necessary to solidly put in place conditions that would favour the setting-up of new businesses, the strengthening of exports, the inflow of foreign direct investment and the creation of new jobs in the private sector

Putting in place conditions that favour the creation of new, or the expansion of already existing, businesses will facilitate changes in the composition of economic activity that are dictated by current developments. In this respect, *emphasis should be placed on eliminating barriers to competition, as well as to the movement of capital and labour from declining sectors and enterprises to sectors with high value added.* This is the only way to maintain and increase income from employment and from healthy entrepreneurship in internationally competitive sectors and to curb structural unemployment.

Start-up procedures and costs are more cumbersome in Greece than in many other EU countries.[43] On top of that, the commencement of business in certain professions requires time-consuming bureaucratic processes. The cost and the time needed for resolving disputes between commercial enterprises and for closures inhibit business activity. It should be noted that a bankruptcy procedure in Greece — due to the fragmentation of the enterprise to which the bankruptcy often leads (as the enterprise is not transferred as a whole, but part by part) — results in creditors recovering a smaller portion of their investments compared with the other EU-15 countries.[44]

These obstacles do not only impact on domestic activity adversely, but also result in lower ratings for Greece (based on various international indicators, such as the OECD's,[45] the World Bank's[46] and the UN's[47]) than its competitors for Foreign Direct Investments (FDI).[48] According to UN data (UNCTAD), average FDI inflows in Greece over the 2006-2008 period accounted on average for 6.3% of gross fixed capital formation, whereas the corresponding EU average was three times higher (18.6%). The FDI stock in Greece amounted to 17.0% of GDP at end-2007 and 10.3% at end-2008 (mainly due to the drop in the market price of shares), compared with an EU average of 40.9% and 35.1%, respectively.

The lack of up-to-date and sufficient information on the regulatory environment (the latest data available relate to 2003) also hinders the attraction of investment, given that the progress made in several fields after 2003 (e.g. the liberalisation of opening hours for retail shops) has not been adequately reflected.

Turning to the regulatory environment, certain phenomena observed around the world during the current crisis do not support the case for increased state involvement in the economy but rather for a more effective supervision of mar-

43 Furthermore, significant burdens ensue just from the operation of a business. Administrative costs incurred so that enterprises and citizens can meet their legal obligations to provide information on their activities or production, either to public authorities or to third parties, are in Greece the highest of the EU: 6.8% of GDP in 2005, compared with the EU-25 average of 3.5% (see European Commission, "Measuring administrative costs & reducing administrative burdens in the EU", Memo/06/425, 14.11.2006, and "Action Programme for Reducing Administrative Burdens in the European Union Commission Staff Working Document", SEC(2007)84, 24.1.2007). Moreover, according to an earlier report by the Hellenic Federation of Enterprises (SEV), the "measured bureaucratic burden" amounted to 1.6% of the value added in large enterprises, 3.7% in medium-sized and 7.2% in small enterprises (see Hellenic Federation of Enterprises (SEV), *Summary findings of SEV-IOBE pilot survey*, 16 June 2005 [in Greek]).

44 See S. Djankov, O. Hart, C. McLiesh and A. Shleifer (2008), "Debt enforcement around the world", Journal of Political Economy, vol. 116, no 6, pp. 1105-49.

45 See Anita Wölfl, Isabelle Wanner, Tomasz Kozluk and Giuseppe Nicoletti, "Ten years of product market reform in OECD countries – insights from a revised PMR indicator", OECD Economics Department Working Paper No 695, April 2009.

46 World Bank, *Doing Business 2010* – Greece (country profile), 9 September 2009.

47 UNCTAD, *World Investment Report 2009*, 17.9.2009.

48 Greece, Ireland and Slovakia are the only OECD countries for which data regarding (i) the indicators of regulatory interventions in business activities and (ii) legislative provisions on the commencement of business for freelancers are not available in the OECD database for 2008.

kets. For example, inefficient financial supervision in some countries (mainly because responsibilities are fragmented across different agencies and the role of central banks is limited) simply points to the need for effective control mechanisms and independent regulatory authorities (for the new international recommendations on financial supervision, see also Box II.2).

Some of the procedures for starting up a business are designed in a way that does not place disproportionate burdens on small enterprises. However, there are costs that are irrespective of business size. Meanwhile, small enterprises have no incentives to grow, even though the productivity of larger businesses is significantly higher. By contrast, the tax system favours self-employment and the creation of small enterprises. Other countries (such as France) opt for business clusters with a view to making the most out of economies of scale.[49]

Moreover, there are no sufficient incentives for promoting R&D and partnerships between enterprises on the one hand, and research and academic institutions, on the other, as shown by the fact that R&D expenditure stand at 0.7% of GDP, when the Lisbon target is 3%.

A positive correlation between the economic growth rate and the export growth rate has been established in all OECD countries over the 2000-2007 period.[50] The promotion of Greek exports cannot be achieved through just a better marketing of the products. First and foremost, there is a need for actions that will enhance the competitiveness of Greek products, i.e. increased productivity and provisions for containing product price increases. Providing incentives particularly to exporters and reducing bureaucratic procedures for exports could also help in this direction. Of course, the substantial bolstering of the Greek economy's export orientation under the current, particularly competitive, conditions of the globalised economy could come from a change in the composition of production, aimed at increasing the share of goods with high value added (which, in turn, would mean higher wages).

The opening up of closed-shop professions, in implementation of the Directive 2006/123/EC, is expected to enhance competition and benefit all the citizens who use these professionals' services. The estimated cost of these closed-shop professions on the economy is elevated and, according to assessments, their opening up will boost employment.[51] The Directive's implementation in other Member States broadens the potential for Greek service providers to expand their business to these countries as well.

Funds under the National Strategic Reference Framework should be managed more efficiently and money should be used for production rather than consumption purposes. The use of funds, e.g. for covering salary outlays, does not create the conditions for the continuation of activity once inflows come to an end. The aim should be to fund actions that could create activity in the future.

In the labour market, the systematically high rate of youth unemployment reflects limited job creation in the private sector. The reduction in employers' social security contributions for young workers, a practice followed in many OECD countries, can foster the employment of young people. Besides, relatively looser working conditions in the public sector (shorter hours of work, no link between wages and productivity etc.) generate imbalances in labour supply, as most people tend to aim at employment in the public sector (also given the advantage of permanency).

In the public sector, contained recruitment of permanent employees and the concurrent hir-

49 Potter, J. and G. Miranda (2009), Clusters, innovation and entrepreneurship, OECD. See also Bank of Greece, *Annual Report 2007*, April 2008, p. 46

50 See also Kierzenkowski, R. (2008), "The challenge of restoring French competitiveness", OECD Economics Department Working Paper No. 720.

51 See Badinger, H., F. Breuss, P. Schuster and R. Sellner (2008), "Macroeconomic effects of the services directive" in F. Breuss, G. Fink. S. Griller (eds.), *Services liberalisation in the internal market*, ECSA Austria Publication Series, Vol. 6, Springer, Vienna, pp. 125-65. See also Bank of Greece, *Monetary Policy – Interim Report, October 2008*, Appendix 1 to Chapter V ("Economic regulation and competition: some evidence for the Greek economy"), pp. 88-90.

ing of specialised consultants are not enough to resolve the problem of inefficient public administration. Jobs in the public sector need to be redefined and civil servants need to be retrained.[52]

The necessary key orientations of structural reforms

The central objective of structural reforms should be to steadily improve productivity and competitiveness, increase the employment rate, as well as establish conditions for lasting fiscal consolidation. Moreover, *reforms should provide an effective support to sustainable long-term growth, which respects and protects the environment and strengthens social cohesion.*

As mentioned in previous reports, the main policy orientations for meeting these targets, in accordance with the Lisbon Strategy, which is binding for all EU Member States, are the following:[53]

- *securing the soundness and improving the efficiency of the public sector;*

- *enhancing the productive base through investment;*

- *raising the employment rate and constantly improving the quality of human capital;*

- *strengthening competition in all markets; and*

- *changing the current pattern of energy production and consumption.*

With regard to the latter, as announced in June[54], a Committee composed of distinguished experts has been set up, on the initiative of the Governor of the Bank of Greece, and has been entrusted with **the task of preparing a study on the economic, social and environmental impact of climate change in Greece.** The Committee will evaluate the cost of climate change for the Greek economy, the cost of possible non-action, as well as the cost of measures for climate change mitigation to be implemented within the framework of the relevant EU policies. The Bank of Greece hopes that the conclusions of this study will be useful not only as regards the issue of climate change, but also for enriching and strengthening the policy that will ensure the exit from the current economic crisis and the policy that will address the more permanent structural problems of the Greek economy.

52 See also Bank of Greece, *Annual Report 2007*, April 2008, p. 39.
53 For more details, see Bank of Greece, *Annual Report 2008*, April 2009, pp. 43-44.
54 See Press Release of 16 June 2009, "Bank of Greece initiatives on climate change" (in Greek). For more details, see http://www.bankofgreece.gr/Pages/el/klima/default.aspx (in Greek).

II THE EXTERNAL ENVIRONMENT OF THE GREEK ECONOMY

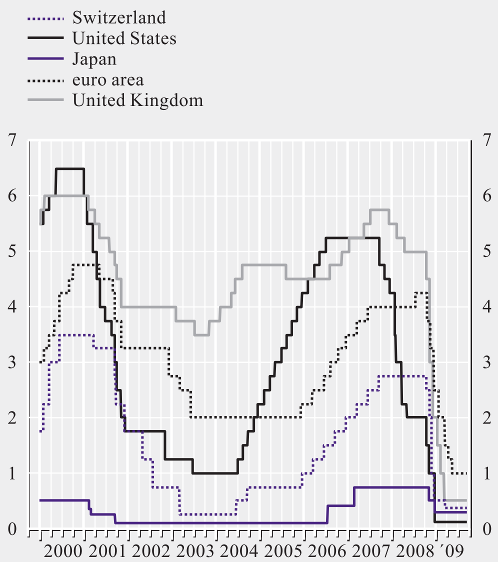
1 INTERNATIONAL AND EURO AREA ECONOMIC DEVELOPMENTS AND POLICY INTERVENTIONS [1]

Following the sharp economic downturn across the globe in the last quarter of 2008 and the first quarter of 2009, there have been signs of stabilisation and/or a slight increase in economic activity in advanced economies since the beginning of the second quarter, while in some major emerging and developing economies (e.g. China) growth has picked up. The international and domestic authorities' prompt and concerted response, in the form of liquidity provision and support to the financial sector and the real economy, contributed decisively to prevent economic recession from deteriorating into a major economic crisis. However, uncertainty about the short-term outlook of the world economy remains high, as a smooth exit from the crisis will require coordinated efforts and careful action. According to estimates and forecasts by international economic organisations, the growth rate of the world economy will enter positive territory in the second half of the current year and will gradually recover during 2010, driven by emerging and developing economies. Growth rates in advanced economies are expected to be clearly lower than in emerging economies, as well as unevenly distributed. Inflation in advanced economies is expected to be very low in 2009, against the backdrop of economic recession and adverse labour market developments.

The negative feedback loop between the financial sector and the real economy, and the unusually high synchronisation of the crisis across regions considerably hinder the exit of the global economy from recession. The swift, extensive and largely coordinated implementation of standard and non-standard monetary and fiscal policy measures prevented, on the one hand, the collapse of the international financial system at the peak of the financial crisis in the second half of 2008 and, on the other hand, a further drop in GDP in 2009. However, the huge amount of liquidity in the global monetary system and the extremely high fiscal deficits created by the measures taken to tackle the crisis may pose a serious risk of destabilisation of economies over the medium term (see "Exit strategies" in this chapter). In some advanced economies, the general government deficit is expected to continue to increase, exceeding 10% of GDP in 2010. Central banks' key interest rates dropped to historical lows in most major economies in 2009 (see Chart II.1). Many central banks, having exhausted the standard monetary policy measures by cutting interest rates to 0%-1%, resorted to non-standard measures (quantitative easing), injecting liquidity to banks and purchasing corporate and government bonds in order to galvanise the economy.

Chart II.1 Central bank policy rates (January 2000 - September 2009)

(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.

Global GDP is expected to contract by 1.1% in 2009, compared with a 3.0% increase in 2008,

1 The following analysis is based on macroeconomic developments until the beginning of October and has taken into consideration the most recent forecasts of the IMF (*World Economic Outlook*, October 2009), the OECD (*Economic Outlook*, June 2009, and *Interim Assessment*, 3 September 2009), the European Commission (*Interim Economic Forecast*, 14 September 2009), ECB staff macroeconomic projections (3 September 2009) and other available data.

Table II.1 Key macroeconomic aggregates of the world economy

	Number of countries	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)		
			2008	2009	2010	2008	2009	2010	2008	2009	2010[3]	2008	2009	2010
World total	182	100.0	3.0	-1.1	3.1	-	-	-	-	-	-	-	-	-
1. Advanced economies	*33*	*55.1*	*0.6*	*-3.4*	*1.3*	*3.4*	*0.1*	*1.1*	*-4.6*	*-10.1*	*-9.0*	*-1.3*	*-0.7*	*-0.4*
United States		20.6	0.4	-2.7	1.5	3.8	-0.4	1.7	-5.9	-12.5	-10.0	-4.9	-2.6	-2.2
Japan		6.3	-0.7	-5.4	1.7	1.4	-1.1	-0.8	-5.8	-10.5	-10.2	3.2	1.9	2.0
United Kingdom		3.2	0.7	-4.4	0.9	3.6	1.9	1.5	-5.1	-11.6	-13.2	-1.7	-2.0	-1.9
Euro area	16	15.7	0.7	-4.2	0.3	3.3	0.3	0.8	-1.8	-6.2	-6.6	-0.7	-0.7	-0.3
2. Emerging and developing economies	*149*	*44.9*	*6.0*	*1.7*	*5.1*	*9.3*	*5.5*	*4.9*	-	-	-	*3.9*	*2.0*	*2.8*
China		11.4	9.0	8.5	9.0	5.9	-0.1	0.6	4.2	-3.0	-2.7	9.8	7.8	8.6

Sources: IMF, *World Economic Outlook*, October 2009, and OECD, *Economic Outlook*, No 85, June 2009.
Notes: 2009: estimates, 2010: forecasts. According to IMF classification: *Advanced economies*: EU-15, Slovenia and Malta, the four *newly industrialised Asian economies* (Korea, Singapore, Taiwan Province of China and Hong Kong SAR) and United States, Japan, Canada, Australia, Switzerland, Iceland, Israel, Cyprus, Norway and New Zealand. *Emerging and developing economies*: Africa (47), Central and Eastern Europe (13), Commonwealth of Independent States (13 incl. Mongolia), Developing Asia (23), Middle East (13) and Western Hemisphere (32).
1 Percentage share in world GDP in 2008, on the basis of purchasing power parities.
2 HICP for the euro area and the United Kingdom, CPI for the other countries.
3 The subtotal for the "advanced economies" refers to the seven largest advanced economies (G-7).

while the global economy is expected to recover in 2010, growing by 3.1% (see Table II.1). In advanced economies, GDP is projected to fall sharply (-3.4%) in 2009 (compared with a 0.6% increase in 2008), before rebounding at a rate of 1.3% in 2010. Despite a significant slowdown, GDP growth in emerging and developing economies will remain in positive territory in 2009 (1.7%, compared to 6.0% in 2008) and accelerate considerably to 5.1% in 2010. World trade fell sharply —mainly in the sectors of consumer durables and capital goods— and it is estimated that trade volumes will fall by 11.9% in 2009, compared with a 3% increase in 2008. The labour market has also been influenced heavily. In the 30 OECD member countries, the unemployment rate, after reaching a 20-year low in 2007 (5.6%), is expected to rise to 8.5% in 2009, from 5.9% in 2008. Although labour markets are more flexible than in past economic recessions, the unemployment rate should continue to rise in 2010, as labour market developments lag behind cyclical fluctuations.

Inflation and inflation expectations have declined considerably in 2009, mainly due to a drop in international oil prices. The slump in demand and the concomitant decrease in capacity utilisation in most major economies (e.g. in the euro area, where the relevant indicator for manufacturing fell to an all-time low —70%— in July 2009) also contributed to lower inflation, albeit less than expected. This is probably due to (a) the fact that aggregate supply and potential output dropped more than initially estimated; (b) stable expectations for low but positive inflation over the medium term (below but close to 2% in the euro area); and (c) the existing asymmetry in the response of prices and wages to business cycle fluctuations.[2] CPI inflation in advanced economies is projected to fall considerably from the 2008 high (3.4%) to 0.1% in 2009, while in emerging and developing economies inflation is expected to fall to 5.5% in 2009, from 9.3% in 2008.

According to the IMF, among the major advanced economies, those that have suffered the strongest economic downturn and GDP contraction in 2009 are Japan (-5.4%), the United Kingdom (-4.4%) and the euro area (-4.2%). In the United States, GDP reduction is expected to be comparatively smaller, as the impact from the crisis seems to be mitigated by the unprecedented economic policy interventions and the comparatively smaller exposure of the United States to international trade.

Specifically, in the *United States*, GDP is expected to fall by 2.7% in 2009, after growing by 0.4% in 2008, largely as a result of a sharp decline in domestic demand in the first half of the year, which is attributable to a fall in employment, a decline in the value of assets (mainly as a result of adverse developments in the real estate market) and a steep drop in residential and business investment (owing to the prevailing uncertainty about the economic outlook and the continued —though less marked— credit crunch). The unemployment rate is increasing rapidly and is projected to rise to 9.3% in 2009, from 5.8% in 2008, while CPI inflation is expected to turn negative in 2009 for the first time since 1955 (-0.4%, from 3.8% in 2008). Due to the improvement in the trade balance, the US current account deficit is expected to fall considerably further to 2.6% of GDP in 2009, from 4.9% in 2008.

In *Japan*, the rate of change in GDP is projected to be strongly negative in 2009 (-5.4%), as the economy goes through the most severe recession in post-war history. The decline in world trade volumes and the appreciation of the yen from the end of 2008 onwards have impacted heavily on exports and business investment. Export volumes are expected to decline by 32% in 2009 and total fixed capital formation by 13%. The three supplementary fiscal packages approved until May 2009 will widen the fiscal deficit, which is expected to reach 10.5% of GDP in 2009, from 5.8% in 2008.

2 See also ECB, *Monthly Bulletin*, September 2009, Box 5 ("Links between economic activity and inflation in the euro area") and Box 6 ("Developments in euro area capacity utilisation and factors limiting economic activity").

In the *United Kingdom*, in the first quarter of 2009 GDP shrank by 2.5% quarter-on-quarter, which is the largest drop in 50 years, before recording a considerably smaller decline (-0.7%) in the second quarter. The impact of the crisis on the real estate market, of rising unemployment and of the problems in the financial sector were mitigated by the unprecedented monetary and fiscal interventions (the fiscal deficit will rise to 11.6% of GDP, from 5.1% in 2008, reflecting the fiscal measures and the impact from the crisis) and the depreciation of the pound sterling. Nevertheless, the economic crisis is expected to lead to a large decline in GDP in 2009 (-4.4%, compared to an increase of 0.7% in 2008).

In *China*, economic activity is expected to decelerate only slightly to 8.5%, from 9.0% in 2008, as a result of expansionary fiscal and monetary policies, while there is a shift in activity in favour of domestic demand. The projected GDP growth rate is lower than the potential rate; as a result, inflation is expected to be slightly negative (-0.1%) in 2009, compared to 5.9% in 2008, also under the pressure of developments in international commodity prices. Export volume growth has declined considerably to 9% in 2008, from 20% in 2007, and is expected to turn negative in 2009 (-13%). In China, however, the current account surplus as a percentage of GDP is estimated to record a limited decrease in 2009 (to 7.8%, from 9.8% in 2008), on account of significantly lower import volumes. The overall fiscal balance is becoming negative for the first time in recent years (-3.0% of GDP, from +4.2% in 2008, according to OECD estimates).[3]

International *crude oil* prices, after a sharp continuous rise for seven years, are estimated to drop considerably in 2009 by 37% (in US dollars) in average annual terms.[4] Likewise, international non-oil commodity prices are expected to fall by 20% (compared with a 7.5% rise in 2008). More recently, until the end of September, international oil and certain commodity prices have recovered significantly from their end-2008 levels. As regards crude oil, despite an estimated fall in global demand (of 2.2% according to the IEA), there are upward trends, mainly attributable to shocks in aggregate supply (e.g. attacks on oil production facilities in Nigeria); it is also estimated that China's drive to rebuild its stocks of basic metals plays an important role in the rise in commodity prices.

As from mid-2009, for the first time since 2007, international economic organisations' growth estimates and projections have been revised upwards. In 2010, GDP growth rates will pick up from their already high levels, in China (up by 9.0%) and in other emerging Asian economies which have not been affected by the financial crisis as severely as the advanced economies. In the United States, despite the consecutive and extremely costly economic policy measures implemented to tackle the crisis, the rate of change in GDP is expected to be positive (1.5%), albeit markedly lower than the potential rate; as a result, unemployment will rise further to slightly over 10%. In the euro area, where recovery is expected to be gradual and slow, the unemployment rate will increase further in 2010 (see below).

Financial markets, where the global financial crisis originated, after being heavily affected, already show the first signs of improvement in economic sentiment. The US dollar and euro interbank market rates (Libor and Euribor) were very low in August compared to October 2008. Moreover, stock market indices in many advanced and emerging economies recovered significantly over the first three quarters of 2009 from the lows they had reached after the intensification of the financial crisis in autumn 2008. As regards the economic indicators, conjuncture surveys, among other evidence, point to an improvement in consumer confidence and economic sentiment.

3 OECD, *Economic Outlook*, June 2009. According to the IMF (*World Economic Outlook*, October 2009), the central government deficit will be 2.0% of GDP this year, compared to a budget close to balance in 2008 (when the deficit was 0.1% of GDP).

4 According to the IMF, the international oil price (in US dollars per barrel) will be $61.53 in 2009 and $76.50 in 2010, from $97.03 in 2008.

Despite the signs of improvement in financial conditions and economic sentiment, economic recovery is still uncertain and fragile. Advanced economies seem to be generally going through a phase of stabilisation of economic activity and, in some cases, of very slow recovery, while financing conditions for households and businesses have not yet normalised. Moreover, according to the IMF, banks across the globe have not yet cleaned their balance sheets of impaired assets. Finally, risks to the forecasts for global economic recovery are compounded by risks associated with the persistent global macroeconomic imbalances and trade protectionism, since such phenomena are expexted to build up as the impact from the economic crisis becomes more visible, particularly in the labour market.[5]

Developments and prospects in the euro area

During the first quarter of 2009, economic activity in the euro area showed the sharpest decline since the beginning of the crisis, as the rate of change in GDP was -2.5% quarter-on-quarter, after being negative over most of 2008. Underlying this was mainly a fall in investment and exports, against a background of rapidly shrinking world trade volumes. During the second quarter, the negative rate of change in GDP came to -0.2%, as the contribution of net exports turned positive, public consumption continued to increase, the negative contribution of investments was limited and the contribution of private consumption turned from negative to zero. The relative resilience of private consumption, which —as estimated by the European Commission[6]— is due to substantial disinflation, on the one hand, and support from households' nominal available income, on the other, is worth noting. The resilience of nominal available income is explained, in turn, by the relative wage rigidity and the slow (i.e. lagged) response of employment to the economic downturn. The limited decline in employment[7] is partly associated with employment protection through the adoption of short-time work schemes (as well as compensating workers for part of their income losses through subsidies paid by unemployment insurance agencies – see also Box II.1 below). According to recent indications and forecasts, stabilisation will continue during the second half of the current year and will be followed by slow recovery, as the euro area is expected to continue to benefit from expansionary macroeconomic policy measures, measures to support the financial system and the improvement in financial market conditions, while external demand will also edge up gradually.[8] According to IMF projections (October 2009), GDP growth in the euro area in average annual terms will be highly negative (-4.2%) in 2009 and slightly positive (0.3%) in 2010. Besides, according to ECB staff projections (3 September 2009), the average annual GDP growth rate will range between -4.4% and -3.8% in 2009 and between 0.8% and 1.6% in 2010, while according to interim forecasts of the European Union (14 September 2009) it will be -4.0% in 2009.

A risk to steady economic upturn in the euro area is a possible strengthening of the negative feedback loop between the real economy and the financial sector, which is still rather vulnerable,[9] in an environment of deteriorating labour market conditions, as the unemployment rate is projected to increase further in 2010.

Inflation fell considerably in the euro area from August 2008, mainly due to a fall in international oil and —to a smaller extent— other raw material prices, as well as to an easing of domestic inflationary pressures. Annual HICP inflation declined from 4.0% in July 2008 to 1.6% in December and was negative from June

5 In the summit held on 8 July 2009, the G8 Leaders underlined their commitment to open markets and to rejecting protectionism. In their statement, it is stressed that international trade is a key element for sustainable economic recovery and that the G8 Leaders are determined to work towards the completion of the Doha round. These views were confirmed in the G20 Pittsburgh summit.

6 *September 2009 Interim Forecast*, 14 September 2009, p. 5.

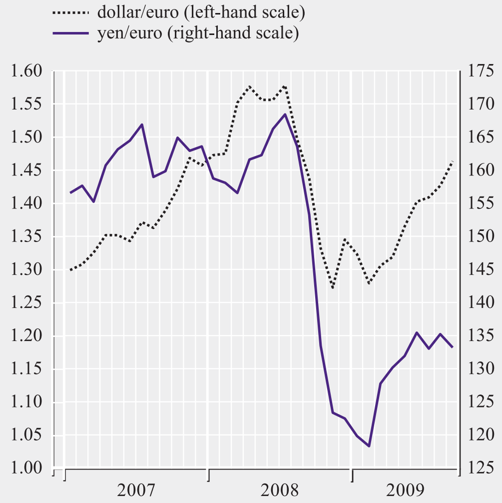
7 According to Eurostat, employment in the euro area declined by 0.7% in the first quarter of 2009 (*quarter-on-quarter*) and by 0.5% in the second quarter.

8 It should be noted that in September the economic sentiment indicator for the euro area improved for the sixth consecutive month, though still remaining well below the long-term average.

9 See also European Commission, *September 2009 Interim Forecast*, 14 September 2009, p. 10.

Chart II.2 Exchange rate of the euro against the US dollar and the Japanese yen (January 2007-September 2009)

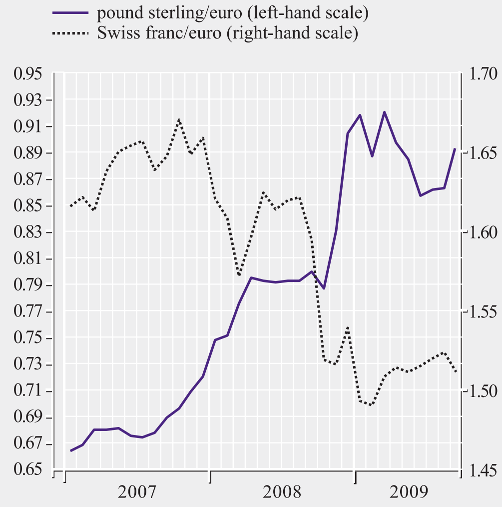
(monthly data)



Sources: ECB and Bank of Greece.

Chart II.3 Exchange rate of the euro against the pound sterling and the Swiss franc (January 2007-September 2009)

(monthly data)



Sources: ECB and Bank of Greece.

(-0.1%) to September (-0.3%, according to provisional data). According to Eurosystem staff projections, the average annual inflation rate is expected to range between 0.2% and 0.6% in 2009 and between 0.8% and 1.6% in 2010.

In the euro area, labour market conditions deteriorated markedly due to the economic recession, but were less affected than economic activity. The unemployment rate rose to 9.6% of the labour force in August 2009, from 7.6% in the same month of 2008, and is expected to rise further until the end of the year and in 2010. According to recent forecasts (IMF, October 2009), the unemployment rate is expected to rise to 9.9% in 2009 and 11.7% in 2010. Data on the impact of the economic recession on employment in the euro area by sector of economic activity and worker groups are given in Box II.1.

Box II.1

RECENT EMPLOYMENT DEVELOPMENTS IN THE EURO AREA[1]

The economic recession led to a deterioration of labour market conditions in the euro area, as the annual growth rate of employment fell to 0.8% in 2008, from 1.8% in 2007, and became negative (-1.5%) in the first half of 2009, compared with the corresponding period in 2008. However, the decline was smaller than that observed in economic activity indicators (such as GDP).

The dramatic deterioration in the economic situation affected employment in construction mainly and, to a lesser extent, manufacturing. In these sectors, in the first half of 2009 employment fell

1 This box also draws on estimates published in the September 2009 *Monthly Bulletin* of the ECB (Box 7: "The composition of the recent decline in employment in the euro area") and more recent data on the second quarter.

by 7.3% and 3.8% (on an annual basis), respectively, year-on-year. Employment in the services sector started to drop in the first quarter of 2009 only. Regarding the contribution of individual sectors in the change of total employment, construction and manufacturing together account for 4/5 of the total decline in employment in the euro area during the first half of 2009.

According to Labour Force Survey (LFS) data, the worker groups that took the strain of shrinking employment in the past quarters are male workers, young people aged between 15 and 24 years, low-skilled workers and workers with fixed-term contracts. Temporary employment declined strongly (-0.8% in 2008 and -8.7% between the first quarter of 2009 and the corresponding quarter in 2008).

The strong impact on young and male workers is also evident in recent data on unemployment. Between the second quarter of 2008 and the second quarter of 2009, the unemployment rate rose by 2.4 percentage points for men (to 9.1%), 1.3 percentage points for women (to 9.5%), 4.2 percentage points for workers aged between 15 and 24 years (to 19.2%) and 1.7 percentage points for people aged 25 years or more (to 8.1%).

Developments for male workers have been more unfavourable than for female workers, as a significantly larger percentage of men are employed in the sectors hit the most by the economic downturn. According to the EU Labour Force Survey (LFS), in the 2000-2008 period 71.5% of working women were employed in the services sector (excluding the public sector) and only 12% in construction and manufacturing, while the corresponding percentages for men were 49.1% and 34.3%.

Another significant characteristic of employment data is the relative deterioration in employment conditions for young people aged 15-24 years, compared with people aged 55-64 years, as youth employment fell by 6.9% on an annual basis in the first quarter of 2009. The favourable developments in employment for older people in the same period (+4.2%) may be attributable to labour market reforms implemented in recent years, which tightened access to early retirement and encouraged older people to remain in the labour market.

The thus far small impact of the decline in employment on workers with permanent contracts partly reflects the high level of employment protection in certain countries. However, this factor may hinder recruitment of permanent workers once the economy is on the upswing. Another factor that limited the decline in employment is the measures that several countries of the euro area took in order to subsidise jobs for a certain period of time (e.g. compensating workers for a significant part of their income losses due to short-time work schemes that were implemented to avoid lay-offs[2]). Such measures aim at protecting the human capital of companies in short-term economic downturns. However, if implemented for longer periods of time, they may prevent necessary structural adjustments.

At the same time, the highly negative impact from the economic recession on certain groups of workers (e.g. low-skilled workers and workers with temporary contracts, often younger people) calls for special attention. The longer these people stay out of work, the more their skills become outdated and the scantier their chances of finding a job. In the current juncture, it is vital to reduce the risk of social exclusion and support more vulnerable members of the labour market to participate in it. Such efforts should include active labour market policies and measures to encourage life-long learning, in order to help these people re-enter the labour market.

2 See also Bank of Greece, *Annual Report 2008*, April 2009, Box V.1, p. 74.

The general government deficit in the euro area as a whole is projected[10] to rise to 6.2% of GDP in 2009 (three times higher than in 2008, when it was 1.8%) and further to 6.6% of GDP in 2010. This will be a result of the economic recession and the operation of automatic stabilisers, as well as of the fiscal measures adopted by Member States under the European Economic Recovery Plan. According to forecasts, most euro area countries (except for Cyprus, Luxemburg and Finland) will have a fiscal deficit of over 3% of GDP in 2009. Public debt is expected to rise further to 80.0% of GDP (from 69.2% in 2008) and then to 86.3% of GDP in 2010, due to high deficits and negative nominal GDP growth in the 2009-2010 period. The effect of measures to support the banking system, most notably measures for strengthening banks' capital base, on public debt should be smaller (this effect is recognised directly in public debt and does not appear in the deficit).

Review of economic policy actions for the recovery of the European economy

The **European Council** of 18 and 19 June 2009 verified that, according to the ECOFIN Council report, the significant measures taken to support the banking sector and the economy in general had averted the risk of financial collapse and started to create prospects of recovery of the real economy. The **ECOFIN**[11] assessed the measures taken by governments and central banks and concluded that these measures mitigate the negative impact from the recession, contribute to employment protection and prepare the ground for sustainable economic recovery. The ECOFIN Council ascertained that, in general, the measures taken were timely and targeted, in line with the rules of the Single Market and consistent with long-term priorities under the Lisbon Strategy. However, the Council observed that only a few Member States took the opportunity to significantly invest in greening their economy and improve framework conditions for innovation. Moreover, while the crisis has forced economic imbalances to drop, many of the underlying structural problems remain. As a result, the Council notes that the focus of further measures should shift to structural reforms and to improving the longer-term performance and growth potential.

Exit strategies

Governments, central banks, European and international organisations remain vigilant in the face of the most severe economic crisis since World War II. Moreover, it is becoming evident that it is necessary to formulate an exit strategy from the extremely relaxed monetary and fiscal policies and the extensive state aid given mainly to the banking system.

In the European Union, reference to the principles that should govern the exit strategies is made in the Conclusions of the **European Council** and in interventions made by members of the **European Commission** and the Governing Council of the **ECB**. As regards **fiscal policy**, in the current conditions of large deficits and public debt, an exit strategy should be based on credible medium-term programmes promoting fiscal consolidation and sustainable public finances, including, when necessary, pension reform.[12] The timing and pace of fiscal consolidation should take into account the economic and fiscal conditions of each Member State. As regards the exit strategy from non-standard **monetary policy** measures ("enhanced credit support measures"), the ECB has devised a framework and set of principles for the unwinding of the non-standard measures as market conditions normalise.[13] In this connection, gradualism and clear communication by the central bank of any changes to the operational framework with sufficient lead time to allow market participants to pre-

10 IMF, *World Economic Outlook*, October 2009.

11 See *Council (ECOFIN) contribution to the 18-19 June European Council: Report on the European Economic Recovery Plan*, 9 June 2009.

12 See Conclusions of the European Council, 18-19 June 2009, and Speech by European Commissioner J. Almunia entitled "Beyond the crisis: a changing economic landscape", Brussels Economic Forum, 14 May 2009.

13 See J.-C. Trichet, "The ECB's exit strategy", Frankfurt, 4 September 2009.

pare and adjust their liquidity management will be essential.[14]

At an international level, the **G20 Finance Ministers and central bank Governors** met in London on 4 and 5 September 2009 to discuss the issue of exit strategies and agreed on the need for a transparent and credible process for withdrawing extraordinary fiscal, monetary and financial sector support, as recovery becomes firmly secured. They also agreed to work with the **IMF** and the **Financial Stability Board** in order to develop cooperative and coordinated exit strategies, recognising that the scale, timing and sequencing of actions will vary across countries and across the types of policy measures. More recently, at the Pittsburgh summit held on 24-25 September, the **G20 Leaders** agreed to continue to implement stimulus programmes to support economic activity until recovery is secured. At the same time, they will prepare their exit strategies and, when the time is right, withdraw their extraordinary policy support in a cooperative and coordinated way, maintaining their commitment to fiscal responsibility. Moreover, they agreed to create a cooperation framework aiming at the promotion of the policies needed to lay the foundation for strong, sustained and balanced growth.

Decisions on the new global financial architecture for the enhancement of supervision

The **European Council** recently decided to establish new, necessary supervision authorities aiming to protect the European financial system from future risks and to avoid repeating mistakes of the past. Specifically, in the conclusions of the summit of 18 and 19 June 2009, the European Council supported:

- the creation of a **European Systemic Risk Board** in the context of macro-prudential supervision, which will monitor and assess potential threats to financial stability and, where necessary, issue risk warnings and recommendations for action and monitor their implementation; and

- the establishment of a **European System of Financial Supervisors**, in the context of micro-prudential supervision, comprising three new European Supervisory Authorities,[15] aimed at upgrading the quality and consistency of national supervision, strengthening oversight of cross-border groups through the setting up of supervisory colleges and establishing a European single rulebook applicable to all financial institutions in the Single Market.

Furthermore, the European Council welcomed the Commission's intention to bring forward, by early autumn 2009 at the latest, the legislative proposals for putting in place the new framework for EU supervision, fully respecting the balance of competences and the Member States' competence to pursue fiscal policy, and taking full account of the ECOFIN Council conclusions of 9 June 2009. These proposals need to be adopted swiftly in order for the new framework to be fully in place in the course of 2010. The **European Commission's** legislative proposals were indeed published on 23 September 2009 (see Box II.2).

In the **United States**, the government's plan for financial regulatory reform was announced on 17 June. The primary goal of this plan is to safeguard the stability of the financial system and the main responsibility for the attainment of this goal will lie with the US Federal Reserve. The key objectives of this plan are:

- **to promote robust supervision and regulation of financial firms:** all financial institutions that are critical to market functioning should be subject to strong oversight;

- **to establish comprehensive supervision of financial markets, including derivatives markets:** the major financial markets must be strong enough to withstand both system-wide stress and the failure of one or more large institutions;

14 See L. Papademos, "The role of the ECB in financial crisis management", Athens, 27 May 2009.
15 The European Banking Authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA) and the European Securities & Markets Authority (ESMA).

• **to protect consumers and investors:** to this end, it proposed the establishment of a special agency dedicated to protecting consumers in the financial services markets as well as stronger regulations across a range of financial services;

• **to provide tools for effective management of financial crises:** this will enable authorities to intervene for the resolution of financial firms in a manner that limits systemic risk (as in the case of the Lehman Brothers bankruptcy and the risk of failure of AIG); and

• **to improve international supervision and cooperation:** the necessary steps towards this end are to improve the supervision of global financial markets and internationally active firms and to enhance crisis management tools.

The **Group of Central Bank Governors and Heads of Supervision from 27 countries**, the oversight body of the **Basel Committee on Banking Supervision**, met on 6 September and concluded on the following key measures to strengthen the regulation of the banking sector (see Box II.2).

In the Pittsburgh summit, the **G20 Leaders** agreed on joint action in order to reinforce international rules on banks' capital adequacy, review compensation practices and reform the global financial architecture to meet the needs of the 21st century.

Box II.2

NEW ORIENTATIONS AND RECENT MEASURES TO STRENGTHEN GLOBAL BANKING SUPERVISION

After the G20 summit of 2 April 2009, international stakeholders stepped up coordinated action to reshape the banking supervisory mechanisms and networks, in order to prevent a financial crisis like this from recurring in the future. To this end, on 6 September 2009 **the oversight body**[1] **of the Basel Committee** announced a series of recommendations, which focus on strengthening banks' capital adequacy and liquidity;[2] in particular, they involve:

• Raising the quality, consistency and transparency of the Tier 1 capital base, the predominant part of which should be common shares and retained earnings. Moreover, all components of the capital base should be fully disclosed.

• Introducing a leverage ratio as a supplementary measure to the Basel II risk-based framework which will be harmonised internationally, fully adjusting for differences in accounting practices.

• Introducing a minimum global standard for funding liquidity that includes a stressed liquidity coverage ratio requirement, to cover short-term liabilities. This ratio will be underpinned by a longer-term structural liquidity ratio.

• Introducing a framework for countercyclical capital buffers above the minimum requirement. The Basel Committee will review an appropriate set of indicators, such as earnings and credit-based variables, as a way to condition the build-up and release of capital buffers. In addition, the Committee will promote more forward-looking provisions based on expected losses.

1 The oversight body, chaired by the President of the ECB, is the Group of Central Bank Governors and Heads of Supervision of 27 countries.
2 See Bank for International Settlements, "Comprehensive response to the global banking crisis", press release of 7 September 2009.

- Issuing recommendations to reduce the systemic risk associated with the resolution of cross-border banks.

Moreover, the **Basel Committee** will also assess the need for a capital surcharge to mitigate the risk of systemic banks. In the transition to a higher level and quality of capital, national supervisory authorities should require banks to adopt policies for:

- the conservation of capital, e.g. by limiting excessive dividend payments, compensation and share buybacks;

- the alignment of compensation with prudent risk-taking and long-term, sustainable performance; and

- the promotion of the stability of national banking systems and the broader economy.

Based on this framework, the **Basel Committee** will announce concrete measures/proposals by the end of this year and will undertake a Quantitative Impact Study by the end of 2010. Generally, the measures are expected to enhance the resilience of the global banking system and ensure that banks adopt prudent policies over the long term.

The above recommendations are in line with the initiatives taken at the EU level; e.g. recently the **European Commission** approved a package of legislative proposals in order to enhance financial supervision in the EU. (This followed up on the recommendations of the group of experts chaired by Jacques de Larosière, the ECOFIN decisions of 9 June and the decisions reached by the European Council in its meeting of 18-19 June 2009.) Actually, on 23 September 2009 the European Commission submitted a number of legislative proposals to the European Council and the European Parliament for fast-track approval, so as to allow implementation of the new supervisory framework in the EU in 2010. According to the Committee's announcement, the aim of the new framework is to:

- sustainably reinforce financial stability throughout the EU;

- ensure that the same basic technical rules are applied and enforced consistently;

- identify risks in the system at an early stage; and

- be able to act together far more effectively in emergency situations and in resolving disagreements among supervisors.

To achieve this aim, the following authorities will be created:

- For macro-prudential supervision,[3] the **European Systemic Risk Board (ESRB)**, to monitor and assess risks to the stability of the financial system as a whole, to provide early warning of systemic risks that may be building up and, where necessary, recommendations for action to deal with these risks.

3 "Macro-prudential supervision" is the systematic surveillance of structural characteristics and conjunctural trends in (i) the credit system as a whole and its major sectors; (ii) the other sectors of the economy and their main sub-sectors; and (iii) the channels linking the credit system with the other sectors of the economy.

• For micro-prudential supervision, the **European System of Financial Supervisors (ESFS)**, which will consist of a network of national financial supervisors working in tandem with new European Supervisory Authorities, the **European Banking Authority (EBA)**, the **European Insurance and Occupational Pensions Authority (EIOPA)**, and the **European Securities and Markets Authority (ESMA)**.[4] The European System of Financial Supervisors will have the power to issue recommendations and warnings to Member States, to the national supervisors and to the European Supervisory Authorities, which will have to comply. Additionally, the new authorities will develop proposals for technical standards, respect better regulation principles, resolve cases of disagreement between national supervisors, where legislation requires them to co-operate or to agree, and ensure coordination in emergency situations. In particular, the European Securities and Markets Authority will be responsible for the direct supervision of credit rating agencies.

4 These will be created by transforming the existing Committees on banking, securities and insurance and occupational pensions, which had only an advisory role up until now.

2. INDICATIONS OF A WEAKENING OF THE CRISIS IN INTERNATIONAL FINANCIAL MARKETS

At the end of 2008, the downward path[16] of international crude oil and other commodity prices was reversed, while later on, there were other indications[17] of a deceleration in the global economic slowdown; as a result, investors' risk appetite has increased since March 2009.

As the financial crisis is closely associated with developments in the banking system, the continued easing of tensions in money markets since the end of 2008 and the improved results of certain major banks in the euro area and the United States, already since the first quarter of 2009, gave rise to well-founded expectations that the financial crisis is weakening[18] and the financial system is stabilising, imbuing financial markets with some optimism.[19] Besides, during the January-September 2009 period, uncertainty[20] about future price developments in major financial markets gradually receded, albeit remaining relatively high.

Specifically, in regard to the banking system of the euro area, valuation losses on securities (mainly credit derivatives) in banks' portfolios, loan write-offs/write-downs and increased provisions against credit risk due to the financial crisis had reached $365 billion by the end of May 2009. Besides, further loan write-offs/write-downs and provisions of $283 billion are expected until the end of 2010.[21] It is encouraging that large and complex banking groups (LCBGs) of the euro area have raised from the private sector and Member States' governments enough capital to offset impairment losses on credit derivatives in their portfolios (recorded until the end of May 2009). However, these developments leave no room for complacency, because, as repeatedly pointed out by the ECB,[22] a number of risks to financial stability in the euro area may well emerge in the near future. These risks mainly stem from the economic downturn, which leads to increased non-performing loans.

16 Since July 2008.
17 Mainly survey results, as well as short-term indicators.
18 However, as the President of the ECB pointed out ("Supporting the financial system and the economy: key ECB policy actions in the crisis", 22 June 2009), there are still risks of a sudden emergence of unexpected financial turbulence.
19 According to the *BIS Quarterly Review* of June 2009, the factors that also fostered investors' risk appetite are: (a) various additional measures for the support of the banking sector taken in the United States and the United Kingdom in the beginning of 2009; (b) the publication of results of stress tests administered by US banks; and (c) possibly, the non-standard monetary policy measures taken in some developed economies.
20 As measured on the basis of implied stock volatility.
21 In the recent *IMF Global Financial Stability Report* (October 2009), the sum of impairement losses on securities, loan write-offs/write-downs and provisions against credit risk in the euro area is estimated at $814 billion.
22 See ECB, *Financial Stability Review*, June 2009.

Foreign exchange markets

The main development in foreign exchange markets during the period from January to September 2009 was a reversal of the downward path of the exchange rate of the euro against the US dollar and the Japanese yen (see Chart II.4). Compared to the trough reached by bilateral euro exchange rates in the first quarter of 2009, by the end of September the euro appreciated 17% against the dollar and 16% against the yen.

Money markets

In the period from January to September 2009, interest rates on interbank loans with a maturity of over one month[23] continued to fall in the euro area[24], the United States and other developed economies. The spreads between the Euribor, USD or other currency Libor and fixed rates on the corresponding overnight indexed swaps (OIS)[25] with the same maturity as interbank loans also narrowed (see Chart II.5). The evolution of these spreads implies that interbank market tensions are easing.

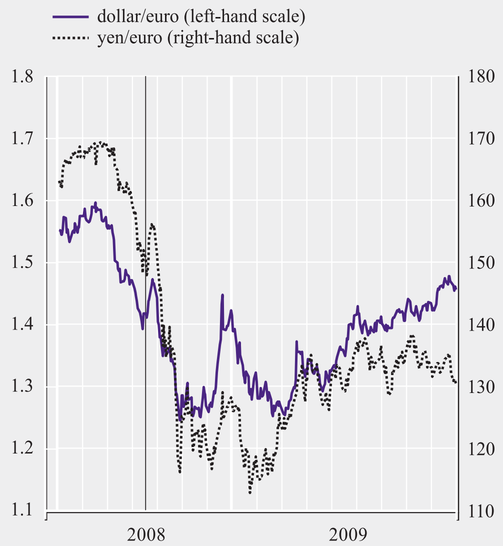
Finally, the EONIA rate and other rates for interbank market investments with a maturity of less than one month have also declined in the euro area and other developed economies, while in the United States the federal funds rate remained almost stable at very low levels. The aforementioned developments reflect key interest rate cuts and other liquidity support measures taken by central banks and, possibly, the effect of collateralisation for the raising of funds by banks and of government capital injections into banks in many developed economies.

Bond markets

In the January-September 2009 period, long-term bond yields in the euro area and other developed countries (such as the United Kingdom and Japan) recorded fluctuations —but overall small increases— while in the United States long-term rates increased significantly. Specifically, ten-year bond yields in the euro area rose from 3.52% (2.25% in the United States) at end-December 2008 to 3.75%

Chart II.4 Exchange rate of the euro against the US dollar and the Japanese yen (June 2008-September 2009)

(daily data)



Source: ECB.
The vertical line indicates the date (15 September 2008) when the bankruptcy of Lehman Brothers was announced.

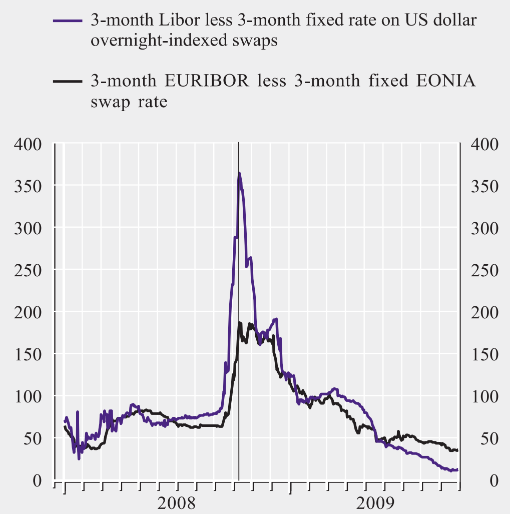
23 The USD Libor on interbank loans with a maturity of one month (as well as of one or two weeks) rose slightly from the beginning of the year to mid-March. Afterwards, it declined slightly.

24 For details on the developments in the euro area money market, see Chapter III.2

25 Two parties enter into an overnight indexed swap in which one party agrees to pay interest for a given period (e.g. three months) on a specified notional amount at a "fixed rate" (swap rate) and, in return, its counterparty agrees to make interest payments, on the same amount, at the overnight money market rate compounded daily over the duration of the transaction (3 months). The interest rates and the difference between the two flows of interest payments are settled upon maturity. The agreed "fixed" swap rate incorporates expectations regarding the evolution of the interbank market rate. It is reasonable to think that these transactions involve negligible risk compared with interbank loans of comparable maturity. Consequently, the spread between the three-month non-euro Euribor or Libor rate and the three-month overnight swap rate is a measure of the risk premium incorporated in the three-month Euribor or Libor respectively, in addition to the expectations regarding the evolution of the overnight rate in the next three months. The risk premium is set either as guarantee in the event of non-repayment of the interbank loan, or in case the lending bank is hit by a liquidity shock and raising funds is very costly or difficult due to the situation in the money market or due to the insufficient collaterals offered to counterparties. See "The Eurosystem's open market operations during the recent period of financial market volatility", ECB, *Monthly Bulletin*, May 2008, Box 2, page 93, and "Liquidity risk premia in money market spreads", ECB, *Financial Stability Review*, December 2008, Special Feature D.

Chart II.5 Spread between the 3-month Euribor and the 3-month fixed rate on euro overnight-indexed swaps and between the 3-month Libor and the 3-month fixed rate on US dollar overnight-indexed swaps

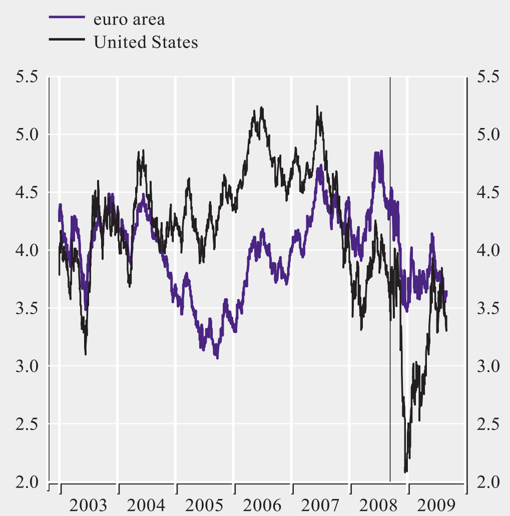
(basis points, daily data)



Sources: ECB and Bloomberg.
The vertical line indicates the date (10 October 2008) when interest rate spreads reached their highest levels in both the euro area and the United States.

Chart II.6 Yields on 10-year euro area and US government bonds (January 2003-September 2009)

(yields in percentages per annum, daily data)



Source: ECB.
The vertical line indicates the date (15 September 2008) when the bankruptcy of Lehman Brothers was announced.

(3.30% in the United States) at end-September 2009 (see Chart II.6).

The slope of the yield curve[26] in the aforementioned government bond markets steepened, reflecting – in addition to a rise in long-term interest rates – also a decline in short-term government bond rates at the beginning of 2009[27] due to central bank key interest rate cuts and expectations for further reductions in key interest rates. It should be noted that interest rates on short-term (mainly three-month) government bonds in the euro area declined again in mid-June 2009.

Long-term yields came under upward pressure firstly by the increased public sector borrowing requirement, mainly due to the measures taken in most countries to support the banking system and boost aggregate demand for goods. Moreover, after the beginning of March 2009, there were portfolio shifts away from government securities (which are considered a safer investment and are more liquid than other securities) mainly into shares, due to the renewed risk appetite, resulting in a decline in government bond prices. However, the rise in long-term rates was contained due to increased demand by banks and institutional investors for government bonds worldwide.

The renewed risk appetite also explains the narrowing of yield spreads (observed after the beginning of March 2009) between the government bonds of all euro area countries excluding Germany and German government bonds, on the one hand, and between private debt securities and government bonds with the same residual maturity, on the other.[28] Although declining, these spreads are still significantly higher than before the onset of the financial crisis in 2007. According to the

26 The slope of the yield curve can be measured by the spread between the yield on ten-year government bonds and the yield on three-month Treasury bills.
27 It should be noted that, as mentioned above, short-term interest rates in the United States remained almost unchanged at very low levels during the six-month period in question.
28 This was the case in the euro area. In the United States, the narrowing of spreads between private and government bonds had already started around the end of 2008.

ECB,[29] government bond yield spreads, as in the case of France and Germany, are not necessarily associated with changes in the perceived credit quality of these countries, but rather reflect liquidity premia. The evolution of credit default swap (CDS) spreads on government securities and corporate bonds was consistent with developments in yield spreads between government bonds of euro area countries, on the one hand, and between private and government bonds, on the other.

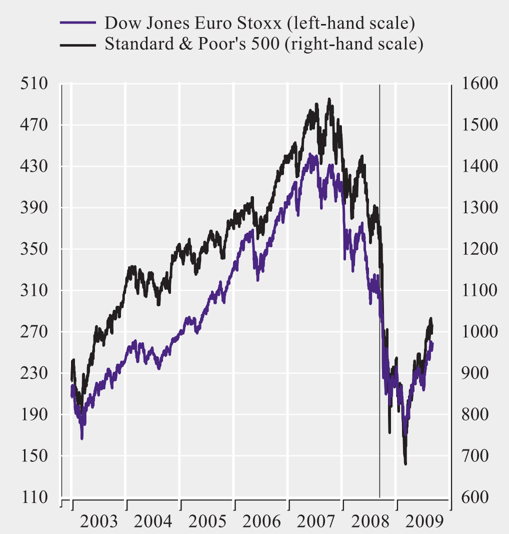
The significant increase in the volume of new private debt securities issuance, particularly in the euro area and other developed economies, reflects improved bond market conditions. Underlying this development were also government guarantees for the new issues. By contrast, markets for asset-backed securities (ABS) continued to suffer from serious disruption,[30] as indicated by the lack of new issues. In the euro area, new issues were taken up in their entirety by credit institutions (often the same banks that had granted the securitised loans) so that the new securities could be used as collateral for the provision of liquidity by the Eurosystem.

Stock markets

The downward course of share prices in 2008 and the first two months of 2009 came to a halt in March. Ever since then, share prices have recorded upward trends in most developed and emerging economies, albeit with some swings, which show that the uncertainty about future economic and stock market developments, despite declining, is still relatively high. At the end of September 2009, the Dow Jones Euro STOXX and the US Standard and Poor's 500 indexes were by 58.9% and 56.3% higher than their minimum levels recorded at the beginning of March, respectively (see Chart II.7). The gradual improvement of the medium-term outlook for the economies and for business profitability also contributed considerably to the recovery of share prices. This improvement rekindled risk appetite, without however bringing it back to pre-2008 levels. It is worth noting that in most economies, during the March-September 2009 period, the banking sector price index outperformed the general share price index by far.

Chart II.7 Stock market indices in the euro area and the United States (January 2003-September 2009)

(daily data)



Source: ECB.
The vertical line indicates the date (15 September 2008) when the bankruptcy of Lehman Brothers was announced.

3 SOUTH-EASTERN EUROPEAN ECONOMIES[31]

The global economic crisis has impacted heavily on the economies of SE Europe. In the six years before the crisis, economic growth in these countries had relied on foreign capital inflows and strong export growth. These factors were reversed in October 2008 by the sharp deterioration of the global financial and macroeconomic environment, which led to a credit crunch and large declines in (a) aggregate demand for

29 See ECB, *Monthly Bulletin*, September 2009, Box 4 ("Credit and liquidity premia on selected euro area sovereign yields").
30 This, however, is not the case for debt securities backed by consumer loans or loans to small businesses in the United States, the market for which has improved following the measures taken by the US Federal Reserve.
31 This section covers the following countries: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, Former Yugoslav Republic of Macedonia (FYROM), Romania, Serbia and Turkey.

Table II.2 Real GDP growth in South-Eastern European countries

(annual percentage changes)

Country	2006	2007	2008	2009 (forecasts)
Albania	5.5	6.3	6.8	0.7
Bosnia-Herzegovina	6.9	6.8	5.5	-3.0
Bulgaria	6.3	6.2	6.0	-6.5
Croatia	4.7	5.5	2.4	-5.2
FYROM	4.0	5.9	4.9	-2.5
Montenegro	8.6	10.7	7.5	-4.0
Romania	7.9	6.2	7.1	-8.5
Serbia	5.2	6.9	5.4	-4.0
Turkey	6.9	4.7	0.9	-6.5

Sources: National central banks, IMF and Reuters.

goods and (b) output in the economies of this region. The negative impact from external shocks was compounded by domestic factors such as certain structural features of these economies and consumers' and businesses' deep pessimism, which enhances reluctance to consume and discourages investment.

In most SE European economies, the economic downturn was particularly steep during the last quarter of 2008 and the first quarter of 2009, while the decline in GDP is expected to be strong for 2009 as a whole (see Chart II.2). The global crisis affects the GDP of these countries by impacting on the real economy, directly and indirectly, through two channels: export performance and domestic financial conditions.

Regarding the first channel, due to the drop in global demand and the fall in international trade, the export performance of the economies of this region has deteriorated dramatically. The decline in exports squeezed industrial production and halted investment activity, mainly by export firms, which typically represent one of the most dynamic sectors of these economies. The largest decrease in exports was recorded in Bulgaria, Croatia and Romania and the smallest in FYROM and Albania.

The second channel of external shock transmission, i.e. the financial channel, came into play mainly due to the extremely negative climate in international markets. This led to generalised risk aversion and a trend towards bank deleveraging across the globe. Given the particular features of SE European economies, these factors triggered a drop in net capital inflows, a considerable deterioration of external borrowing conditions and a significant decline in bank credit expansion. Moreover, there was a marked decline in foreign direct investment inflows, which had been the main source of financing for the external deficit of the countries in this region until recently.

Underlying the drop in total fixed capital formation and private consumption was notably a strong decline in credit expansion, which is expected to be around and/or lower than 10% in 2009. This slowdown came from both the supply and the demand sides. Factors on the supply side included a drop in capital inflows, domestic banks' difficulties to raise funds abroad, the objective inability to strengthen the domestic deposit base and a tightening of banks' credit standards warranted by the need to safeguard the quality of their portfolios at a time of deteriorating macroeconomic conditions.

The steep worsening of economic conditions in the countries of this region and the concomitant drop in demand, coupled with a considerable fall in international food and energy

Table II.3 Inflation in South-Eastern European countries

(annual percentage changes)

Country	2006	2007	2008	2009 (forecasts)
Albania	2.4	2.9	3.4	1.7
Bosnia-Herzegovina	6.1	1.5	7.4	0.9
Bulgaria	7.4	7.6	12.0	2.7
Croatia	3.2	2.9	6.1	2.8
FYROM	3.2	2.3	8.3	-0.5
Montenegro	2.1	3.5	9.0	3.4
Romania	6.6	4.8	7.8	5.5
Serbia	12.7	6.5	11.7	9.9
Turkey	9.6	8.8	10.4	6.2

Sources: National central banks and IMF.

prices compared to the previous year, have contributed to substantial disinflation. Actually, in some countries inflation was negative during the first half of 2009 (see Table II.3). The fastest decrease in inflation is observed mainly in Bulgaria and FYROM and, to a lesser extent, Romania and Turkey.

The financial crisis also affected the fiscal aggregates of SE Europe unfavourably since, besides the inevitable reduction in tax revenue, there was a pronounced need for increased state aid, directly impacting on fiscal deficits. These developments have also affected countries with remarkable fiscal stability in the last few years, such as Bulgaria and FYROM, which are likely to show a deficit at the end of 2009. It should also be noted that the countries of the region are less able to make use of fiscal policy in order to tackle the crisis than most developed countries. This is due both to their difficulty in financing fiscal deficits and to restrictions from other economic policy priorities, such as the implementation of exchange rate policy (in those countries that have an exchange rate peg).

High deficits and considerable external vulnerability, mainly owing to the increased need for external financing, had a direct negative impact on the exchange rates of these countries, particularly between September 2008 and March 2009.[32] It should be noted that exchange rate developments are particularly important to the countries of the region, as a large part of bank loans to the private sector in many of these countries, especially in Croatia, Romania and Bulgaria, is denominated in foreign currency. It is therefore obvious that, if the domestic currencies of these countries depreciate further, a part of the private sector would probably become unable to service its debt, thus undermining financial and macroeconomic stability. Recently, however, the exchange rates of the countries of the region seem to be stabilising and/or rebounding against the euro.[33] On the other hand, the monetary authorities of countries with exchange rate pegs have ensured —at least so far and in spite of the adverse conditions— the stability

32 Specifically, most free-floating currencies recorded considerable losses against the euro from the beginning of the crisis, in September 2008, to March 2009. In more detail, between 12 September 2008, i.e. one day before the bankruptcy of Lehman Brothers, and the end of March 2009, the following currencies depreciated against the euro: the Ukrainian hryvnia by 60.7%, the Serbian dinar by 24.4%, the Turkish lira by 25.1%, the Romanian leu by 18.3% and, to a lesser extent, the Albanian lek by 7.2% and the Croatian kuna by 5.4%.

33 In early October (7.10.2009), several of the aforementioned currencies seemed to rebound against the euro from the end-March 2009 troughs. Specifically, the following currencies appreciated: the Serbian dinar by 2.1%, the Turkish lira also by 2.1% and the Croatian kuna by 3.0%. By contrast, the following currencies depreciated slightly: the Romanian leu by 0.8% and the Albanian lek by 2.6% (the depreciation of the Albanian currency occurred in the last month). Finally, the Ukrainian hryvnia depreciated by 12.8%. Although this was the strongest depreciation among the currencies of the region, it is considerably lower than the drop of the same currency in the period between September 2008 and March 2009.

Table II.4 Current account balances (% of GDP) in South-Eastern European countries

Country	2006	2007	2008	2009 (forecasts)
Albania	-5.6	-9.1	-14.1	-11.5
Bosnia-Herzegovina	-8.4	-12.7	-14.7	-8.8
Bulgaria	-18.5	-25.2	-25.5	-11.4
Croatia	-6.7	-7.6	-9.4	-6.1
FYROM	-0.9	-7.2	-13.1	-10.6
Montenegro	-24.1	-29.4	-29.6	-16.0
Romania	-10.4	-13.5	-12.4	-5.5
Serbia	-10.1	-15.6	-17.3	-9.1
Turkey	-6.0	-5.8	-5.7	-1.9

Sources: National central banks and IMF.

of their currencies' exchange rate, particularly against the euro.[34] Still, in their effort to tackle effectively the pressures, many countries turned to the IMF and the European Union in order to ensure liquidity. Romania, Serbia and Ukraine turned mostly to the IMF. Moreover, these countries committed to take measures in order to improve their fiscal position, support the domestic banking system and adopt a restrictive income policy.

Turning to the external sector, the large deficits – the main common feature of the countries of this region in recent years – have narrowed considerably in 2009. Based on data for the first quarter of 2009, a significant improvement was observed in the trade balance and, by implication, in the current account balance of SE European countries (see Table II.4), especially those with very high deficits in 2008, namely Bulgaria, Turkey and Romania. These developments are associated with a significant reduction in imports across the region, which in several cases has more than offset the decline in exports.

Generally, in the light of the above analysis, it should be noted that despite the strong recession, unemployment, large fiscal and external deficits and financing difficulties in SE European countries, the risk of serious financial instability and foreign debt servicing difficulties has been limited. The year 2009 will undoubtedly be crucial for SE European countries. Restoring macroeconomic stability (primarily by ensuring fiscal consolidation) and continuing structural and institutional reforms can be the key policy orientations for ensuring long-term growth.

34 This, of course, in most cases forced national central banks to intervene strongly in the foreign exchange market.

III THE SINGLE MONETARY POLICY AND EUROSYSTEM INTERVENTIONS

1 THE SINGLE MONETARY POLICY[1]

The Governing Council of the ECB, which had started reducing the key interest rates of the Eurosystem progressively in October 2008, continued to gradually cut them until May 2009. Between June and mid-October 2009, the key interest rates remained unchanged (see Table III.1). In more detail, the Governing Council of the ECB cut the fixed rate on the main refinancing operations four times[2] during January-May 2009, by a total of 150 basis points, to 1% in May 2009, from 2.5% in December 2008 (and 4.25% during the July-September 2008 period).[3] After these reductions, the key interest rates reached an all-time low, not only in the Monetary Union, but also in its member countries before the introduction of the single currency. Moreover, during January-October 2009, the Governing Council of the ECB continued to expand the use of non-standard monetary policy measures,[4] which facilitate the flow of financing to the real economy of the euro area through the banking system and contribute decisively to financial stability.

The Governing Council of the ECB formulates monetary policy with a view to achieving the primary objective of the Eurosystem, i.e. price stability[5] in the euro area over the medium term. During January-October 2009, the Governing Council of the ECB repeatedly stressed that, through its interest rate policy and non-standard measures, it contributes to the firm anchoring of medium-term inflation expectations in line with price stability. Such anchoring is indispensable to financial stability and growth.

The Governing Council of the ECB pointed out that, given the key interest rate cuts and its non-standard monetary policy measures, it is expected that price stability will be maintained in the euro area over the medium term.[6] Consequently, based on available data and the analysis of developments, the current key interest rates remain appropriate. Indeed, indicators of inflation expectations,[7] which are affected by the monetary policy measures of the Eurosystem, suggest that inflation in the euro area is expected to stand below but close to 2% over the medium term.

In more detail, during the January-July 2009 period, inflationary pressures relented gradually and reached low levels —where they are expected to remain over the medium-term— mainly on account of the downward course of international oil and other commodity prices until the end of 2008 and the global economic downturn. The outcome of *economic analysis* (that inflationary pressures have eased and will remain low over the medium term) is also corroborated by *monetary analysis*, given the simultaneous slowdown in the annual growth rate of M3, total credit expansion and especially bank loans to the private sector, which resulted in a commensurate deceleration in the underlying pace of monetary expansion.[8]

1 According to the introductory statements of the President of the ECB at the press conferences held every month after the first meeting of the Governing Council of the ECB —in which monetary policy is formulated— during January-October 2009.
2 The fixed rate on the main refinancing operations was reduced by 50 basis points in January and March and by 25 basis points in April and May 2009.
3 The interest rate on the marginal lending facility was gradually reduced by 125 basis points, to 1.75% in May 2009 from 3% in December 2008 (and 5.25% in the period July-September 2008), and the interest rate on the deposit facility was gradually reduced by 175 basis points, to 0.25% in April 2009 from 2% in December 2008 (and 3.25% during the July-September 2008 period).
4 These measures are considered non-standard because they are connected with significant modifications of the operational framework —i.e. the instruments and procedures— for the implementation of monetary policy. These measures improve financing conditions and enhance the flow of financing from the financial system —in the euro area, mainly banks— to the economy, at a larger scale than cuts on key interest rates alone would make possible.
5 According to the definition in the monetary policy strategy of the Eurosystem, price stability is achieved when inflation is below but close to 2%.
6 Of course, if in the future macroeconomic developments show a significant and sustainable improvement, low interest rates on the one hand and non-standard measures on the other may rekindle inflation. For this reason, it was necessary to formulate an exit strategy from these monetary policy measures, but this does not mean that the Eurosystem commits itself on the future path of interest rates or other technical details or the timing of the implementation of this policy.
7 In the context of monetary analysis, the Governing Council of the ECB monitors various indicators of inflation expectations over the medium to longer term in the euro area (e.g. 5 years ahead). These indicators are based on the yields on index-linked bonds, swaps, data from the ECB Survey of Professional Forecasters, etc.
8 For the calculation of underlying money growth, which is not published, the ECB employs a number of different techniques (see ECB, *Monthly Bulletin*, May 2008, Box 1, p.15). It is considered that this aggregate provides more insight into the development of inflation than M3 growth, taking into consideration the time lags.

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.

Consequently, as mentioned above, the Governing Council of the ECB progressively cut the fixed rate on the main refinancing operations. Moreover, with a view to further normalising money market conditions and facilitating the flow of financing through the banking system to the real economy of the euro area:

- *longer-term refinancing operations with a maturity of one year* started to be conducted as from June 2009;

- the European Investment Bank became an eligible counterparty to the Eurosystem monetary policy operations as from July 2009;

- the Eurosystem started implementing a covered bond purchase programme as from July 2009 (see Section 2 of this Chapter).

The Governing Council of the ECB has pointed out that the measures taken since the intensification of the financial crisis in September 2008 are unprecedented in nature, scope and timing. These measures have led to significant cuts in bank lending rates to households and non-financial corporations. As the transmission of monetary policy works with lags, these measures progressively feed through to the economy in full, providing ongoing support for households and corporations.

Moreover, the Governing Council of the ECB has stressed that, given the challenges that lie ahead, banks should take appropriate measures to strengthen further their capital bases and, where necessary, take full advantage of the government measures that support the financial sector.

The *economic analysis*, taken into account by the Governing Council of the ECB, showed that the euro area GDP continued to fall in the first two quarters of 2009, mainly because of the negative impact from the financial crisis on global trade. Nevertheless, there are now increasing signs of GDP stabilisation. Given the effect of interest rate cuts and other liquidity-enhancing measures by central banks, fiscal policy stimulus packages in many euro area countries, measures to support the financial system globally as well as other factors (such as corporations' trend to replenish their inventories), it is expected that economic activity in the euro area will gradually recover. Nonetheless, uncertainty remains high.

Regarding inflation, its slowdown continued during January-July 2009. Its annual rate of change has remained —as expected— in negative territory since June, mainly because during most of 2008 both oil and other commodity prices increased strongly (even though this was reversed afterwards[9]), and also because of the economic downturn. In August and September 2009, the rate of inflation remained negative, albeit less than in July.

The Governing Council of the ECB has repeatedly stressed that inflation will remain in negative territory only temporarily, since within the next few months the general price level in the euro area is expected to start picking up moderately on an annual basis. According to the latest ECB staff macroeconomic projections (September 2009), average annual inflation is projected to range between 0.2% and 0.6% in 2009 and between 0.8% and 1.6% in 2010. The possibility of larger than expected hikes in indirect taxes and administered prices cannot be ruled out, however (in an effort to contain the actual widening of fiscal deficits in the future). Moreover, the evolution of economic activity and of oil and other commodity prices is not unlikely to belie current expectations, leading potentially to different inflation levels than the ones projected. In any event, as already mentioned, the Governing Council of the ECB has been stressing throughout the period January-October 2009 that, according to the available indicators of inflation expectations over the medium to longer term, which are affected by the monetary policy of the Eurosystem, price stability is expected to be maintained in the euro area over the medium term.

Turning to the *monetary analysis*, the Governing Council of the ECB has pointed out the continued deceleration in M3 growth (December 2008: 7.5%, August 2009: 2.5%), combined with a synchronised continued decline in the growth rate of total credit and bank loans to the private sector (December 2008: 5.8%, August 2009: 0.1%). The simultaneous slowdown in the growth of M3 and of loans to the private sector leads to a deceleration in underlying money growth and thus signals an easing of inflationary pressures (which have become low) over the medium term.

Finally, the Governing Council of the ECB has stressed that interest rate cuts and non-standard measures, aimed at facilitating the flow of credit to the euro area economy, will be quickly unwound once the macroeconomic environment improves,[10] and that the liquidity provided to the banking system will be absorbed,

9 As a result of this development, oil and other commodity prices in the first half of 2009, which have decisively influenced inflation in this period, were significantly lower than during most of 2008.

10 This moment has yet to come, according to the speech delivered by the President of the ECB in the ECB Watchers conference held in Frankfurt on 4 September 2009.

in order to avert upside risks to inflation over the medium to longer term and to keep medium-term inflation expectations in line with price stability.

2 EUROSYSTEM INTERVENTIONS IN THE MONEY MARKET AND NON-STANDARD MONETARY POLICY MEASURES IN THE EURO AREA

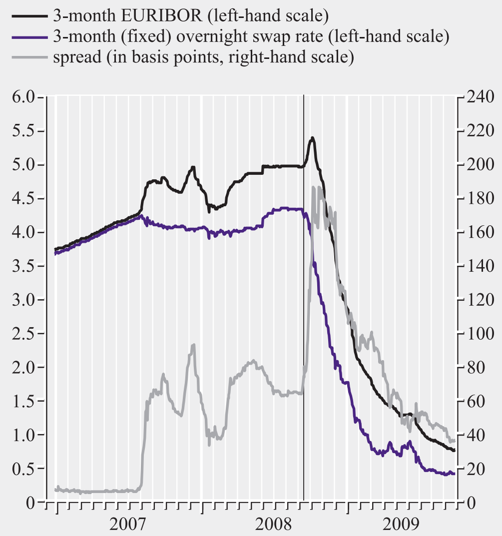
During January-September 2009, the Eurosystem continued to provide liquidity to credit institutions in the euro area through a fixed-rate tender procedure with full allotment. The number of securities that the Eurosystem accepted as eligible for collateral in these tenders was larger than in the period before mid-October 2008. Similarly, US dollar liquidity-providing operations will continue to be conducted through fixed-rate tenders with full allotment against eligible collateral and through the marginal lending facility. Moreover, the provision of Swiss francs to euro area credit institutions through EUR/CHF foreign exchange swaps with the Eurosystem continued.[11]

During this period, progress was made towards smoothing out the conditions in the euro area interbank market (as regards uncollateralised deposits). In more detail, the Euribor and the spread between the Euribor and the corresponding EONIA swap rates[12] (that have the same maturity as interbank loans), which reflect the magnitude of tensions in the interbank market, gradually declined.[13] Thus, the three-month Euribor/three-month EONIA swap rate spread remains, since May 2009, below the level at which it stood before the intensification of the financial turmoil in mid-September 2008 (see Chart III.1). However, this spread is still significantly higher than before the beginning of August 2007, when the euro area interbank market started to be affected by the international financial turmoil.

Given that, as already mentioned, all Eurosystem counterparties' bids were accepted in open market operations,[14] the amount of liquidity was determined on the spot by banks' demand for liquid assets. By contrast, in the period before the beginning of October 2008, the amount of liquidity provided through open market operations was determined by the ECB, with a view to steering very short-term interbank interest rates.

Chart III.1 Spread between the 3-month Euribor and the 3-month fixed rate on overnight-indexed swaps (January 2007-September 2009)

(percentages per annum and basis points, daily data)



Sources: ECB and European Banking Federation.
The vertical line indicates the date (15 September 2008) when the bankruptcy of Lehman Brothers was announced.

11 During January-September 2009, the following modifications of the operational framework of monetary policy (besides the non-standard measures) were adopted: (i) extension of the period in which regular liquidity-providing open market operations (financing in euro) will be conducted as fixed rate tenders with full allotment for as long as necessary and in any event until the end of 2009; (ii) extension, until the end of 2010, of the period in which the expanded list of eligible collateral remains in force – which was decided in October 2008; (iii) discontinuance of the EUR/USD temporary reciprocal currency arrangements (swap lines) at the end of January 2009. The regular provision of US dollars against eligible collateral continued, with the exception of operations at terms of 28 days, which were discontinued after the end of July 2009. Operations at terms of 84 days will also be discontinued, after the beginning of October 2009. Therefore, after that moment, US dollar liquidity-providing operations will be conducted exclusively at terms of 7 days; (iv) extension, until the end of January 2010, of the period in which EUR/CHF foreign exchange swaps will be conducted.

12 See footnote 25 in Chapter II.

13 Three-month Euribor (31 December 2008: 2.89%, 30 September 2009: 0.75%); three-month Euribor/EONIA swap rate spread (31 December 2008: 114 basis points, 30 September 2009: 36 basis points).

14 Provided, of course, that the underlying collateral is sufficient.

During the January-September 2009 period,[15] the EONIA rate was consistently below the fixed rate on the main and longer-term refinancing operations (see Chart III.2), as a result of the fact that credit institutions drew very large amounts of liquidity from the Eurosystem – also on account of the high uncertainty surrounding their future needs for liquid assets. The (positive) spread between the fixed rate on these operations and the EONIA followed a downward trend until the end of June 2009. Around the end of June, excess liquidity in the interbank market grew considerably, as credit institutions drew very large amounts in the first liquidity-providing operation with a maturity of one year. This increase in excess liquidity caused a further decline in the EONIA, which thus came closer to the deposit facility rate.[16] This, in turn, interrupted the said downward trend of the (positive) spread between the interest rate for the provision of euro liquidity by the Eurosystem through open market operations and the EONIA.

On 21 January 2009, the corridor set by the interest rates on the two standing facilities[17] of the Eurosystem (see Chart III.3) reverted to 2 percentage points. This new increase in the corridor resulted in a gradual reduction, until the end of June 2009:

- in the amount of credit institutions' deposits in the deposit facility;[18] and

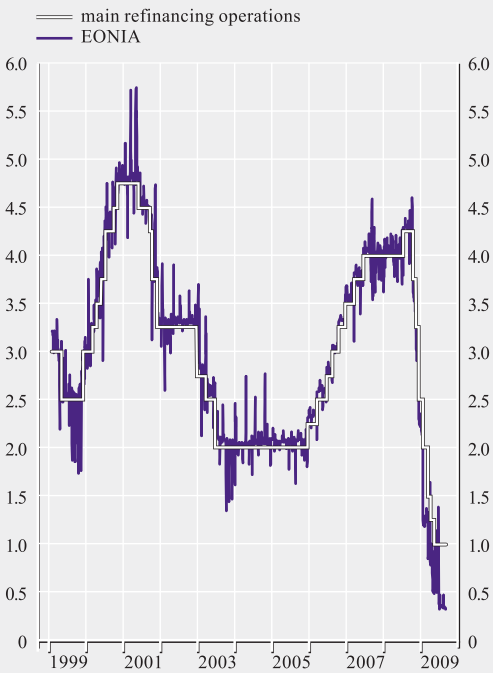
- in the provision of liquidity by the Eurosystem to credit institutions through open market operations.[19]

Likewise, there was an increase in the volume of transactions on the interbank deposit overnight market.

These developments suggest a reduction in counterparty risk[20] in the interbank market, mainly on account of Eurosystem measures to enhance liquidity. As a result, banks – also due to the fact that making use of the deposit facility became less attractive – began channelling their liquidity surpluses to other banks

Chart III.2 Interest rate on the Eurosystem's main refinancing operations and the euro overnight index average (EONIA) (January 1999-September 2009)

(percentages per annum, daily data)



Source: ECB.

15 With the exception of some very short periods.
16 It should be noted that the EONIA rate cannot be lower than the deposit facility rate of the Eurosystem.
17 The corridor equals the difference between the interest rate on the marginal lending facility and the interest rate on the deposit facility. As mentioned in the *Monetary Policy Report 2008-2009* (February 2009), this difference was reduced from 2 percentage points to 1 percentage point as from 9 October 2008. This reduction aimed at limiting the fluctuations of the EONIA around the fixed rate on the main refinancing operations. As already known, the EONIA can be neither higher than the marginal lending facility rate nor lower than the deposit facility rate. Later on, this difference was raised anew to 2 percentage points as from 21 January 2009. This increase aimed at providing again sufficient motivation to banks to channel their liquidity surpluses to the interbank market instead of depositing them with the Eurosystem through the deposit facility. Finally, as from 13 May 2009, the interest rate on the marginal lending facility was reduced and the interest rate on the deposit facility remained unchanged, thus the corridor narrowed anew, to 1.5 percentage points.
18 From €315 billion on 9 January to €7.5 billion on 24 June 2009.
19 The liquidity provided by the Eurosystem to credit institutions through open market operations increased from €449 billion (4.9% of euro area GDP) on 17 September – i.e. immediately after the bankruptcy of Lehman Brothers – to €857 billion (9.3% of GDP) on 31 December 2008. However, by the 17th July 2009, the amount of Eurosystem claims from liquidity-providing open market operations in euro had declined to €618 billion (6.8% of GDP).
20 Counterparty risk discourages interbank lending. Eurosystem measures to enhance liquidity contributed to reducing this risk. Specifically, these measures allowed debtor banks to meet their obligations also by tapping into the Eurosystem as well, only subject to the availability of collateral.

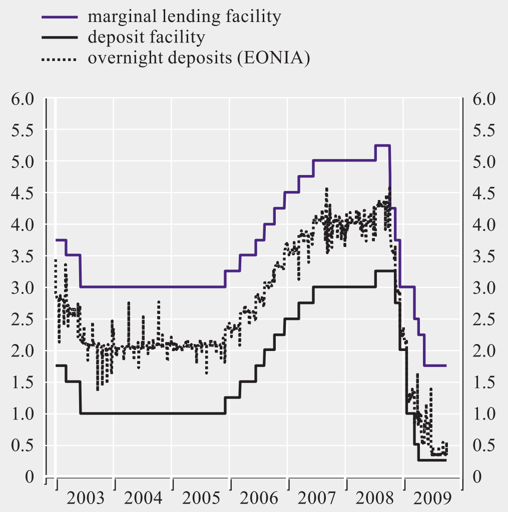
through the interbank market. Likewise, banks with liquidity shortages did not have to resort to the Eurosystem for liquidity, at least not to the same extent as in the last months of 2008. Nonetheless, the volume of transactions in the interbank market for deposits with a maturity of over one month remained low, while several banks were (and still seem to be) unable to raise funds from the interbank market, thus having to rely exclusively on the Eurosystem open market operations for financing.

As regards open market operations,[21] in the period from the beginning of 2009 to the end of June, the liquidity provided through main refinancing operations as a percentage of total liquidity gradually increased.[22] Respectively, the liquidity provided through longer-term refinancing operations as a percentage of total liquidity declined. It should also be noted that in the first nine months of 2009, at the end of each maintenance period, the ECB conducted liquidity-absorbing fine-tuning operations in the form of variable rate tenders.

Upon the conduct of the first longer-term refinancing operation with a maturity of one year at the end of June 2009, the amount of Eurosystem claims vis-à-vis credit institutions, affected by the provision of liquidity, increased sharply. Afterwards, however, credit institutions reduced significantly the amounts of liquidity received through other open market operations (which provide liquidity with a maturity of less than one year), bringing Eurosystem total claims vis-à-vis credit institutions back to a declining path.[23] On the other hand, the tendency to reduce the amount of deposits in the deposit facility was temporarily interrupted at the end of June 2009. This was a result of the fact that banks deposited with the Eurosystem the bulk of the funds drawn through the first open market operation for the provision of liquidity with a maturity of one year.[24] Afterwards, these deposits followed again a downward path, with some fluctuations.[25] At end-June 2009, reversing its downward trend, the amount of liquidity provided through longer-term refinancing operations as a percentage of total liquidity increased considerably.[26]

Chart III.3 Interest rates on Eurosystem's facilities and overnight deposit rate in the interbank market (EONIA) (January 2003-September 2009)

(percentages per annum, daily data)



Source: ECB.

21 Open market operations are divided into regular, fine-tuning and structural operations. Regular open market operations are conducted on predefined dates (e.g. once a week) and include (i) main refinancing operations; and (ii) longer-term refinancing operations. Through the main refinancing operations, the Eurosystem provides liquidity to credit institutions with a maturity of one week. The maturity of longer-term refinancing operations varies: it may equal the maintenance period (i.e. around 30 days), three or six months or – as from the end of June 2009 – twelve months. During the maintenance period, credit institutions have to comply with reserve requirements, making a deposit with the corresponding national central bank (these reserves have to reach a predefined amount on average, although the daily amount may fluctuate). Finally, as regards fine-tuning open market operations, the dates on which they are conducted and their maturity are decided as appropriate. It should be noted that fine-tuning open market operations are used sometimes for the provision and sometimes for the absorption of liquidity.

22 Thus, liquidity provided through the main refinancing operations, as a percentage of the liquidity provided through all open market operations, increased from about 25% at the end of 2008 to around 50% in mid-June 2009.

23 On 25 June 2009, total liquidity provided by the Eurosystem through open market operations reached a 2009 high of €897 billion (9.9% of the euro area GDP). However, by 30 September, the total amounts allotted had shrunk to €670 billion (7.4% of GDP).

24 See "The impact of the first one-year longer-term refinancing operation", ECB, *Monthly Bulletin*, August 2009, Box 3, p. 34.

25 On 3 July 2009, the amounts outstanding in the deposit facility of the Eurosystem reached a 2009 high of €316 billion. By 30 September 2009, these amounts had shrunk to €74 billion.

26 To around 88% at end-September 2009, from around 50% at mid-June.

Further non-standard monetary policy measures,[27] which were announced in May 2009, aimed at facilitating the flow of financing to the real economy of the euro area. Since in the euro area the largest part (over 2/3) of the flow of funds between surplus and deficit economic units is channelled through credit institutions,[28] these measures focus on supporting the banking system.[29] In particular, non-standard measures aim directly at decreasing money market interest rates on longer-term loans, increasing the liquidity of an important type of private securities (covered bonds) and improving bank funding conditions.

As already mentioned, at the end of June 2009, the first liquidity-providing operation with a maturity of one year and a fixed rate equal to the rate on the main refinancing operations was conducted. At the end of September 2009, the second operation with a maturity of one year and the same rate was conducted. Longer-term refinancing operations with a maturity of one year will be quarterly. As announced, the fixed rate for the provision of liquidity through such operations may be higher than the rate on the main refinancing operations in the future, if conditions so require.

Longer-term refinancing operations with a maturity of one year contribute to enhancing bank liquidity (under very favourable terms and for an extended period of time) and keeping the 12-month interbank rate low, thus reducing the spread between this interest rate and the shorter-term rates in the money market. Also, they encourage banks to maintain or even increase the flow of credit to their customers, a development that will bolster up the expected economic recovery.

In July 2009, the European Investment Bank (EIB) became an eligible counterparty to the Eurosystem, after fulfilling the terms and conditions applicable to all counterparties, and can receive liquidity from the Eurosystem (through the national central bank of Luxembourg). This will enhance the EIB's capacity to implement its lending programme,[30] which is important for small- and medium-sized enterprises.

In July 2009, the Eurosystem also started purchasing covered bonds[31] on the primary and the secondary market. These bonds have to be denominated in euro and issued in the euro area. The covered bond purchase programme is expected to expire at the end of July 2010. Through these purchases the Eurosystem wishes to contribute to: (1) a reduction in the yield spread between covered bonds and government securities; and (2) an increase in transactions in covered bonds between third

27 The measures announced in May 2009 by the Governing Council of the ECB are not the first non-standard measures taken by the Eurosystem. The significant modifications of the operational framework of monetary policy in October 2008 (see *Monetary Policy*, February 2009) are also non-standard measures. Besides, the President of the ECB explained in his speech "Supporting the financial system and the economy: Key ECB policy actions in the crisis" (22 June 2009) that the Eurosystem had taken non-standard measures already from the first day of the turmoil. In more detail, the first non-standard measure was the tender conducted on 9 August 2007, through which overnight liquidity was provided to credit institutions at a fixed rate with full allotment. It should be noted that these measures contributed to preventing the collapse of systemically important banks and maintaining financial stability in the euro area.

28 In contrast to market-based financing, whose relative importance in other economies, e.g. the United States, is higher. In speeches that the President of the ECB delivered on 12 and 22 June 2009, he pointed out that in the euro area 70% of non-equity external financing comes from banks, compared with 30% in the United States, whilst the stock of financing to the private sector equals 145% of GDP in the euro area and private bonds (including bank bonds) 81% of GDP, compared with 63% and 168% respectively in the United States (end-2007 data). This difference in the financial structure explains the fact that, contrary to the Eurosystem, the US Federal Reserve has purchased large quantities of, *inter alia*, short-term commercial paper in order to counter the impact of the financial crisis.

29 The focus on the support of the banking system is also explained by the fact that Eurosystem counterparties are basically credit institutions.

30 The EIB expected to face difficulties in security-based financing because of the strong demand for funds by other, chiefly public, entities.

31 Covered bonds are bonds with a fixed rate and a medium to longer-term maturity, issued usually by credit institutions. These bonds are based on a group of loans (the "cover pool") granted by the issuing institutions. Loans included in the cover pool are selected according to the safety criterion, i.e. are either mortgage loans (with a relatively low loan-to-value ratio) or public loans (including bonds). The cover pool falls within the ambit of supervisory authorities who monitor it closely. Besides, since loans are kept on the balance sheet of the issuing credit institution, its incentives to select and monitor its debtors do not weaken, contrary to asset-backed securities. In fact, covered bonds offer their holders extra safety (being dual-recourse instruments). Covered bond holders are considered creditors of the bank (contrary to the holders of other securities issued against existing bank loans, e.g. structured bonds). Moreover, covered bond holders have a privileged claim over the loans that comprise the cover pool (see "Covered bonds in the EU financial system", ECB, December 2008).

parties, so as to deepen the secondary market and increase its liquidity. The ultimate goal is to make it easier for banks to raise funds by issuing new covered bonds. By September 2009, the said spread had narrowed considerably and new covered bond issuance had increased.

As already mentioned, the Governing Council of the ECB has underlined that non-standard measures can be quickly unwound and will be unwound if upside risks to inflation over the medium to longer term emerge, and the Eurosystem will absorb the liquidity provided through such measures.

IV MACROECONOMIC DEVELOPMENTS AND PROSPECTS IN GREECE

1 ECONOMIC ACTIVITY: DEVELOPMENTS AND PROSPECTS

The economic downturn in Greece, noticeable since the fourth quarter of 2007, gradually deepened in the course of 2008 and spread to all economic sectors and subsectors. As a result, annual GDP growth fell from 4.5% in 2007 to 2.0% in 2008 (see Table IV.1 – revised NSSG data). The economic downturn continued in 2009: in the first half of the year, the GDP rate of change stood at zero (according to provisional NSSG estimates which are expected to be revised). This is the worst performance of the Greek economy since Greece joined the euro area and reflects the impact from the international financial turmoil, as well as the influence of domestic factors, both cyclical and structural. The available short-term indicators, which cover the first nine months of the year, imply that the performance of the economy has been sluggish so far and make it highly likely that activity will shrink further and the GDP rate of change will turn negative, reaching or exceeding -1% for 2009 as a whole.

According to the coincident indicator of economic activity compiled by the Bank of Greece,[1] the rate of change in economic activity turned negative in July 2009 (-1.0%), from 0.6% in December 2008 (see Chart IV.1). By contrast, the results of household and business confidence surveys have conveyed some optimistic messages since the second quarter of the year. However, the levels of these indicators fall considerably short of their past five years average and, therefore, cannot be considered to signal a reversal of the downward trends and an overall recovery of the economy. In parti-

1 This indicator summarises information contained in a set of short-term indicators and reflects the growth rate of the underlying economic activity, smoothing the excess volatility of some short-term indicators.

Table IV.1 Demand and gross domestic product: 2007-2009

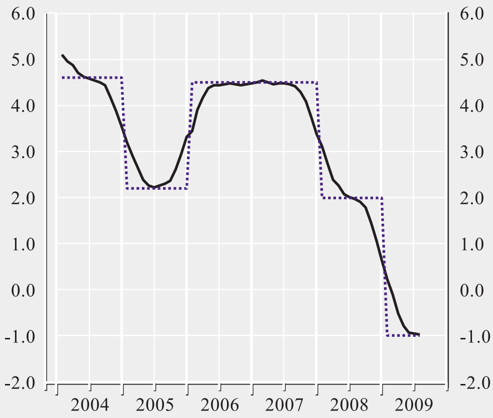
(at constant market prices of 2000; annual percentage changes)

	2007	2008	2009 (Jan.-June)
Private consumption	3.3	2.3	-1.1
Public consumption	8.4	0.6	4.8
Gross investment	*8.1*	*-2.5*	*-12.9*
Gross fixed capital formation:	4.6	-7.4	-11.3
Housing	-8.6	-29.1	-21.5
Other construction	2.5	2.2	22.4
Equipment	20.9	6.3	-29.0
Domestic final demand	**4.3**	**0.0**	**-2.1**
Change in inventories and statistical discrepancy (% of GDP)	0.8	1.8	0.9
Domestic demand	**5.0**	**1.0**	**-2.6**
Exports of goods and services	5.8	4.0	-15.6
Exports of goods	1.5	3.7	-17.2
Exports of services	9.2	4.1	-14.5
Imports of goods and services	7.1	0.2	-19.2
Imports of goods	6.6	-3.1	-19.1
Imports of services	8.8	12.5	-19.7
GDP at market prices	**4.5**	**2.0**	**0.0**

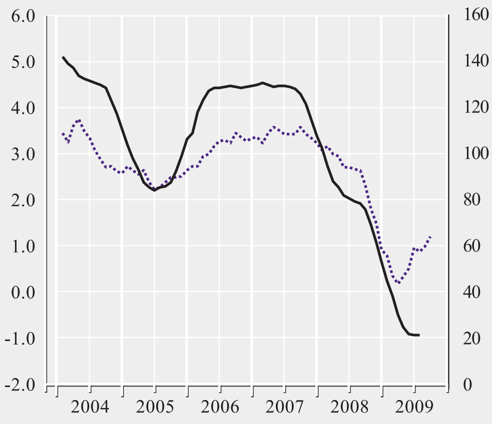
Sources: NSSG/National Accounts and Ministry of Economy and Finance, September 2009, revised data for 2007 and 2008. For January-June 2009, provisional NSSG data under revision. For Bank of Greece estimates for 2009, see the main text.

Chart IV.1 Economic activity indicators

A. The coincident indicator of economic activity compiled by the Bank of Greece
(January 2004 - July 2009)



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 2009)



Sources: Bank of Greece (coincident indicator and 2009 GDP), NSSG (2004-2008 GDP) and European Commission (economic sentiment indicator).
1 Annualised monthly percentage changes.
2 Annual rate.
3 Monthly data.

cular, after recording a continuous and steep fall for about fifteen months and reaching an all-time low in March 2009, the Economic Sentiment Indicator for Greece, which is compiled by the European Commission, partly recovered in the period from April to September, probably implying a slowdown in the deterioration of conditions.

Following a long period of high demand and output growth, which clearly exceeded the medium-term potential GDP growth rate, the Greek economy is now faced with a serious crisis, which at the same time brings to the fore its long-standing structural weaknesses and macroeconomic imbalances. Although a cyclical downturn was perhaps to be expected after a long period of continuous growth, the international crisis has also had a significant impact on the Greek economy. However, a comparison between the performance of the Greek economy and that of other euro area economies shows that the deterioration was relatively weaker in Greece, at least with regard to the gravity of the economic downturn. Some structural characteristics and weaknesses of the Greek economy, such as the excessively large share of internationally non-tradeable goods in GDP and the concomitant limited openness of the economy to international trade, as well as product and labour market rigidities, have acted – only in the short run, though – to temporarily mitigate the impact from the international financial turmoil. However, as the crisis still affects activity in Greece, it is certain that the same factors will act in the opposite direction, preventing the Greek economy from joining promptly the recovery of the international economy, once it takes hold. Characteristically, in the course of 2008 and mostly in the first nine months of 2009, fiscal policy has been very relaxed, on both the revenue and the expenditure sides, which resulted in a considerable widening of the fiscal deficit in 2008 and its further increase this year. Although fiscal relaxation (which is reflected in the cash data for this period – see Chapter V) actually helped contain the drop in activity (by increasing public consumption, accelerating public investment spending and boosting disposable income due to the shortfall in tax revenues), it also contributed to an accelerating increase in public debt. In the short term, these developments adversely affect Greece's creditworthiness and increase its borrowing costs; in the longer term, they undermine the country's growth prospects.

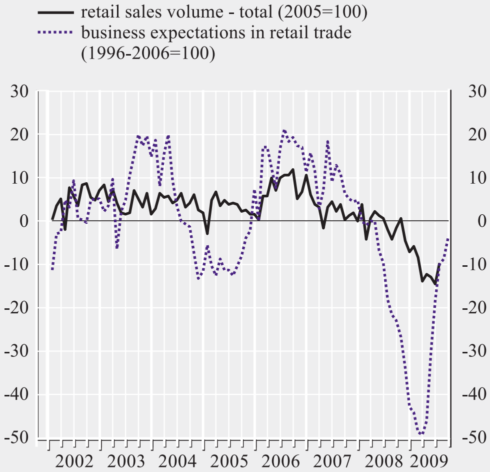
As mentioned above, the average GDP rate of change for 2009 as a whole is expected to reach or even exceed -1%. This estimate takes into account the available national accounts data. However, it should be noted that while data for 2008 were extensively revised recently, revised data for the first half of 2009 are not available yet. This reduces the accuracy of the forecast for the whole year. Moreover, account has been taken of current trends in the main short-term indicators, estimates and forecasts by international organisations on developments in the global economy, as well as reasonable technical assumptions on developments in international commodity prices and exchange rates. The GDP growth estimate for 2009 is also based on the assumption that the GDP rate of change will be slightly affected by partial destocking (inventories had reached very high levels in 2008, adding 1.1 percentage points to GDP growth. According to available provisional national accounts data, inventories continued to rise in the first quarter of 2009, before declining in the second quarter).

Final domestic demand is expected to decrease in 2009 (after stagnating in 2008), thus making a negative contribution to the change in GDP. On the contrary, the change in the real external balance is expected to make a positive contribution, solely as a result of an anticipated large decrease in imports of goods and services.

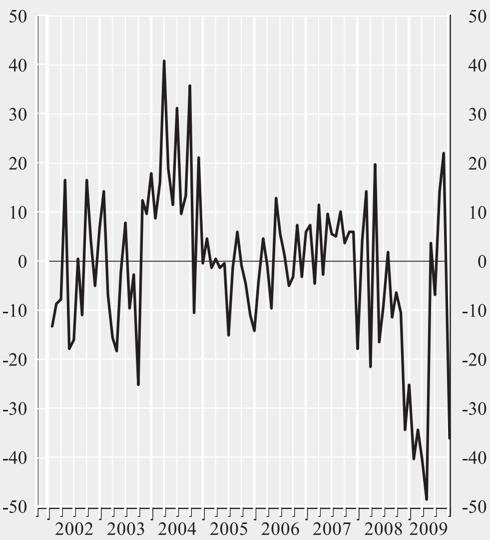
On the basis of data on demand, private consumption (see Chart IV.2 and Table IV.2) is expected to fall by about 1% in 2009 as a whole (against a rise of 2.3% in 2008), thereby contributing to a negative rate of change in domestic demand. According to provisional NSSG estimates, in the first half of 2009 the annual rate of change in private consumption at constant prices was negative (-1.1%). Private consumption has been the main factor that supported domestic demand for at least a decade and its anticipated drop in 2009 represents an important change in demand data. Actually,

Chart IV.2 Consumer demand indicators

A. Sales volume and business expectations in retail trade[1]
(January 2002 - September 2009)



B. New passenger car registrations[1]
(January 2002 - September 2009)



Sources: NSSG (retail sales and cars), 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 six months.
1 Percentage changes over same month of previous year.

Table IV.2 Indicators of consumer demand (2007-2009)

(annual percentage changes)

	2007	2008	2009 (available period)
Volume of retail trade	2.3	-1.4	-11.2 (Jan.-July)
Food-beverages-tobacco[1]	0.9	-0.1	-7.0 (» »)
Clothing-footwear	1.0	-5.5	4.1 (» »)
Furniture-electrical appliances-household equipment	6.7	-4.3	-20.5 (» »)
Books-stationery-other	6.7	-1.3	-28.3 (» »)
Revenue from VAT (at constant prices)	6.8	0.8	-10.4 (Jan.-July)
Retail trade business expectations index	9.0	-15.3	-30.3 (Jan.-Sept.)
New private passenger car registrations	4.3	-7.0	-19.5 (» »)
Tax revenue from mobile telephony[2]	114.2	5.3	0.5 (Jan.-Aug.)
Outstanding balance of consumer credit[3]	22.4 (Dec.)	16.0 (Dec.)	4.8 (Aug.)

Sources: NSSG (retail trade, cars), Bank of Greece (VAT revenue and consumer credit), IOBE (expectations), Ministry of Economy and Finance (tax revenue from mobile telephony).
1 Including big food stores and specialised food-beverages-tobacco stores.
2 Adjusted monthly service fees per subscription apply as from 1 November 2006.
3 Including bank loans and securitised loans, and taking into account loan write-offs and foreign exchange valuation differences.

assuming that the national accounts estimates of total private consumption (of goods and services) in the first half of the year are accurate, then these estimates, coupled with the fact that the volume of retail sales of consumer goods and domestic industrial production have fallen less than the import of goods in the same period, seem to suggest that (a) the *share of domestically* produced goods in consumption has grown; and (b) the consumption of services has decreased far less than the consumption of goods (or has even increased!).

The volume of retail sales (excluding car and fuel sales) in the first seven months of the year dropped at an average annual rate of 11.2%, compared with an increase of 0.3% in the same period of 2008. Moreover, in the first nine months of the year, the number of new passenger car registrations fell by 19.5%, despite the upward effect on the sales of cars with high engine capacity in July and August from the decrease in car registration fees. However, some indications recorded since April 2009, including the *relative* strengthening of consumer and business confidence in retail trade (IOBE surveys), may suggest that in the second half of the year private consumption will not decrease faster than in the first half. The estimated increase of about 1% in real terms in the *total* pre-tax income of employees (see Section 3 of this Chapter) could help in this direction. By contrast, although the annual rate of credit expansion to households remains positive, albeit decelerating, the net flow of new loans is considerably lower than last year and, therefore, contributes to the decline in consumer demand. In any case, any forecast of the evolution of private consumption is surrounded by high uncertainty, mostly related to the rise in the unemployment rate (up by some 1.5 percentage points in the first half of 2009 year-on-year – see Section 2 of this Chapter). Any further increase in unemployment would worsen the expectations of households on the evolution of their future incomes and would lead to a rise in the saving rate.

The influence of changes in household asset valuations on private consumption growth is expected to be marginally negative in 2009. It is estimated that in the first nine months of the year, house prices (in Athens) fell at an average annual rate of 4.0% (see Box IV.1). By contrast, although share prices in the Athens Exchange rose substantially from their

Table IV.3 Indicators of investment demand (2007-2009)

(annual percentage changes[1])

	2007	2008	2009 (available period)
Capital goods output	-1.1	-6.6	-21.6 (Jan.-Aug.)
Capacity utilisation rate in the capital goods industry	(80.4)	(77.5)	(73.1) (Jan.-Sept.)
Outstanding loans to domestic non-financial corporations[2,4]	20.6 (Dec.)	18.7 (Dec.)	7.3 (Aug.)
Disbursements under the Public Investment Programme	7.6	9.3	19.2 (Jan.-Sept.)
Volume of private construction activity (on the basis of permits issued)	-5.0	-17.1	-28.7 (Jan.-July)
Cement production	-9.2	-3.1	-23.8 (Jan.-Aug.)
Business confidence indicator in construction	1.5	3.0	-36.4 (Jan.-Sept.)
Outstanding bank credit to housing[3,4]	21.9 (Dec.)	11.5 (Dec.)	4.8 (Aug.)

Sources: NSSG (capital goods output, volume of private construction activity, cement production), IOBE (capacity utilisation rate, business expectations index), Bank of Greece (bank credit to domestic enterprises and housing, disbursements under the Public Investment Programme).
1 Except for the capacity utilisation rate in the capital goods industry, which is measured in percentages.
2 Including loans, corporate bonds, as well as securitised loans and securitised corporate bonds.
3 Including loans and securitised loans.
4 The rates of change are adjusted for loan write-offs and foreign exchange valuation differences.

low levels in early March 2009, their average level in the first nine months of 2009 was considerably lower (by 46%) year-on-year (see Chapter VI.5). However, equities represent only a small part of household wealth. Moreover, the effect of wealth on private consumption has not been empirically confirmed in Greece and is probably weak.

In the first half of the year, public consumption increased —according to provisional NSSG estimates— at a high annual rate (4.9% at constant prices[2]), contributing positively to GDP change by 0.8 percentage points. Increased public consumption reflects a considerable overrun in ordinary budgetary expenditure (see Chapter V). The evolution of public consumption for 2009 as a whole is difficult to foresee and will depend on the final outcome of the fiscal measures that have already been taken or may be taken until the end of the year.

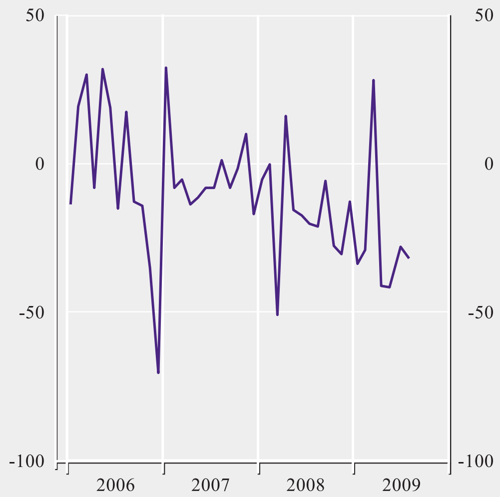
The downward course of gross fixed capital formation in 2008 (-7.4% at constant prices, not including the change in inventories) continued in the first half of this year (down by 11.3% year-on-year). This development reflects the continued decline in residential investment (-21.5% compared with the first half of 2008) and a sharp decrease in investment in mechanical and transport equipment (-28.0% and -30.3%, respectively), as it seems that the implementation of business investment plans has largely slowed down due to the crisis. Non-residential construction investment has had a counterbalancing effect, as its growth rate markedly increased in the first half of the year (22.4%), mostly as a result of the acceleration of large infrastructure projects currently underway. To the extent that these investments relate to public works, it should be noted that Public Investment Programme (PIP) disbursements increased at an annual rate of 19.2% in the first nine months of 2009.

The significant uncertainties that still prevail in the international and domestic economic environment have an adverse impact on business

2 9.6% at current prices.

Chart IV.3 Volume of new buildings and extensions on the basis of permits issued (January 2006-July 2009)

(percentage change over same month of previous year)



Source: NSSG.

investment. Thus, all indicators of investment demand, as well as short-term indicators of current activity are very low, implying that some of the factors that influence investment decisions, such as demand for final products and services, and business profitability[3] are not expected to rebound quickly in the immediate future.

With regard to short-term indications of activity in the construction sector, the confidence indicator in construction fell sharply by 36.4% in the first nine months of 2009, after increasing by 3% for 2008 as a whole. Residential investment is still shrinking, as implied mostly by a large decrease in the volume of private construction activity (on the basis of permits) of 28.7% on an average annual basis in the first seven months of the year (see Chart IV.3), which suggests that private construction activity will weaken further, and by a large decline in cement production (average annual rate in the first eight months of the year: -23.8%). The *net flow of new housing loans* to households has fallen considerably, while the annual growth rate of *outstanding* housing loans to households dropped to 4.8% in August, from 11.5% in December 2008 and 21.9% in December 2007. Besides, the evolution of non-residential construction investment will depend on the progress of major projects and the implementation of the PIP.

In any event, the scope and duration of the current investment downturn[4] are expected to be influenced not only by the general economic climate and the evolution of domestic and international demand, but also by other factors such as government actions to support investment, expedited disbursements for approved projects, promotion of "green investment" mostly in the energy sector, and progress towards the formation of Public-Private Partnerships (PPPs) and the implementation of PPP projects. Such actions include, *inter alia*, the plan to support small and medium-sized enterprises, with a budget of €1,050 million, announced by the Ministry of Economy and Finance in May 2009, and legislation on licensing large business projects within 100 days and on the conversion of the Hellenic Investment Centre (ELKE) into an Agency under the name "Invest in Greece".[5] Certainly, the positive results of these initiatives will only become evident in the medium term.

Exports of goods and services are expected to fall significantly in 2009, after rising by 4.0% in 2008. Exports of both goods and services are expected to fall overall by more than 15%. In particular, exports of goods (on a national accounts basis) declined at an annual rate of 17.2% in the first half of the year. For 2009 as a whole, they are expected to fall faster than international demand,[6] under the direct impact of the dramatic decline in global trade, due to the cumulative loss of structural competitiveness in the past years. After rising in 2008, exports of services at constant prices fell at an annual rate of 14.5% in the first half of the

3 These indicators are examined in more detail below.
4 In a survey conducted by the Association of Chief Executive Officers (EASE) in cooperation with ICAP at the end of the second quarter of 2009, one in two chief executive officers stated that investment expenditure is lower today than a year ago.
5 In particular, Articles 9-14 of Law 3775/2009 passed in July.
6 International demand (i.e. demand for imports in Greek export markets) is expected to decrease by 12%, after rising slightly in 2008.

Table IV.4 Indicators of industrial activity (2007-2009)

(annual percentage changes)

	2007	2008	2009 (available period)	
1. Industrial production index (overall)	**2.4**	**-3.9**	**-9.7**	**(Jan.-Aug.)**
Manufacturing	2.3	-4.5	-11.7	(» »)
Mining-quarrying	-0.3	-4.5	-11.6	(» »)
Electricity	3.5	-2.8	-4.0	(» »)
Main industrial groupings				
Energy	2.9	-2.4	-1.2	(» »)
Indermediate goods	0.9	-6.7	-20.3	(» »)
Capital goods	-1.1	-6.6	-21.6	(» »)
Consumer durables	0.2	-5.6	-23.4	(» »)
Consumer non-durables	4.9	-1.8	-5.8	(» »)
2. Industrial turnover index[1]	**4.3**	**6.7**	**-26.9**	**(Jan.-July)**
Domestic market	2.5	7.5	-26.1	(» »)
External market	8.8	4.9	-29.3	(» »)
3. Industrial new orders index[2]	**2.3**	**-2.3**	**-34.0**	**(Jan.-July)**
Domestic market	0.5	-1.1	-29.5	(» »)
External market	4.7	-3.8	-40.9	(» »)
4. Business confidence indicator in industry	**1.3**	**-10.6**	**-26.6**	**(Jan.-Sept.)**
5. Purchasing Managers' Index (PMI)[3]	**53.7**	**50.4**	**48.5**	**(Sept.)**

Sources: NSSG (industrial activity index, industrial turnover and new orders), IOBE (business expectations), 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.

year. For 2009 as a whole, they are expected to decline considerably, as a result of a fall in both travel and transport receipts.[7]

Subdued domestic demand is reflected in imports of goods and services, which *fell* at an annual rate of 19.2% in the first half of the year. For 2009 as a whole, imports of goods and services are expected to subside by about 20%. In this case, the evolution of imports will contribute "in accounting terms" to an only moderate decline of GDP in 2009. This will be reversed in the next years, as —with the economy recovering— the rate of change in imports will rebound to levels compatible with changes in domestic demand.

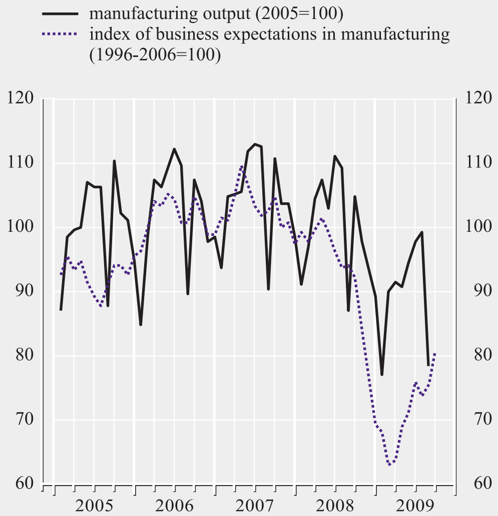
With respect to developments in supply, according to NSSG short-term indicators, the decline in total industrial output in 2008 (-3.9%) continued and gathered momentum in the first eight months of 2009 (average annual rate: -9.7%), while the fall in manufacturing output in the same period was even steeper (-11.7%, against -4.5% for 2008 as a whole). The fall in industrial output was broadly based on the main industrial groupings (see Table IV.4).

Recession in the industrial sector is also reflected in the relevant IOBE business survey. The business confidence indicator was very low in the first nine months of 2009,[8] as

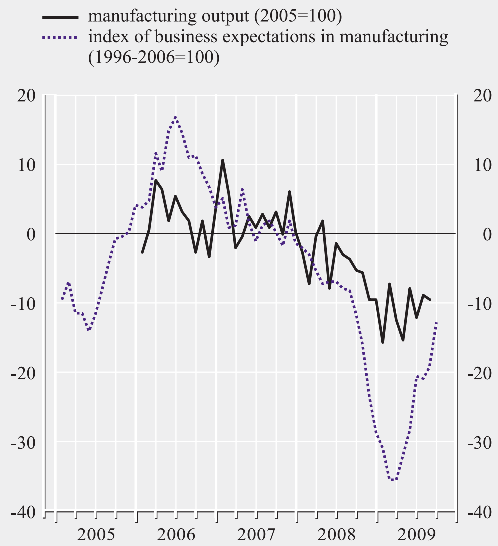
7 In the January-July 2009 period, gross travel receipts (at constant prices) fell by 15.5% and transport receipts fell by 30.1% (compared with the same period of 2008 – see Section 4 of this Chapter).
8 It averaged 71.2, compared with an average of 100 in the period 1996-2006.

Chart IV.4 Output and business expectations in manufacturing
(January 2005 - September 2009)

A. Indices



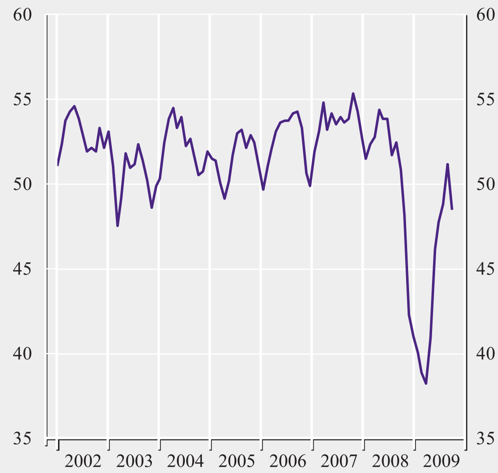
B. Percentage changes over same month of previous year



Sources: NSSG (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 2002 - September 2009)

(seasonally adjusted index; values over 50 indicate growth)



Sources: Markit Economics and Hellenic Purchasing Institute.

it declined by 26.6% year-on-year (see Chart IV.4). However, in the period from March to September 2009, the downward trend in the expectations of industrial firms came to a halt and the relevant indicator recorded an increase (albeit remaining lower than twelve months ago). Furthermore, in the first nine months of 2009, the capacity utilisation rate also declined (70.6 against 76.4 in the same period of 2008), as did the quantitative indicator of months of secured production (to 4.3 months, from 5.0 months in the first nine months of 2008). Moreover, the indicators of turnover and new orders in industry also performed poorly, reflecting a dramatic fall in the first seven months of the year.

In the first nine months of 2009, the PMI index for manufacturing followed a similar path and reached a post-1999 low in March (see Chart IV.5). However, it improved continuously from April to August (when it stood at 51.1, implying a rise in output for the first time since September 2008), before falling again in September to 48.5, suggesting a new decline in output.

In the first half of 2009, important branches of the services sector, including transport and trade (wholesale trade and car trade) saw a decrease in turnover. However, turnover in tourism (hotels-restaurants) showed a decrease

Table IV.5 Activity indicators in the services sector (2007-2009)

(annual percentage changes)

	2007	2008	2009 (available period)	
Services turnover indicators				
Car retail sales	7.8	-7.9	-21.7	(Jan.-June)
Wholesale trade	11.4	9.4	-12.4	(» »)
Telecommunications	-11.5	-1.0	-9.3	(» »)
Land transport	18.2	5.1	-47.6	(» »)
Sea transport	8.1	10.2	-21.4	(» »)
Air transport	7.0	6.5	-3.7	(» »)
Storage and supporting transport activities	-1.4	3.1	-37.4	(» »)
Travel agencies and related activities	27.5	3.5	-37.1	(» »)
Tourism (hotels and restaurants)	6.5	3.2	7.9	(» »)
Legal, accounting and management consulting services	11.7	10.9	-2.6	(» »)
Architectural and engineering services	13.9	9.0	-6.9	(» »)
Advertising and market research	4.7	2.6	-23.2	(» »)
Passengers				
Passenger kilometres of Olympic Airlines	2.7	-8.6	-18.3	(Jan.-July)
Aegean Airlines[1]	17.5	14.4	9.2	(Jan.-June)
Piraeus port (OLP)	2.0	0.7	-4.0	(Jan.-Apr.)
Business confidence indicator in the services sector	**2.8**	**-8.3**	**-32.7**	**(Jan.-Sept.)**

Sources: NSSG (services turnover), Olympic Airlines, Aegean Airlines, Piraeus Port Authority (OLP) and IOBE (expectations).
1 Including charter flights.

in the first quarter (on an annualised basis), before increasing in the second quarter (see Table IV.5). Also, as mentioned above, the economic downturn is also evident in the evolution of the volume of retail sales (excluding car and fuel sales) and new car registrations. Lastly, according to the IOBE business survey, in the first nine months of the year the business confidence indicator in the services sector (excluding retail trade and banks) fell at an average annual rate of 32.7%. For more detailed information, see Section 4 of this chapter regarding tourism and Chapter VI.6 regarding the banking sector.

Box IV.1

DEVELOPMENTS AND PROSPECTS OF THE GREEK REAL ESTATE MARKET AND STRUCTURAL ISSUES OF HOUSING FINANCE IN THE EURO AREA

1 THE GREEK REAL ESTATE MARKET: CURRENT DEVELOPMENTS AND PROSPECTS

House prices

The gradual deceleration, since early 2006, in the growth rates of house prices in Greece continued through end-2008. According to available Bank of Greece data, house prices in all urban areas combined increased by 2.6% in 2008, against 4.6% in 2007 and 12.2% in 2006.[1] Since the first quarter of 2009, the year-on-year percentage change in house prices has been negative both in Athens and in other urban areas. More specifically, on the basis of data collected from banks,[2] nominal house prices in Athens are estimated to have fallen by 4.0% in the first nine months of 2009 (Q1: -1.4%, Q2: -4.4%, and Q3: -6.3%). In other urban areas, in the first half of 2009 (for which data are available), they fell by 2.2%, whereas in all urban areas combined the corresponding drop was 2.6% (see Table A).[3] Despite the continuous unwinding of house price growth from 2006 to 2008 and the slight drop in 2009, house prices in Greece have remained fairly resilient and have not undergone abrupt changes as in other European countries, some of which (e.g. Ireland, Spain, United Kingdom) have seen their house prices plummet at double-digit rates, after a period of very sharp increases.[4] Furthermore, as financial markets gradually return to normal, the risk of an abrupt price correction in Greece's real estate market becomes all the more remote.[5]

Construction activity and housing supply

For the past three years, private construction activity has been undergoing significant correction, in response to the oversupply that has built up in the Greek real estate market since 2005 and especially in the course of 2006. Residential investment fell by 8.6% in 2007, 29.1% in 2008 and 21.5% in the first half of 2009.[6] The volume of private construction activity on the basis of permits issued fell by 28.7% in the first seven months of 2009, compared with a decline of 17.1% in 2008 and 5.0% in 2007. Meanwhile, the number of building permits issued fell by 16.1%.[7] Further indications of the significant drop in building activity in Greece are the decrease in cement production by an average annual 23.8% in the first eight months of 2009, compared with decreases of 3.1% and 9.2% in 2008 and 2007 respectively (see Table B).[8]

The significant deceleration in private construction activity over the past few years has contributed only slightly to the absorption of the stock of newly-built homes available for sale, given the continued caution on the demand side. The number of real estate transactions dropped considerably after 2005 (2006: -19.6%, 2007: -3.0% and 2008: -21.7%),[9] as a result of which the stock of

1 The deceleration was slightly stronger in the "other urban areas", where the percentage change in the house price index fell from 13.0% in 2006 to 3.8% in 2007 and 2.6% in 2008. These rates were calculated, on the basis of relevant data collected by the branches of the Bank of Greece, mainly from real estate agents – see Table A.

2 These data are assessments of residential property reported by banks to the Bank of Greece as from 2009, in compliance with Bank of Greece Governor's Act 2610/31 October 2008 on "Reporting by credit institutions of data on residential property financed or used as collateral for loans extended by credit institutions". By end-August 2009, the Database (assessments) of the Real Estate Market Analysis Section had gathered data on some 405,000 residential properties, valued for the most part between January 2006 and July 2009. The first results from the utilisation of these data, mainly the compilation of more detailed residential property indices, were presented at the conference "Real estate market in Greece: recent developments and prospects", held at the Bank of Greece on 29 April 2009. See also *Bank of Greece Annual Report 2008* (April 2009, Box IV.1).

3 In a survey conducted by the Real Estate Market Analysis Section of the Bank of Greece among large real estate agents, referring to the second quarter of 2009, roughly half of the respondents estimated that house prices had remained unchanged over the previous quarter, whereas the other half estimated that prices had dropped slightly. As regards the type of residence buyers choose, the survey indicated a shift towards smaller and older houses. A similar trend had been recorded in the previous quarter.

4 See ECB, "Housing finance in the euro area", Occasional Paper Series No. 101, March 2009, and ECB, "Recent housing market development in the euro area", *Monthly Bulletin*, February 2009. See also OECD, *Economic Outlook – Interim Report*, 31 March 2009.

5 In any case, the weak housing credit expansion projected for 2009, the still high level of excess supply of housing and the relative stickiness of house prices all point to a likely continuation of downward pressures on real estate prices over the next months.

6 Between the first quarter of 2007 and the second quarter of 2009, residential investment nearly halved.

7 The decrease in both the volume (cubic metres) and the floor space (square meters) of new constructions, according to the permits issued, at a much stronger rate than the actual number of permits issued is consistent with the shift in demand towards smaller houses in recent quarters (see footnote 3).

8 A significant drop in building activity is confirmed by data from the Technical Chamber of Greece on civil engineers' fees, which fell at an annual rate of 19.1% in the first seven months of 2009 (blueprint and permit fees: -14.3%, construction site supervision fees: -28.0%), compared with a 6.2% rise in 2008.

9 On the basis of data collected by the NSSG from notary publics across the country, the number of real estate transactions dropped from 215,000 in 2005 to 173,000 in 2006 and 167,700 in 2007. The number of transactions in 2008 is estimated to have come to 131,000, roughly equal to the number of house building permits issued in the same year.

Table A House price index

Period		All urban areas combined			Athens			Other urban areas		
		Index	Percentage changes		Index	Percentage changes		Index	Percentage changes	
		1997=100	Over previous quarter	Year-on-year	1997=100	Over previous quarter	Year-on-year	1997=100	Over previous quarter	Year-on-year
1997		100.0	9.7	9.7	100.0	12.5	12.5	134.7	7.1	7.1
1998		114.4	14.4	14.4	115.5	15.5	15.5	152.6	13.3	13.3
1999		124.5	8.9	8.9	129.6	12.2	12.2	161.5	5.8	5.8
2000		137.7	10.6	10.6	149.1	15.1	15.1	171.3	6.1	6.1
2001		157.5	14.4	14.4	175.4	17.6	17.6	190.2	11.0	11.0
2002		179.3	13.9	13.9	203.8	16.2	16.2	211.7	11.3	11.3
2003		189.0	5.4	5.4	211.9	4.0	4.0	226.8	7.1	7.1
2004		193.4	2.3	2.3	212.4	0.3	0.3	237.4	4.7	4.7
2005		214.5	10.9	10.9	230.8	8.6	8.6	269.3	13.4	13.4
2006		240.6	12.2	12.2	256.8	11.3	11.3	304.2	13.0	13.0
2007		251.6	4.6	4.6	270.1	5.2	5.2	315.8	3.8	3.8
2008		258.2	2.6	2.6	277.3	2.7	2.7	323.9	2.6	2.6
1997	I	96.2	...	...	95.1	...	...	130.9	3.0	6.1
	II	98.2	2.1	...	97.8	2.9	...	132.6	1.3	6.2
	III	100.2	2.0	...	100.8	3.1	...	134.0	1.1	4.8
	IV	105.4	5.1	...	105.7	4.8	...	141.3	5.5	11.2
1998	I	110.1	4.5	14.4	109.3	3.4	14.9	149.4	5.7	14.1
	II	113.9	3.5	16.0	115.4	5.6	18.0	151.6	1.5	14.4
	III	115.0	0.9	14.8	116.5	1.0	15.6	153.0	0.9	14.2
	IV	118.4	2.9	12.3	120.9	3.7	14.4	156.3	2.1	10.6
1999	I	120.4	1.7	9.3	123.8	2.5	13.3	157.9	1.0	5.7
	II	123.6	2.7	8.5	128.1	3.4	11.0	161.0	2.0	6.2
	III	125.3	1.3	8.9	130.5	1.9	12.0	162.3	0.8	6.1
	IV	128.8	2.9	8.9	136.0	4.2	12.5	164.7	1.5	5.4
2000	I	132.1	2.5	9.7	141.6	4.1	14.3	166.1	0.8	5.2
	II	135.7	2.8	9.8	146.5	3.5	14.4	169.6	2.1	5.3
	III	138.8	2.2	10.8	150.4	2.7	15.3	172.6	1.8	6.4
	IV	144.2	3.9	11.9	158.0	5.0	16.2	177.1	2.6	7.5
2001	I	150.5	4.4	14.0	165.7	4.9	17.0	184.0	3.9	10.8
	II	156.1	3.7	15.0	174.2	5.1	18.9	188.0	2.2	10.8
	III	159.5	2.2	15.0	178.7	2.6	18.8	191.3	1.8	10.9
	IV	164.0	2.8	13.7	183.0	2.4	15.8	197.5	3.2	11.5
2002	I	171.5	4.6	14.0	193.6	5.8	16.8	204.0	3.3	10.8
	II	180.3	5.1	15.5	208.0	7.4	19.4	208.9	2.4	11.2
	III	180.7	0.2	13.3	205.4	-1.3	14.9	213.3	2.1	11.5
	IV	184.9	2.3	12.7	208.2	1.4	13.8	220.5	3.4	11.6
2003	I	188.6	2.0	10.0	214.6	3.1	10.8	222.5	0.9	9.1
	II	187.5	-0.6	4.0	210.6	-1.8	1.3	224.4	0.8	7.4
	III	189.0	0.8	4.6	210.6	0.0	2.6	228.1	1.7	7.0
	IV	190.9	1.0	3.3	211.5	0.4	1.6	232.1	1.7	5.3
2004	I	190.6	-0.2	1.0	209.7	-0.9	-2.3	233.6	0.6	5.0
	II	191.6	0.5	2.2	209.4	-0.2	-0.6	236.5	1.2	5.4
	III	193.3	0.9	2.3	211.1	0.8	0.2	238.8	1.0	4.7
	IV	198.0	2.4	3.7	219.4	3.9	3.7	240.9	0.9	3.8
2005	I	205.2	3.6	7.7	223.7	2.0	6.6	254.1	5.5	8.8
	II	211.6	3.1	10.5	228.9	2.3	9.3	264.1	3.9	11.7
	III	216.9	2.5	12.2	231.5	1.1	9.7	274.5	4.0	15.0
	IV	224.1	3.3	13.2	239.0	3.2	8.9	283.8	3.4	17.8
2006	I	233.3	4.1	13.7	249.9	4.6	11.7	294.1	3.6	15.7
	II	238.7	2.3	12.8	255.0	2.1	11.4	301.7	2.6	14.2
	III	240.9	0.9	11.1	254.9	0.0	10.1	307.4	1.9	12.0
	IV	249.2	3.4	11.2	267.2	4.8	11.8	313.7	2.0	10.5
2007	I	251.3	0.8	7.7	269.5	0.9	7.9	315.8	0.7	7.4
	II	249.5	-0.7	4.5	266.9	-1.0	4.7	314.3	-0.5	4.2
	III	252.1	1.0	4.6	272.1	1.9	6.7	314.5	0.1	2.3
	IV	253.5	0.6	1.7	271.9	-0.1	1.7	318.4	1.2	1.5
2008	I	255.6	0.9	1.7	274.2	0.8	1.7	321.1	0.8	1.7
	II	258.3	1.0	3.5	277.6	1.3	4.0	323.7	0.8	3.0
	III	258.1	-0.1	2.4	277.2	-0.2	1.9	323.6	0.0	2.9
	IV	260.9	1.1	2.9	280.3	1.1	3.1	327.1	1.1	2.7
2009*	I	250.7	-3.9	-1.9	270.4	-3.5	-1.4	313.0	-4.3	-2.5
	II	250.0	-0.3	-3.2	265.3	-1.9	-4.4	317.5	1.4	-1.9
	III	...	...	...	259.7	-2.1	-6.3	...	...	...

Sources: For other urban areas: Bank of Greece (data collected by the Bank's branches, mainly from real estate agents). For Athens: calculations based on data from "Danos & Associates" (1993-97), "Property Ltd" (1997-2005) and Bank of Greece (data collected by credit institutions, 2006-2009). For all urban areas combined: weighted index based on the housing stock in Athens and other areas.
* Provisional data.

Table B Summary table of key short-term indicators for the real estate market

Indicators	Average annual percentage changes					
	2004	2005	2006	2007	2008	2009
1. Indices of prices of dwellings (BoG) and rents (NSSG)						
1.1 All urban areas combined	2.3	10.9	12.2	4.6	2.6	-3.2 (Q2)
1.2 Athens	0.3	8.6	11.3	5.2	2.7	-6.3 (Q3)
1.3 Other urban areas	4.7	13.4	13.0	3.8	2.6	-1.9 (Q2)
1.4 Rent price index	5.3	4.2	4.4	4.5	3.9	3.5 (Sept./Sept.)
2. Construction cost indices of (new) residential buildings (NSSG)						
2.1 Total cost	3.2	3.4	4.3	4.6	5.1	-0.6 (Q2)
2.2 Price index of work categories	2.4	2.6	2.9	2.8	4.2	-0.3 (Q2)
2.3 Labour cost	2.3	3.1	2.6	2.4	3.3	0.6 (Q2)
2.4 Material cost	3.9	3.6	5.6	6.3	6.4	-3.5 (Aug./Aug.)
3. Private building activity (NSSG)						
3.1 a. Number of building permits (Greece)	-1.4	17.6	-14.4	-5.3	-15.6	-16.1 (7mon.)
3.2 a. Floor space in square metres(Greece)	-2.3	41.8	-24.4	-7.5	-18.1	-27.3 (7mon.)
3.3 a. Volume in cubic metres (Greece)	-3.4	35.2	-19.5	-5.0	-17.1	-28.7 (7mon.)
3.1 b. Number of building permits (Athens)	-6.2	29.4	-14.9	-4.7	-23.2	-18.4 (7mon.)
3.2 b. Square metre floor space (Athens)	-8.5	54.2	-24.6	-14.3	-24.5	-24.4 (7mon.)
3.3 b. Cubic volume of buildings (Athens)	-10.6	49.8	-20.2	-13.3	-24.1	-22.3 (7mon.)
4. Construction activity						
4.1 Cement production volume (NSSG)	-2.3	2.4	3.1	-9.2	-3.1	-23.8 (8mon.)
4.2 Public investment programme disbursements (BoG)	11.7	-21.0	8.9	7.6	9.3	19.2 (9mon.)
4.3 Production indices in construction (NSSG)						
a. General index	-15.8	-38.8	3.9	15.1	2.8	0.8 (6mon.)
b. Building construction	-16.5	-15.3	-9.2	6.9	0.0	-13.4 (6mon.)
c. Civil engineering	-15.5	-49.9	18.1	21.8	4.8	12.0 (6mon.)
4.4 Civil engineer fees (Technical Chamber of Greece)						
a. Total fees	-	-	-5.3	23.5	6.2	-19.1 (7mon.)
b. Building permit issuance fees	-	-	-8.4	19.0	11.0	-14.3 (7mon.)
c. Construction supervision	-	-	1.5	32.5	-2.4	-28.0 (7mon.)
5. Business expectations (IOBE)						
5.1 Business confidence in the construction sector	-29.1	-22.7	44.6	1.5	3.0	-36.4 (9mon.)
5.2 Months of assured production in construction[1]						
a. Total private construction	12.6	13.9	15.7	16.8	17.3	16.1 (Sept.)
b. Residential construction	12.0	11.3	14.7	15.4	11.7	11.9 (Sept.)
c. Non-residential	10.0	8.7	9.3	10.1	9.8	9.3 (Sept.)
d. Public works	13.4	15.9	18.4	19.5	21.1	19.6 (Sept.)
5.3 Activity relative to previous quarter[2]						
a. Total construction	8.0	-27.3	11.8	10.2	10.0	-20.0 (Sept.)
b. Residential construction	6.0	-2.0	24.0	-11.0	-22.0	-20.0 (Sept.)
5.4 Planned future activity[2]						
a. Total construction	-25.0	-58.0	-45.0	-33.0	-29.0	-42.0 (Sept.)
b. Residential construction	-17.0	-41.0	-22.0	-22.0	-39.0	-52.0 (Sept.)
6. Investment in construction (NSSG)						
a. Total construction	-5.6	0.6	5.8	1.7	-14.6	-8.1 (Q2)
b. Residential construction	-1.9	0.0	29.1	-6.8	-29.1	-23.3 (Q2)
7. Domestic MFI credit to hoiuseholds (BoG)[3]						
a. Outstanding balances of loans to households	30.4	31.0	25.7	22.4	12.8	4.7 (Aug./Aug.)
b. Outstanding balances of housing loans to households	27.6	33.0	26.3	21.9	11.5	4.8 (Aug./Aug.)
8. Housing loan rates (BoG)[1]						
a. Interest rates on new housing loans (including charges – APRC)	4.8	4.3	4.7	4.9	5.3	3.8 (Aug.)
b. Interest rates on outstanding housing loans with an initial maturity of over 5 years	5.1	4.8	4.9	5.1	5.1	4.2 (Aug.)

Sources: As indicated in each heading (in brackets).
1 In absolute terms.
2 Weighted percentage balances of positive and negative answers.
3 Including loans and securitised loans.

unsold houses essentially remained at the same high levels.[10] The Greek residential market is still characterised by excess supply after the large increase in private construction activity on the basis of permits issued in 2005 (number of permits issued: +17.6% and volume of buildings: +35.2%) triggered by the government's decision to subject new homes to VAT as of 1 January 2006. Since then, building contractors seem to have opted for a "wait and see" approach before undertaking new investment projects. This stance is intensified by higher construction costs which, in turn, raise the cost of replenishing the housing stock.[11]

Demand for residential property

The declines in demand, which started after the upward adjustment of the "objective" values of property in March 2007, continued at a fast pace until recently. This is evidenced by the continuous deceleration in the growth of outstanding housing loans to households, which dropped to 4.8% at end-August 2009, from 11.5%, 21.9% and 26.3% at end-2008, end-2007 and end-2006, respectively. The net flow of new housing loans in the first eight months of 2009 came to €1,604 million, about one fourth the amount in the corresponding period of 2008 (€6,647 million). Against the backdrop of the financial crisis, this decrease can be attributed to the cautious stance of households, mainly on account of heightened employment and income uncertainty, and to the banks' tightening of their credit standards for new housing loans.

However, there have been some encouraging signs of a recovery in demand in the real estate market in recent months. According to data reported by credit institutions to the Bank of Greece, the number of valuations on residential properties for mortgage or collateral purposes, rose to 17,300 in the second quarter of 2009, from 13,100 in the previous quarter, but still remained relatively low.[12] The number of valuations had been steadily decreasing since the first quarter of 2007, falling to a total of 98,000 in 2008 (2007: 125,000).

Expectations of a recovery in the real estate market

Apart from the abovementioned indications of a recovery in housing demand evidenced by data on credit expansion for the second quarter of 2009, there are further indications, from statistical data, of more favourable recovery prospects for the real estate market in the coming quarters. More specifically:

- A survey of Greece's major real estate agents conducted by the Real Estate Market Analysis Section of the Bank of Greece in the second quarter of 2009 found respondents to be cautiously optimistic about the prospects for a recovery in the real estate market. More specifically, while some 50% of the respondents consider that the situation in the real estate market will remain unchanged in the next quarter, the remaining 50% are equally split between those who expect

10 As estimated in a recent study by the Economic Analysis Division of the National Bank of Greece ("Greek residential real estate market: Recovery in sight by mid-2010", *Greece – Economic and Market Analysis*, June 2009), the stock of unsold homes in 2008 amounted to 137,000 and accounted for 2.3% of the total housing stock. Based on a scenario that assumes a decline of 12% in households' real disposable income in 2009, followed by a rise of 1% in 2010; short-term interest rates unchanged in 2009 and 50 basis points higher in 2010; and a cumulative drop in house prices by 10% between 2009 and 2010), the stock of unsold homes is projected to fall to 70,000 by the end of 2009 and to 40,000 by mid-2010.

11 As shown by the NSSG indicators on construction costs for new houses, total costs increased at an average annual rate of 5.1% in 2008, compared with 4.6% in 2007. Over the past five years, construction costs have significantly outpaced the general price index. This trend was reversed in the second quarter of 2009, when total construction costs index fell by 0.6%, whereas the Consumer Price Index rose by 0.7%.

12 According to the same data, the transaction/valuation volume index rose to 51.6 in the second quarter of 2009, from 39.0 in the first quarter (2007 Q1=100), coming closer to the level seen in the fourth quarter of 2008 (52.8).

a small improvement and those who expect a small deterioration in the situation. Half of the respondents expect house prices to remain at their present levels, while the rest expect them to drop slightly.

- According to a survey conducted by the Foundation for Economic and Industrial Research (IOBE) in September 2009, homebuilders estimated their assured activity at 11.9 months, up from 11.1 months in January 2009. Furthermore, the index of business expectations in construction,[13] though deteriorating dramatically overall in the first nine months of 2009 (average annual change: -36.4%, compared with 3% in 2008, 1.5% in 2007 and 44.6% in 2006), showed a temporary improvement in June to 69.0 from 52.8 one month earlier, before decreasing again in July and August. By September 2009, it had returned to the same level as in April.

- The continuous drop in interest rates since November 2008 across categories of housing loans is expected to help rekindle demand in the housing market.

Finally, it should be noted that housing rents had, over at least the past five years, increased at considerably higher rates than the general price level, a trend which continued into the first eight months of 2009. In September, housing rents rose at an annual rate of 3.5%, compared with a CPI inflation rate of 0.7%. However, in recent years, the persistent strong growth in housing rents, coupled with the sharp weakening in house prices, has caused Greece's house price-to-rent ratio, still high by international standards, to decrease slightly from 2008 onwards.[14]

Construction costs for (new) residential property have, in recent years, also risen at rates significantly above inflation.[15] However, the construction material price index declined considerably in the second quarter of 2009, registering its first negative rate of change (-1.5%) in years (see Table B).

2 STRUCTURAL ASPECTS OF HOUSING FINANCE IN THE EURO AREA

Housing finance is of crucial importance to the Eurosystem, as housing loans constitute the largest liability of households and account for a large proportion of bank lending. The financial market crisis following the disruptions in US housing finance in 2007 intensified the interest of the Eurosystem on housing finance in the euro area. The ECB's recent 10th Structural Issues Report[16] analyses the main developments in housing finance in the euro area over the period from 1999 to 2007, looking at mortgage indebtedness, at characteristics of housing loans to households, at the way banks financed these loans and at the spreads between the interest rates on loans granted by banks and the interest rates banks had to pay for their funding or for alternative investments. The report also provides a comparison of some key aspects of the mortgage markets in the euro area, the United Kingdom and the United States, and briefly discusses aspects of the transmission of monetary policy to the economy. Studies of housing finance in the euro area are to some extent hindered by the lack of detailed information on the characteristics of mortgage loans and on the fund-

13 This revised IOBE index (base period: 1996-2006) covers houses and other private and public constructions.
14 The house price-to-rent ratio is often used to monitor the conditions prevailing in the real estate market and for forecasting purposes. Insofar as rent income represents the average return on residential investment, changes in rental rates over time will also impact house prices. On the other hand, if house prices are disproportionately high (low) compared with rents, potential buyers will prefer to rent (buy), thus putting downward (upward) pressure on house prices.
15 The total costs of constructing a new residential building, as shown by NSSG indices, rose by an average annual rate of 5.1% in 2008, compared with 4.6% in 2007 and 4.3% in 2006, driven by the rising costs of construction materials by 6.4% in 2008, 6.3% in 2007 and 5.6% in 2006.
16 See ECB, *Housing finance in the euro area, Structural Issues Report*, March 2009.

ing of these loans. In addition, long series that allow an analysis of developments over time are often lacking or incomplete.[17]

The main findings of the report can be summarised as follows:

- Households' debt for house purchase, expressed as a percentage of GDP, has increased in most euro area countries over the past decade and represents households' largest liability. Various factors account for the strong growth in housing loans: lower interest rates, income and population growth, and the liberalisation of the housing finance market and the emergence of new loan products. Lower interest rates have kept the increase in households' debt service burden contained despite the rise in indebtedness.

- Some common trends in the characteristics of housing loans can be observed in the 15 countries of the euro area: the loan-to-value ratios (LTV ratios) increased, the maturities of loans for house purchase were lengthened and more flexibility in repayment schedules was introduced. However, there remain substantial differences across countries, for instance, as regards the share of variable rate contracts, which ranged from 10% to 99% in 2007. Differences can in part be attributed to cultural and historical factors (such as the inflation history), as well as to institutional features: the degree of consumer protection (reflected, for instance, in foreclosure and bankruptcy procedures), the degree of fiscal subsidisation of owner-occupied housing and mortgage loans, and supervisory rules for securitised loans and covered bonds.[18]

- Housing loans in the euro area are offered mainly via banks, the market share of other suppliers such as insurance companies and pension funds being less than 10%, on average. The funding of housing loans has changed markedly in the euro area over the last decade, with a rapid increase in the issuance of mortgage covered bonds and the securitisation of loans for house purchase. Nevertheless, retail deposits remain the most important source of funding such loans. Considerable cross-country diversity in funding sources can still be observed, partly reflecting:

– differences in legislation on the new funding sources (including supervisory rules);

– differences in consumer preferences for safe investment in deposits;

– differences in mortgage demand dynamics; and

– to some extent, differences in borrower preferences for fixed or variable interest rate loans.

- The mortgage spreads, i.e. the differences between the interest rates on loans for house purchase charged to households and the interest rates that financial institutions pay for their funding (cost of funding or opportunity cost), have decreased over time. This development may be related to increasing competition between banks. In addition, the increasing role of securitisation in the funding of banks, more favourable funding conditions and a possible under-assessment of risks may have contributed to a loosening of the credit standards between 2003 and 2007. Nevertheless, the role of securitisation in loosening credit standards in the euro area is far less sig-

17 One of the aims of this report was to fill some of these gaps. Although long series, in particular, remain essential, the report also stresses the need, at the euro area level, for comprehensive datasets and for harmonised and readily available information from household surveys.
18 Regarding covered bonds, see footnote 31, Chapter III.

nificant than in the United States and the United Kingdom, and differs across euro area countries. Notwithstanding the common development of mortgage spreads over time, there remain large cross-country differences in the euro area that mainly relate to differences in both interest rate characteristics (fixed versus variable interest rates) and legislation (for instance, the cost and length of foreclosure procedures).

• Housing finance in the euro area differs from the US model in several respects. In general, non-interest loan conditions in the euro area appear to be stricter (as indicated by e.g. lower loan-to-value ratios), which may reflect the much lesser degree of government guarantees and possibly also less fierce competition. This has in part resulted in there being no significant sub-prime market in the euro area, although it also reflects differences in supervisory and accounting practices. European foreclosure procedures create a less direct link between house prices and foreclosures than is the case in the United States because recourse to other income or other assets is usually possible in the case of default, although sometimes only after costly and/or lengthy procedures. Also, mortgage equity withdrawal appears to be less common in euro area housing markets. On the funding side, deposits continue to be the main source of funding for bank loans in the euro area, given that this is the least volatile funding source. The originate-to-distribute model is less well-developed in the euro area. These characteristics lend support to the argument that housing finance markets in the euro area are more resilient to shocks. The housing finance characteristics in the United Kingdom generally take an intermediate position between those in the United States and those in the euro area.

• The above-mentioned developments in housing finance affect monetary policy transmission. However, the analysis does not allow firm conclusions to be drawn, given some opposing effects. Higher household indebtedness, for instance, points to stronger transmission, but the increasing reliance of banks on market funding points in the opposite direction. At the same time, monetary transmission is likely to be more asymmetric. Effects of changes in the monetary policy stance, however, are not independent of the particular situation at each moment in time. The impact of house price changes on the economy is bound to have increased, creating the possibility of more pronounced boom-bust periods.

The aforementioned developments were deeply affected, and to some extent even reversed, by the outbreak of the US mortgage market crisis, which has turned into a global financial crisis. It is still too early to fully assess its impact on housing finance, for instance the extent to which the crisis may contribute to reversing the changes in the funding structure of euro area banks witnessed over the past decade. The ongoing process of deleveraging in the banking industry, in an environment characterised by high credit spreads and very limited market liquidity, will probably shift the funding structure of banks towards more traditional and less volatile sources of funds, at least in the short to medium term.

All in all, loan-to-value ratios may not —in the near term— rise to levels seen before the start of the financial crisis. On the funding side, the growth rates of the markets for securitisation and mortgage-backed covered bonds are unlikely to mirror those recorded in the years before the crisis set in, although they are likely to recover from the complete drying-up observed at the end of 2008. In any event, the report concludes that any forecast for the medium-term trend in housing finance would be premature at the current juncture.

2 EMPLOYMENT AND UNEMPLOYMENT: DEVELOPMENTS AND PROSPECTS

The gradual deceleration of annual economic growth that started in 2007 was accompanied by a slowdown in the rate of increase in the number of persons employed until the end of 2008. Subsequently, zero economic growth in the first half of 2009 was accompanied by a reduction in the total number of persons employed and average weekly hours worked per employee, as well as by a significant increase in the absolute number of the unemployed and in the unemployment rate.

According to Labour Force Survey data, the **average number of persons employed** in the first half of 2009 was 4,508.9 thousand, down by 38 thousand (-0.8%) year-on-year (see Chart IV.6). The employment rate of the active population (aged 15-64) in the first half of 2009 stood at 61.3%, from 61.7% in the same period of 2008. In addition, the annual rate of decline in employment gathered pace in the second quarter of 2009 to -1.1%, from -0.6% in the first quarter.

The average absolute number of the **unemployed** in the first half of 2009 was 452.5 thousand (first half of 2008: 381.8 thousand), and the unemployment rate stood at 9.1% (first half of 2008: 7.7% – see Chart IV.7). The rise of 71 thousand in the number of the unemployed (+18.5%) compared with the first half of 2008 was almost double the reduction in the number of persons employed. The divergence between the rise in the number of the unemployed and the reduction in the number of the employed is explained by the growth of the workforce and reflects the increased number of immigrants and women according to the LFS.[9] As a result of these developments, the share of persons aged 15-64 in the labour force increased from 67.0% in the first half of 2008 to 67.5% in the first half of 2009.[10]

The decline in the total number of persons employed mainly reflects a decrease in the number of workers in the sectors of **construction** (-7.6%), **manufacturing** (-3.2%), **hotel and restaurant services** (-3.1%) and **financial and insurance services** (-7%). Decreased employment in these sectors was only partly offset by an increase in the number of persons employed in **trade** (1.1%),[11] **information and communications** (14.5%), **scientific and technical activities** (4.7%), **agriculture** (1.3%) and **education** (1.9%).[12]

Chart IV.6 Employment (1999-2009)

(percentage changes over corresponding quarter of previous year)

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

9 The change with regard to immigrants reflects both the continued inflow of immigrants in Greece and their improved coverage by the survey, as a result of their legalisation.

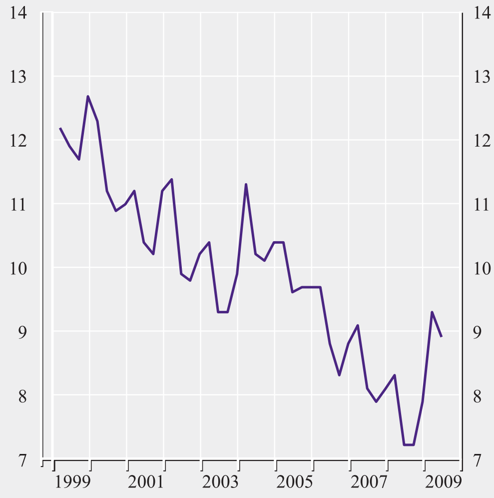
10 In the first half of 2009, the share of men was 78.9% (first half of 2008: 79.1%) and the share of women was 56.1% (first half of 2008: 54.9%). The share of immigrants in the first half of 2009 was 74.2% (first half of 2008: 73.4%).

11 The same rate of increase in the number of persons employed in retail trade in the first half of 2009, compared with the first half of 2008, also results from the survey conducted by the NSSG among retail trade firms. However, increased employment in retail trade during the first half of the year actually reflects the strong rate of increase recorded in the first quarter (2.7% according to the LFS and 3.9% according to the special NSSG survey). By contrast, in the second quarter, employment in retail trade *dropped* (-0.5% according to the LFS and -1.7% according to the special NSSG survey).

12 Trade, manufacturing and construction employ 18.5%, 11.6% and 8.1% respectively of total persons employed, while agriculture employs 11.6%.

Chart IV.7 Total unemployment rate (1999-2009)

(percentage of labour force)



Source: NSSG, Labour Force Surveys.

In the private non-agricultural sector,[13] total employment dropped by 0.9%, a development mostly attributable to **wager-earners**, whose number decreased by 1.6%, making a negative contribution of 1 percentage point to the change (decrease) in total employment in this sector. The number of **self-employed who are not employers** dropped by 0.5% (contributing -0.1 percentage point to the change in employment). By contrast, the number of **self-employed who are employers** and the number of **assistants in family businesses** increased marginally by 0.3% and 3.6%, respectively (contributing 0.003 and 0.2 percentage point to the change in employment).

As a result of the larger share of **men** in the sectors worst hit by the crisis, the employment rate of the active male population dropped (from 75.0% in the first half of 2008 to 73.6% in the first half of 2009), while the corresponding rate for **women** increased (from 48.5% in the first half of 2008 to 48.9% in the first half of 2009).

The total **average weekly hours worked** (regular and overtime) by employees in the private non-agricultural sector dropped by 1.0% – from 40.8 in the first half of 2008 to 40.3 in the first half of 2009. The rate of decrease in hours worked edged up within the first half of 2009 (from -0.7% in the first quarter to -1.3% in the second quarter).[14] The decline in average weekly hours worked was more marked in smaller enterprises. The largest decrease in hours worked was recorded in construction, hotel and restaurant services, in the financial sector and in education. In manufacturing, it seems that the economic downturn led, as already mentioned, to a drop in the number of persons employed,[15] as well as to a lower capacity utilisation rate, but the average weekly hours worked do not seem significantly lower than last year.[16]

For all employees in the private non-agricultural sector, average **overtime work** fell from 0.6 hours in the first half of 2008 to 0.5 hours in the first half of 2009. In the first half of 2009, the number of wage earners who worked overtime even for an hour during the survey's reference week amounted to 198 thousand (6.9% of the total number of wage earners), compared with 218.3 thousand (7.4% of the total number of wage earners) in the same period of 2008. However, the number of persons who **wish to work more hours** increased in the first half of 2009 compared with the figures recorded in the first half of 2008.[17] The number of persons employed who are looking for another job because they are afraid of losing their current job has also risen.[18]

13 The number of persons employed in the private non-agricultural sector in the first half of 2009 amounted to 2,989 thousand (i.e. 66% of all employed persons).
14 Average hours worked (for both years) do not take into account the persons whose weekly hours worked during the survey's reference week were different from their usual hours due to holidays.
15 The reduced utilisation of capital equipment is reflected in the reduction in the number (and percentage) of employed persons who usually work in shifts.
16 LFS data do not seem to reflect the fact that a significant number of full-time labour contracts have been converted into part-time contracts (e.g. 4 days per week) or job rotation agreements.
17 While in the first half of 2008 the percentage of employed persons wishing to work more hours was 3.7%, in the first half of 2009 this percentage stood at 4.4%.
18 The average number of employed persons looking for another job was about 107 thousand in the first half of 2008 and about 122 thousand in the first half of 2009.

With regard to the **forms of employment in the jobs that were created during the first half of the year**, a small increase is observed in both the percentage of part-time workers (in these new jobs, not in general) from 12.5% in the first half of 2008 to 16.4% in the first half of 2009 and the percentage of workers on fixed-term contracts (from 55.6% in 2008 to 57.2% in 2009).[19]

The lower number of wage earners in the first half of 2009 reflects a large —compared with 2008— decrease in recruitments and, to a lesser extent, increased terminations of contracts.[20]

Low-skilled workers, immigrants and young workers with only a few years of previous employment have been more **vulnerable** to the risk of losing their job. In any case, the unemployment rate increased in *both* sexes and *across* age groups (i.e. not only among younger workers). A significant increase in the unemployment rate was recorded among men of foreign nationality, due to their concentration in low-skilled jobs in economic sectors that saw the sharpest decline in activity (e.g. construction, hotel and restaurant services).

The increased **participation of women** in economic activity, which has already been mentioned, can be attributed to the economic problems facing households.[21] A higher participation of the active population in the labour market in periods of crisis can also be observed in other euro area countries. However, if the duration of unemployment becomes longer in the next quarters, the labour force may start to decrease. This would result from the fact that, due to the prolongation of unemployment, the unemployed may give up looking for a job and drop out of the labour market.

In the euro area, the rate of unemployment rose from 7.2% in the first quarter of 2008, when the economic downturn became evident, to 9.3% in the second half of 2009. However, developments in the individual euro area countries with respect to the rise in the unemployment rate vary because (a) the timing of the crisis differed across countries; (b) in some countries the percentage of workers in labour-intensive sectors was higher; (c) the institutional framework of the labour market differs from country to country; and (d) not all countries adopted the same policy measures, whether fiscal or other. Labour market support measures include income support for the unemployed, job subsidisation, training aimed at the fastest possible integration of the unemployed into the labour market, and retraining of dismissed workers to ensure their return to work. The OECD[22] emphasises the need to prevent long-term unemployment through actions targeting specific groups (the youth and the unskilled) and economic sectors with further growth potential, and proposes to focus on retraining —rather than on acquisition of work experience— in the light of the structural changes that the crisis will bring about (significant shrinkage of some sectors and emergence of new ones).

In Greece, certain job subsidisation and support measures for the unemployed have been announced, mitigating the impact from the economic downturn.[23]

19 The increase in part-time employment in new jobs was even higher among private sector employees (from 9.5% in the first half of 2008 to 15.5% in the first half of 2009).

20 According to OAED data, the year-on-year increase of 6.0% (7.9%) in contract terminations in the first 8 months (6 months) of 2009 was accompanied by a decrease in recruitments of 14.8% (15.8%).

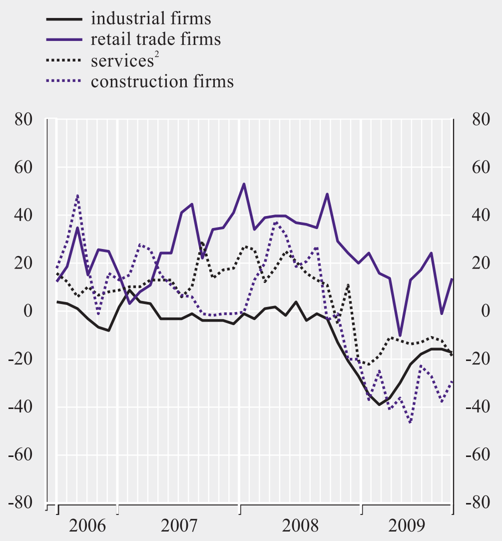
21 The rate of participation of women aged 30-44 in economic activity (the ratio of the sum of employed and unemployed women to the population) rose from 72.7% in the first half of 2008 to 74.3% in the first half of 2009.

22 OECD (2009), *Employment Outlook*.

23 Job subsidies are mostly paid to small enterprises (employing 10-49 workers) and very small enterprises (employing up to 9 workers), provided that they maintain at least the same number of jobs for the next 18 months. Moreover, an agreement was reached with the Public Power Corporation (DEH) and local authorities whereby they would hire unemployed persons, actually converting unemployment benefits to employment benefits. At the same time, the unemployed received income support (in the form of a double Christmas bonus for 2008 and a social cohesion allowance to both the subsidised and the non-subsidised unemployed), while Law 3746/2009 provides for a one-off allowance to persons in dire straits for financial or other reasons. Specific measures address the sectors worst hit by the crisis – construction and hotel and restaurant services. In particular, hotels that in April and May employed the same number of seasonal workers as last year will receive a subsidy equal in amount to the unemployment benefit for each unemployed person they have hired. Moreover, training programmes in construction and tourism will be subsidised, provided that tourist enterprises receiving training subsidies will hire 30% of the trainees.

Chart IV.8 Business expectations[1] for employment
(July 2006-September 2009)

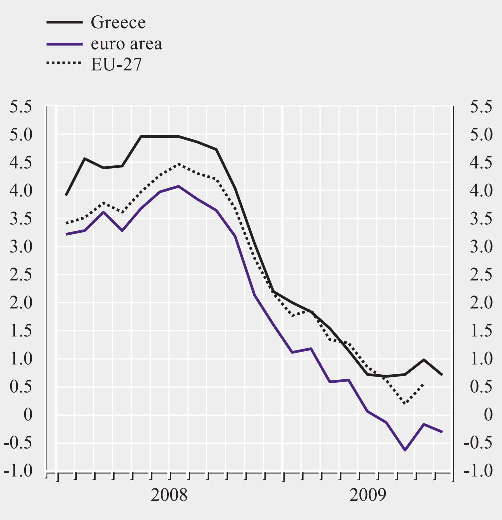
(percentage balances)



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

Chart IV.9 Harmonised index of consumer prices in Greece, the euro area and the European Union
(January 2008 - September 2009)

(percentage changes over same month of previous year)



Sources: NSSG and Eurostat (euro area HICP: provisional estimate for September 2009).

Business expectations regarding the change in demand for staff over the next 3 months, as reflected in the IOBE survey of September 2009 (see Chart IV.8), are negative for industry, construction and services,[24] and positive for retail trade. Furthermore, while in industry and construction, after employment fell for a number of months, expectations seem to be less negative —which was to be expected after the heavy downsizing that has already taken place— no improvement in business expectations can be observed in the services sector within this year.

Special surveys conducted by chambers (e.g. the Athens Chamber of Commerce and Industry), business consultancies (e.g. McKinsey) and research agencies (e.g. IOBE), which analyse the long-term outlook for employment and economic activity, show that businesses expect the crisis to last into 2010. They also consider it likely that they will have to reduce wage growth and the number of workers, especially unskilled ones, in the face of reduced turnover and profits. It should be pointed out, however, that this type of survey does not provide indications for job creation in emerging new sectors.

3 INFLATION: DEVELOPMENTS AND PROSPECTS

3.1 SUMMARY OF PRICE DEVELOPMENTS IN THE FIRST NINE MONTHS OF 2009 AND PROSPECTS FOR THE YEAR AS A WHOLE

The annual inflation rate (based on the Harmonised Index of Consumer Prices – HICP), which had been falling since August 2008, continued to decline up to July 2009, when it stood at 0.7%. In August, inflation increased slightly to 1.0%, before declining again in September to 0.7%,[25] compared with 4.7% in September 2008[26] (see Chart IV.9). In addition, from October 2008 to July 2009 core inflation, which does not include energy and non-processed food

24 Retail trade and banks are not included in the services covered by the IOBE survey.
25 Also 0.7% based on the CPI (see Chart IV.10).
26 In June 2008, inflation reached a post-1998 high.

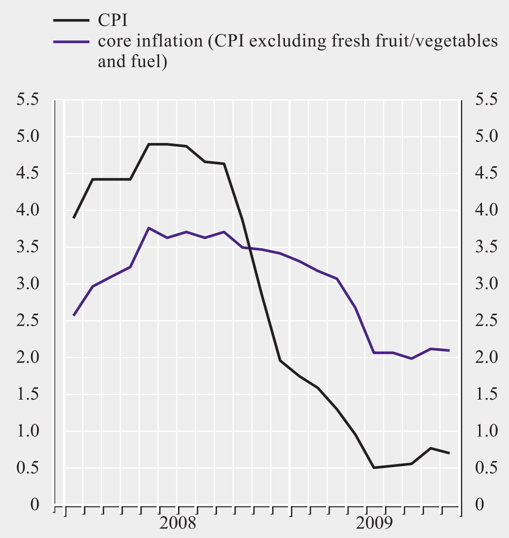
prices, showed a continuous deceleration (July 2009: 1.7%), before picking up slightly to 1.9% in August, to decline again in September to 1.7%, compared with 3.8% 12 months earlier (see Chart IV.11). Although inflation is expected to accelerate gradually in the last months of 2009, it is estimated that average annual inflation will stand at around 1.3% (or even lower, at 1.1-1.2%), compared with 4.2% in 2008. Core inflation is also expected to decrease considerably, though to a lesser extent than headline inflation, as its average level will stand at around 2.1%, compared with 3.4% in 2008. Certainly, forecasts for the whole year are surrounded by uncertainty, as always, mostly connected with the evolution of international commodity prices and exchange rates, on one hand, and domestic and external demand in the last months of 2009, on the other.

The large decline in headline inflation reflects, *inter alia*, a sharp fall in international oil and other commodity prices, which started after mid-2008. Although the price of crude oil in the international market has rebounded since the beginning of 2009, its *annual rate of change* remained strongly negative through to September, continuing to contribute to low inflation levels. Moreover, the decrease in overall demand also contributes significantly to lower core inflation. This development means that inflationary pressures from the demand side, which had only moderated in 2008, *were reversed* this year – namely, there is no excess demand any more, therefore demand exerts *disinflationary* pressures. The weakening of demand is accompanied by both a reduction in corporate profit margins and a considerable slowdown in labour cost growth – i.e. developments that contribute directly to the decline in core inflation.

However, core inflation remains higher than in the euro area as a whole, because the Greek economy is still characterised by conditions of imperfect competition which adversely affect price-setting. Nevertheless, it should be noted that underlying the decline in annual core inflation in the April-June period (by 1.3 percentage points on the basis of the harmonized index or by 1.1 percentage points on the basis of the

Chart IV.10 Consumer price index and core inflation in Greece (January 2008 - September 2009)

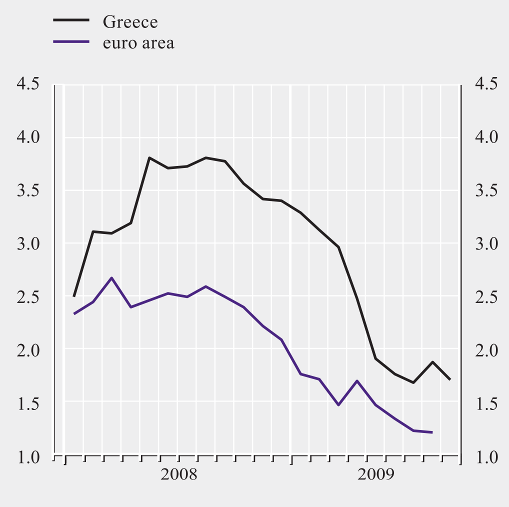
(percentage changes over same month of previous year)



Source: Calculations based on NSSG data (national index).

Chart IV.11 Core inflation in Greece and the euro area on the basis of the HICP excluding energy and unprocessed food (January 2008 - September 2009)

(percentage changes over same month of previous year)



Sources: NSSG and Eurostat.

Table IV.6 Harmonised index of consumer prices: Greece and the EU (2007-2009)

(annual percentage changes)

Country	2007 (year average)	2008 (year average)	August 2008	August 2009
Austria	2.2	3.2	3.6	0.1
Belgium	1.8	4.5	5.4	-0.7
Bulgaria	7.6	12.0	11.8	1.3
Cyprus	2.2	4.4	5.1	-0.9
Czech Republic	3.0	6.3	6.2	0.0
Denmark	1.7	3.6	4.8	0.7
Estonia	6.7	10.6	11.1	-0.7
Finland	1.6	3.9	4.6	1.3
France	1.6	3.2	3.5	-0.2
Germany	2.3	2.8	3.3	-0.1
Greece	**3.0**	**4.2**	**4.8**	**1.0**
Hungary	7.9	6.0	6.4	5.0
Ireland	2.9	3.1	3.2	-2.4
Italy	2.0	3.5	4.2	0.1
Latvia	10.1	15.3	15.6	1.5
Lithuania	5.8	11.1	12.2	2.2
Luxembourg	2.7	4.1	4.8	-0.2
Malta	0.7	4.7	5.4	1.0
Netherlands	1.6	2.2	3.0	-0.1
Poland	2.6	4.2	4.4	4.3
Portugal	2.4	2.7	3.1	-1.2
Romania	4.9	7.9	8.1	4.9
Slovakia	1.9	3.9	4.4	0.5
Slovenia	3.8	5.5	6.0	0.1
Spain	2.8	4.1	4.9	-0.8
Sweden	1.7	3.3	4.1	1.9
United Kingdom	2.3	3.6	4.7	1.6
European Union - 27	2.3	3.7	4.3	0.6
Euro area	**2.1**	**3.3**	**3.8**	**-0.2**

Source: Eurostat.

national index) were also a drop in the prices of fresh pasteurised milk, as a result of *strong competition* in this sector, and a fall in the prices of passenger cars as a result of the temporary reduction of indirect taxes ("car registration fees"[27]); these price declines contributed 0.1 and 0.4 percentage point respectively. The last measure was decided in order to support the car market and contributed to the decline in inflation, but did not boost domestic production, given that cars are imported.

Inflation in Greece remains higher than in the euro area (see Chart IV.12 and Table IV.6). In particular, with regard to annual HICP inflation, the average differential of 0.9 percentage points in 2008 remained unchanged in the first nine months of 2009, while the core inflation differential, which was 1.0 percentage point in 2008, remained virtually unchanged on average in the first nine months of this year (0.9), although it recorded a decline in the second quarter (as a result, in August it fell to 0.7 percentage points – see Table IV.7 and Chart IV.11).

27 From the beginning of April to 7 August 2009, pursuant to Article 25 of Law 3763/2009.

Table IV.7 Contributions to the inflation differential between Greece and the euro area (2004-2009)

(percentage points)

	2004	2005	2006	2007	2008	2009 (Jan.-Aug.)
HICP inflation differential	0.9	1.3	1.1	0.9	1.0	0.9
Contributions:						
Core inflation	1.16	1.40	1.15	1.00	0.77	0.86
of which						
Services	0.48	0.51	0.43	0.50	0.56	0.64
Processed food	0.20	0.10	0.44	0.13	-0.14	0.08
Non-energy industrial goods	0.48	0.79	0.28	0.35	0.35	0.14
Unprocessed food	-0.36	-0.30	-0.12	-0.06	0.03	0.49
Energy	0.10	0.20	0.11	-0.03	0.24	-0.50

Source: Calculations based on Eurostat and ECB data.

3.2 MAIN DETERMINANTS OF INFLATION

External factors

The international price of Brent crude oil in US dollars, which had been constantly on the rise up to July 2008 and then fell sharply by December, has been showing signs of recovery since January 2009, remaining, however, considerably lower year-on-year. In September 2009, oil prices in euro were 33.0% lower than in September 2008, while the average annual price in euro for 2009 as a whole is expected to be 31.5% lower, according to the most recent ECB staff projections,[28] compared with an increase of 24.8% in 2008. The above developments have had a commensurate effect on the prices of imported and domestically sold fuels (see Charts IV.12 and IV.13).[29]

Moreover, in the first seven months of 2009, the annual increase in import prices excluding energy (according to the relevant NSSG index for industry) slowed down substantially (to 0.8% in average, compared with 2.4% in the same period of 2008 – see Chart IV.15), contributing to lower inflation. This deceleration in the growth of euro import prices reflects a significant drop in non-energy commodity prices in US dollars[30] and in inflation rates worldwide, which more than offsets the inflationary impact from the fact that the rise in the nominal effective exchange rate of the euro weighted on the basis of Greece's external trade is smaller than last year (this indicator rose at an average annual rate of 0.3% in the first eight months of 2009, compared with 3.0% in the same period of 2008).

Domestic factors

According to the available estimates (see also Chart IV.17), this year's reduced demand implies that the Greek economy's "output

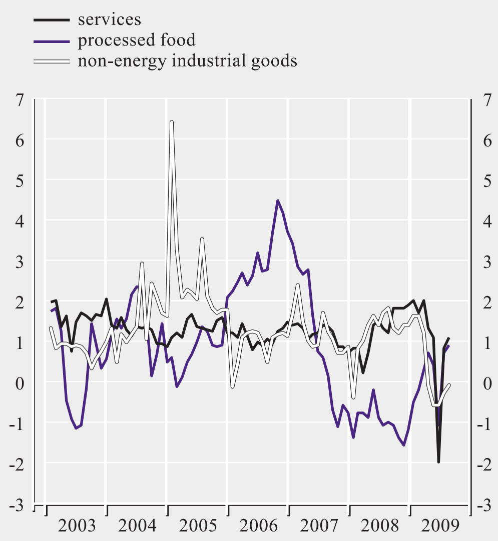
28 See "ECB staff macroeconomic projections for the euro area", 3 September 2009. According to the relevant assumptions, the price of crude oil will fall to $62.4 in 2009, from $97 in 2008 (-35.7%), while – on the basis of the technical assumption used – the exchange rate of the euro against the US dollar will stand at 1.38, compared to 1.47 (down by 9.5%). Furthermore, according to more recent projections of the International Monetary Fund (IMF), the average annual price in dollars of three crude oil types will fall this year by 36.6%, after rising by 36.4% in 2008 (see IMF, *World Economic Outlook*, 1 October 2009).

29 In Greece, according to the Import Price Index in Industry (compiled by the NSSG), in the first seven months of 2009 the prices of imported energy raw materials (crude oil and natural gas) fell at an average annual rate of 12.7% and the prices of imported fuel end products declined at an average annual rate of 34.0%. Furthermore, *in the domestic market*, the *wholesale* prices of fuels (end products) included in the Industrial Producer Price Index for the domestic market fell during the first eight months of 2009 at an average annual rate of 37.8%. The *retail prices of the fuels included in the CPI* dropped during the first nine months of 2009 at an average annual rate of 21.3%.

30 According to ECB experts, the prices (in US dollars) of commodities excluding energy and food will fall by 21.4% in 2009, while according to the IMF non-oil commodity prices will fall by 20.3% (compared with an increase of 7.5% in 2008 – see also previous footnote).

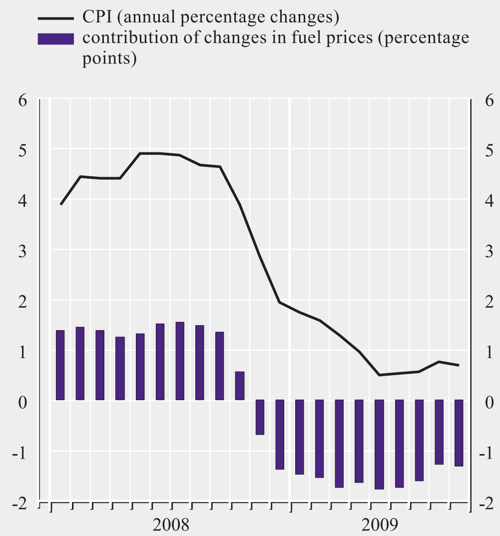
Chart IV.12 Annual inflation differentials between Greece and the euro area (January 2003-August 2009)

(selected indices, differentials in percentage points)



Source: Calculations based on Eurostat and ECB data.

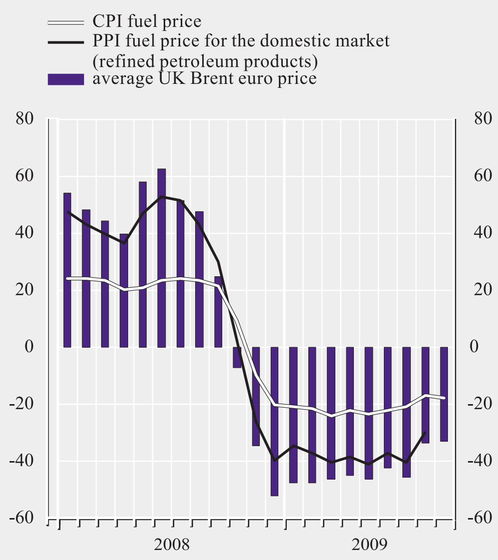
Chart IV.14 Inflationary contribution of changes in fuel prices (January 2008 - September 2009)



Source: Calculations based on NSSG data.

Chart IV.13 Evolution of CPI/PPI fuel prices and of the euro price of Brent crude oil (January 2008-September 2009)

(percentage changes over same month of previous year)



Source: Calculations based on NSSG data and, for crude oil prices (UK Brent), on US Department of Energy data.

gap”[31] is negative in 2009[32], after being positive in recent years. The negative “output gap” contributes — as mentioned before — to lower core inflation. Actually, the latter would have been lower if conditions of imperfect competition did not prevail in the economy.[33]

The evolution of demand and the negative “output gap” are reflected in both the deceleration of unit labour cost growth and squeezed profit margins. In particular:

Unit labour cost growth is expected to slow markedly in 2009 and stand at 3.8% in the total

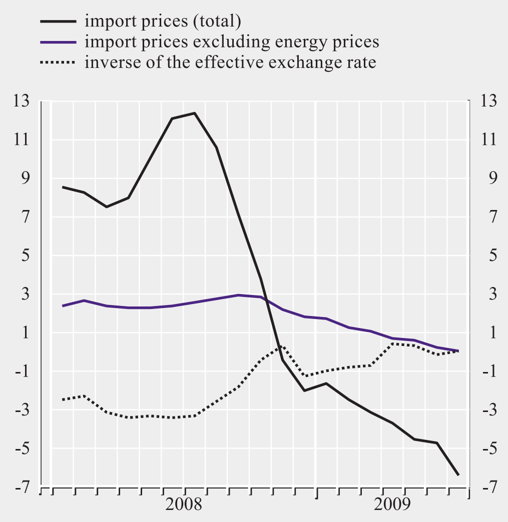
31 The “output gap” is defined as the difference between the level of current output (GDP) and the country’s productive capacity (level of potential GDP) expressed as a percentage of the *level* of potential GDP. Not directly measurable, it is estimated using various alternative methods. The estimates of potential output and the “output gap” involve a high degree of uncertainty. These factors should be taken into account when assessing the conclusions of relevant analyses. A more reliable indicator could be the *change* in the “output gap”, measured in GDP percentage points.

32 According to the European Commission (*Spring 2009 Economic Forecast*, 4 May 2009), the output gap will be negative (-0.5) this year, after being positive in 2008 (2.5). The most recent OECD forecasts (*Economic Outlook*, No. 85, 24 June 2009) are similar: -4.0 for 2009, compared with 0.0 in 2008. The IMF (*Greece: 2009 Article IV Consultation – Staff Report*, 3 August 2009) has estimated that the output gap will remain positive (0.7), but will be much lower than in 2008 (4.1). According to Bank of Greece estimates, the output gap will stand at -1.8 this year.

33 See also Bank of Greece, *Monetary Policy – Interim Report 2008*, October 2008, Appendix 1 to Chapter V, p. 88 onwards.

Chart IV.15 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 2008 - July 2009)

(percentage changes over same month of previous year)



Sources: NSSG and Bank of Greece.

economy,[34] compared with 6.4% in 2008. In the business sector (which includes public and private enterprises and banks), it will come to 2.9%, compared with 5.6% in 2008. **According to these estimates, by now the growth rate for the total economy is converging towards the corresponding figure for the euro area as a whole.**

In particular, average pre-tax earnings in the total economy are estimated to increase by 3.7% in 2009, compared with 6.6% in 2008 (see Table IV.8),[35] while productivity growth will be limited (in the order of 0.5%). This estimate takes into account the following:

- In **central government**, the increase in personnel outlays in 2009 will be less than forecast in the Budget (according to which the wage bill would increase this year by 6.3% and the wage bill plus pension expenditure by 7.9%[36]). On the basis of the income policy announced on 18 March,[37] this year a one-off allowance (instead of a raise in the basic salary) was granted to low- and medium-wage civil servants, while high-earning civil servants did not receive any raise. Similar arrangements applied to central government pensioners.[38] Also, it was announced that recruitments would be clearly less than retirements.[39] Based on certain approximations, it is estimated that, as a result of the above measures, compensation per *civil servant* will rise this year by 4.7%[40] (instead of 6.3%, as forecast). Furthermore, on the assumption (which must be treated with caution) that the number of civil servants will finally decrease by 2% this year[41] (instead of remaining unchanged), it is estimated that the central government wage bill will finally rise this year by 2.6% (instead of 6.3%) and the wage bill plus pension expenditure by 4.6% (instead of 7.9%),[42] i.e. will be €740 million[43] or 0.3% of

34 This rate, as calculated by the Bank of Greece, satisfactorily proxies unit labour cost growth in the non-agricultural sector of the economy (see *Monetary Policy – Interim Report 2008*, October 2008, p. 80).

35 Compensation per employee, including employers' social security contributions (and civil servants' pensions), is expected to increase by 4.3% (compared with 6.8% in 2008). As salaried employment is forecast to decrease by 1.5% this year (compared with an increase of 1.6% in 2008), it follows that total salaried employment compensation will increase by 2.7% this year, compared with 8.5% in 2008. These are the estimates of the Bank of Greece. According to revised NSSG national accounts estimates, total compensation of salaried employment rose by only 5.9% in 2008.

36 The 2009 Budget forecasts an increase of 10.2%, because *additional allowances (of €536 million) under special accounts (now abolished) have been included in the 2009 figures, which are thus not comparable to the 2008 figures.*

37 Article 17 of Law 3758/2009.

38 In particular, central government employees with gross earnings (excluding family benefits) of up to of €1,500 per month as at 31 December 2008 received a one-off allowance of €500. This amount is tax-free and not subject to social security contributions and other withholdings. Likewise, central government employees with gross earnings of up to €1,700 per month received a one-off allowance of €300. No raises were granted in 2009 to central government employees with higher earnings. Central government pensioners entitled to a basic pension of up to €800 received a one-off allowance of €500. This amount is also tax-free and not subject to other withholdings. Likewise, pensioners entitled to a basic pension of up to €1,100 received an allowance of €300.

39 As announced on 18 March 2009, this year only 12,000 recruitments of permanent central government employees were planned, whereas 21,925 civil servants retired in 2008.

40 This percentage includes the carryover effect (1.4%) of raises granted during 2008.

41 This decrease is calculated *assuming that retirements of permanent employees this year will be equal to those recorded in 2008 (i.e. 21,925), recruitments of permanent employees will be limited to 12,000 and the number of other central government employees (under fixed-term or indefinite duration contracts) will remain unchanged.* In such case, the total number of civil servants will decrease this year by 9,925.

42 Not including, as mentioned above, the amount of €536 million since personnel outlays under "special accounts" were included in the Budget.

43 As roughly estimated, the arrangements on civil servants' earnings and central government pensions and the expected decrease in the number of employees will lead to savings of €270 million, €120 million and €350 million, respectively.

Table IV.8 Earnings and labour costs (2002-2009)

(annual percentage changes)

	2002	2003	2004	2005	2006	2007	2008	2009 (forecasts)
Greece								
Average gross earnings (nominal):								
– whole economy	6.6	5.6	7.2	4.4	5.7	5.2	6.6	3.7
– central government[1]	7.3	5.9	9.7	2.3	3.1	3.8	8.3	4.7
– public utilities	10.6	10.9	9.9	7.6	7.0	7.1	8.2	7.7
– banks	2.9[2]	3.1[2]	8.0	1.5[2]	10.8	8.9	3.3	6.2-7.4
– non-bank private sector	6.5	5.8	5.8	5.6	6.8	6.1	6.5	2.8
Minimum earnings	**5.4**	**5.1**	**4.8**	**4.9**	**6.2**	**5.4**	**6.2**	**5.7**
Average gross earnings (real)	**2.9**	**2.0**	**4.2**	**0.9**	**2.4**	**2.2**	**2.3**	**2.4-2.6**
Net[3] income of an employee with average earnings								
– nominal	6.3[4]	6.3[5]	5.3	3.6	4.3	5.5	...	...
– real	2.6[4]	2.7[5]	2.3	0.1	1.1	2.5	...	...
Total compensation of employees	**9.1[6]**	**8.3[5]**	**8.9**	**5.8**	**7.8**	**8.2**	**8.5**	**2.7**
Compensation per employee	**5.9**	**5.5**	**7.6**	**3.9**	**5.9**	**5.6**	**6.8**	**4.3**
GDP[7]	**3.4**	**5.9**	**4.6**	**2.2**	**4.5**	**4.5**	**2.0**	**-1.0**
Unit labour costs:								
– whole economy	5.5[6]	2.3[5]	4.1	3.5	3.2	3.5	6.4	3.8
– business sector[8]	4.9[6]	2.6[5]	2.8	3.9	3.8	4.3	5.6	2.9

Sources: NSSG/Ministry of Economy and Finance (GDP 2002-2008), Bank of Greece estimates (for the 2009 GDP and the other annual aggregates in 2002-2009).
1 Outlays for salaries per employee.
2 The relatively low growth rate of bank employees' average earnings mainly reflects changes in staff structure.
3 Gross earnings less employees' social security contributions and income tax.
4 Including the abolition (as from 1 January 2002) of stamp duties (0.6% of gross earnings) paid by employees.
5 Taking into account the increase (of 0.1% of gross earnings) in employees' and employers' contributions to the Workers' Fund.
6 Including the abolition (as from 1 January 2002) of stamp duties (0.6% of earnings) paid by business sector employers.
7 For 2001-2008: NSSG/Ministry of Economy and Finance. For 2009: Bank of Greece estimates.
8 The business sector includes private and public enterprises and banks.

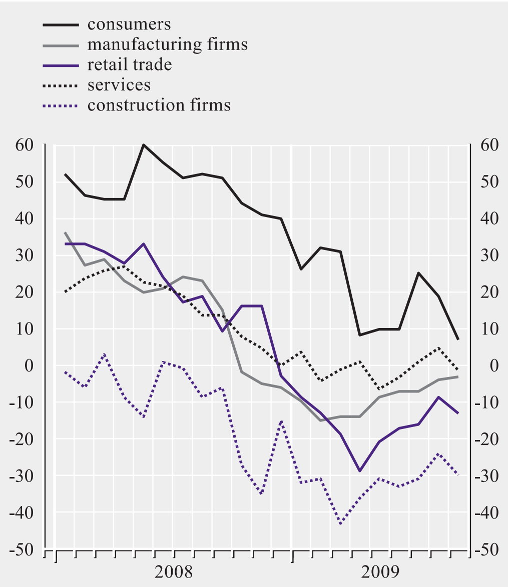
GDP lower than forecast in the Budget. By contrast, if the number of civil servants is not reduced but remains unchanged, the central government wage bill will increase by 4.7% and the wage bill plus pension expenditure by 6.2%.[44]

• **In the non-bank private sector**, the two-year National General Collective Labour Agreement signed in 2008 provides for an average annual increase of 5.7% in minimum wages for 2009. Moreover, the two-year collective agreements concluded at sectoral and occupational level contemplate an average annual increase of 5.8 % in contractual earnings for this year. The envisaged rise in contractual earnings in 2009 would lead to an approximately equal increase in average *actual* earnings only if the impact from adverse economic conditions was to be very limited. However, it is observed that these conditions have already led several enterprises to cut overtime work and reduce average working time (and the corresponding compensation), while there are also cases – in relatively few enterprises – of cuts in regular earnings. Against this back-

44 In comparison with these estimates, it should be noted that, according to data from the State General Accounting Office (*Budget Implementation Bulletin*, June 2009, June 2008), the wage bill increased at an annual rate of 10.2% in the first half of 2009. However, if the non-comparable amount of the special accounts included in the Budget is subtracted, and taking into account that the one-off allowance was granted only in the first half of the year, it is calculated that these data are consistent with a 5.1% increase in the central government wage bill for 2009 as a whole (not including the special accounts, or 8.2% if the special accounts are included).

Chart IV.16 Inflation expectations[1] of consumers and business firms (January 2008-September 2009)

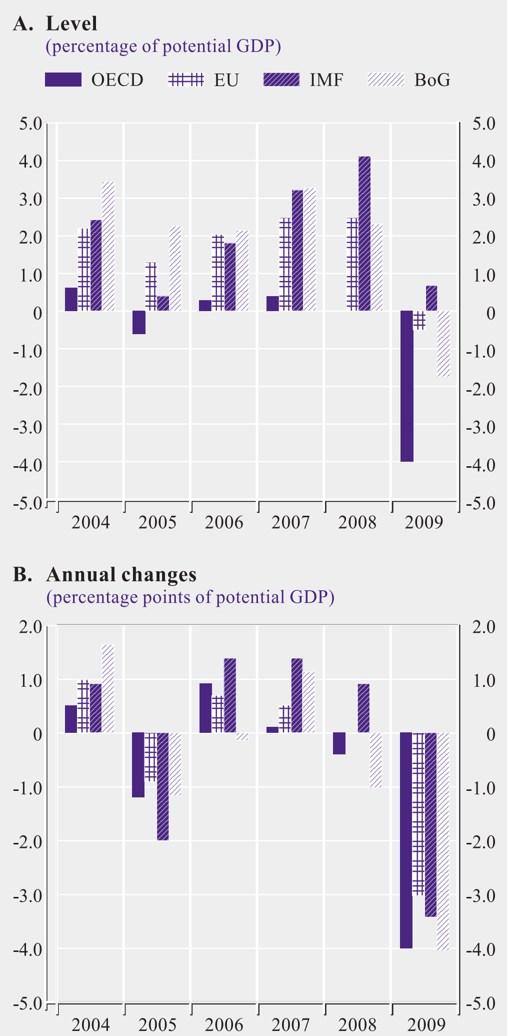
(percentage balances)



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

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

Chart IV.17 The output gap of the Greek economy (2004-2009)



Sources: OECD, *Economic Outlook,* No. 85, June 2009; European Commission (EC), *Spring 2009 Economic Forecasts;* IMF, *Greece: 2009 Article IV Consultation - Staff Report,* August 2009; Bank of Greece (BoG), Economic Research Department estimates.

ground, it is tentatively calculated[45] that the rise in average *actual* earnings in the non-bank private sector will be limited to 2.8% this year (compared with 6.5% in 2008).

- **In banks**, the arbitration award issued in September 2008 applied only to the previous year and provided for increases in basic salaries which imply a carryover effect of 4.7% for 2009.[46] In the course of the year, some agreements have been concluded at individual bank level, while the dispute between bank employees and bankers was referred to the Organisation for Mediation and Arbitration: the relevant arbitration award was issued at the end of September and envisages a rise of 3.0% in basic salaries as from 4 June 2009 and 2.5% as from 1 October 2009. Together with the carryover effect from 2008, average annual contractual earnings will increase by 7.4% in 2008. However, it is likely that the growth of actual

45 Tentative calculation based on the assumptions that: (i) only for 40% of the persons employed in the non-bank private sector the increase in actual earnings will include a rise in contractual earnings and a very small positive seniority effect; (ii) for 50% of the persons employed in this same sector, the increase in actual earnings will be much less than the one in contractual earnings, as average weekly working hours are reduced by 4% due to the elimination of overtime work; and (iii) 10% of persons employed will see a temporary (for this year) cut of around 10% in their earnings.

46 This means that the average annual increase in basic salaries this year would be 4.7% even if no raise had been granted in the course of 2009.

Table IV.9 Average earnings and unit labour costs in total economy: Greece and the euro area (2001-2009)

(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	4.1	1.0
2005	4.4	2.2	3.5	1.3
2006	5.7	2.5	3.2	1.0
2007	5.2	2.6	3.5	1.7
2008	6.6	3.3	6.4	3.3
2009 (forecasts)	3.7	1.9	3.8	3.4

Sources: For Greece, Bank of Greece estimates. For the euro area: European Commission, *Economic Forecasts, Spring 2009*, and *Statistical Annex of European Economy*, *Autumn* 2008. In the euro area, unit labour costs rose at an annual rate of 5.1% in the first half of 2009.

earnings will be lower, due to the decrease in overtime work.

- Finally, the two-year collective agreements signed last year at certain public utilities provide for an average annual increase in contractual earnings of 6.2% this year, while it is assumed that actual earnings will increase (due to seniority) by about 7.5%.

The above estimates lead to the conclusion that average real earnings in the total economy will increase by around 2.4-2.6% this year, i.e. about as much as in 2008 (2.3%). This rise in *average* real earnings dampens the decline in domestic demand (see Sector 1 of this chapter), although its positive effect is considerably limited by the decrease in the number of wage earners (about 1.5%, as forecast) and by other factors, including a considerable decline in household confidence, which may lead to an increase in the propensity to save. In any case, after taking into account the drop in employment, employees' total pre-tax income rises by 0.9-1.1% in real terms. At the same time, the forecast evolution of nominal earnings and productivity implies, as mentioned earlier, a significant deceleration (to 3.8%) of unit labour cost growth in the total economy, *which has by now converged towards the corresponding rate for the euro area as a whole* (see Table IV.9). This means that this year the decline in price competitiveness of the Greek economy (see Table IV.10), *at least vis-à-vis its euro area partners*, will not be attributable to labour cost developments any more.[47]

It is estimated that in 2009, with profits experiencing a stronger decline than turnover, profit margins continue to narrow. This development is almost exclusively attributable to the unfavourable evolution of demand in the domestic and foreign markets. By contrast, the decline in the cost of imported raw materials and the significant deceleration in labour cost growth *only partly* offset the reduced profitability stemming from weak demand. By way of illustration, according to data on firms listed on the Athens Exchange,[48] turnover rose by 13-14% in the first half of 2009, while net pre-tax profits fell by about 39% year-on-year.

47 In the first half of 2009, the annual growth rate of unit labour costs in the euro area reached 5.1% (first quarter: 5.7%, second quarter: 4.6%), against only 2.6% in the same period of 2008 and 3.2% in 2008 on average (see ECB, *Monthly Bulletin*, October 2009, Table 5.1.4 of the Euro Area Statistics). For 2009 as a whole, it is estimated that for the euro area this rate will be lower than in the first half of the year.

48 See also Chapter VI.5.

4 EXTERNAL BALANCE

4.1 CURRENT AND CAPITAL ACCOUNTS

Overview of developments in the first seven months and estimates for the year as a whole

The current account deficit fell considerably year-on-year in the January-July 2009 period (by €4.9 billion or 22.9%) and reached €16.6 billion or 6.9% of estimated annual GDP (against 9.0% of *annual* GDP in the same period of 2008). If capital transfers are included, the total deficit, which reflects the economy's external financing requirements, comes to €15.4 billion or 6.4% of estimated annual GDP (compared with 7.9% in the same period of 2008). The reduced deficit does not reflect an improvement in competitiveness or changes in the structure of markets, but rather cyclical factors related to the international crisis. Thus, for 2009 as a whole, the current account deficit is expected to fall to around 11% of GDP or even lower, from 14.7% in 2008. Including capital transfers, the total deficit is forecast to fall to 9.5% of GDP or even lower (2008: 12.9%).

The significant decline in the current account deficit in the first seven months of 2009 mainly stems from a strong decrease in the trade deficit, which is largely attributable to reduced domestic demand. The income balance has also shown a small decline. By contrast, the reduced surpluses of the services and the current transfer balance pushed up the total deficit. These developments reflect the impact from the international financial crisis and the economic downturn in Greece.

The current reduction in the deficit is mostly cyclical, as the main factors underlying high deficits in recent years and reflecting the shortfall of domestic savings relative to domestic investment expenditure in the same period are still at play. At the same time, the competitiveness of Greek exports of goods and services in international markets continues to deteriorate. This worsening is not only due to a continued decline in price competitiveness[49] (see Table IV.10), but also to low structural competitiveness, as measured on the basis of comparative indicators compiled by international organisations.[50]

Actually, the international competitiveness of an economy is also affected by factors other than prices and costs, which are related to quality and structural issues (non-price competitiveness). The influence of structural factors is usually studied by analysing a number of composite indicators compiled by international agencies to give an overview of developments in various structural and institutional factors that impact on a country's overall competiveness. The main determinants of structural competitiveness are: the focus on research and development, encouragement of innovation and quality of production, development of entrepreneurship, modernisation and expansion of infrastructures, the education level and the efficiency of public administration (reduction of red tape and corruption). Moreover, the structural competitiveness of an economy in general also depends on how flexible the allocation of resources between sectors and firms is; the share of productive investment; the degree of introduction and use of new technologies in the production process; how open the economy is; and, lastly, the tax and financial framework.

49 As mentioned in Section 3 of this chapter, on the basis of relative unit labour costs, competitiveness is not expected to decline in 2009, at least vis-à-vis Greece's euro area partners. However, competitiveness indicators based on relative consumer prices still suggest a deterioration.

50 The most familiar composite indicators of international competitiveness are those of the World Economic Forum (WEF) and the IMD – World Competitiveness Center. According to the WEF's composite index, the "Global Competitiveness Index" (see *The Global Competitiveness Report 2009-2010*, September 2009), Greece ranked 71st among 133 countries in 2009-2010 (67th in 2008). According to the IMD's composite indicator ("2009 Overall competitiveness scoreboard", May 2009), Greece fell 16 places in the last two years and in 2009 ranked 52nd among 57 countries, while in the period 2003-2006 it ranked 36th-37th. Additional information is provided by the World Bank's publication *Doing Business*, which examines the ease of doing business and the attractiveness of an economy. For 2010 (*Doing Business 2010*, September 2009), Greece ranked 109th among 183 economies, i.e. after last year's short-lived improvement, its performance returned to the 2007 level. In all three rankings described above, Greece lags behind all or most of the EU-27 countries (all but Bulgaria in the WEF survey, all but Romania in the IMD survey, and behind all in the World Bank survey).

Table IV.10 Greece: revised nominal and real effective exchange rate (EER) indices[1]

(annual percentage changes in year averages)

		Real EER	
	Nominal EER	On the basis of relative consumer prices	On the basis of relative unit labour costs in total economy
2001	1.1	1.0	0.7
2002	1.9	2.8	4.4
2003	4.5	5.3	3.9
2004	1.4	1.9	4.2
2005	-0.7	0.3	1.0
2006	0.1	1.0	1.9
2007	1.4	1.9	2.6
2008	2.3	2.7	5.2
2009[2]	0.9	1.1	1.0
Cumulative percentage change between 2001 and 2009	13.4	19.4	27.7

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.
1 Revised indices (compiled by the Bank of Greece) include Greece's 28 main trading partners (including the other euro area countries, with the exception of Malta). The weights used reflect the share of each partner country in Greece's manufacturing trade (SITC 5-8) during 1999-2001 and take account of third market effects.
2 Provisional data and estimates.

Low structural competitiveness reflects the failure of domestic supply to sufficiently meet the composition and growth of domestic and external demand. This failure typically implies strong growth of consumer, intermediate and capital goods imports and a large trade deficit (this does not apply, of course, to the current economic downturn, as already mentioned). The structural problem of the trade balance suggests a *de facto* increased importance of the services surplus, particularly of tourism and shipping[51] (although fluctuations in activity in the latter sector may be more marked than in the former). It should be pointed out that there is large scope for improving both the price and "quality" competitiveness of the Greek tourist product.

Trade balance

The reduction of €8.5 billion in the overall trade deficit in the January-July 2009 period stemmed from decreases of €4.9 billion, €2.9 billion and €0.7 billion in the trade deficit excluding oil and ships, the net oil import bill and net payments for purchases of ships, respectively. As regards the trade balance excluding oil and ships, the import bill declined by €6.3 billion or 25.5%, i.e. much more than export receipts, which fell by €1.3 billion or 17.0%.[52]

According to available provisional NSSG data on trade transactions in the first seven months of 2009, the value of Greek non-oil exports to *EU countries* fell at an average annual rate of 23.1%, compared with 4.4% regarding exports to *non-EU countries*. It should be

51 The fact that Greece has comparative advantages in these two sectors has contributed to considerably offsetting the trade deficit. However, it cannot be disregarded that both travel and transport receipts are directly affected by fluctuations in economic activity and incomes at international level.
52 According to available provisional NSSG data for the January-July 2009 period, export values excluding oil and ships fell by 17.2%, while the corresponding import values fell by 21.7%. Moreover, total export values decreased by 18.6%, while total import values (excluding ships) dropped by 36.4%. It should be recalled that discrepancies between the Bank of Greece and NSSG data on trade transactions are largely attributable to the fact that Bank of Greece data involve receipts and payments mainly through the domestic banking system, while the NSSG data are based, on the one hand, on customs data for transactions with non-EU countries and, on the other hand, on tax data (INTRASTAT) for intra-EU transactions.

noted that the share of transactions with EU countries in total imports and exports is in the order of 65%.

Services balance

The surplus of the services balance declined by €3.0 billion in the January-July 2009 period. This development mainly reflects a drop in transport and travel receipts.

Gross transport receipts (mainly from merchant shipping) fell by 30.1%, while net receipts declined by €2.0 billion. It should be noted that freight rates for both dry cargo vessels and oil tankers are still significantly lower than those in January-July 2008.[53] Despite a strong decline (of over 60%) in freight rates, transport receipts only fell by 30.1%, as mentioned above. This is attributable to the year-on-year appreciation of the dollar against the euro in the January-July 2009 period,[54] on the one hand, and to the fact that some of the current long-term charter parties were concluded in periods of higher freight rates.[55]

Moreover, non-residents' travel spending in Greece and residents' travel spending abroad declined (by 15.5% and 3.3%, respectively), leading to a drop of €0.9 billion in net travel receipts.[56] Lastly, net payments for "other" services rose by €137 million.

Income account balance

The income account deficit improved slightly year-on-year in the January-July 2009 period, as a result of lower net interest, dividend and profit payments. In particular, reduced profitability and lower dividends paid by domestic and foreign companies as a result of the financial crisis contributed to a fall in net payments for dividend and profit. Although net interest payments declined overall, net interest payments on government bonds and Treasury bills[57] increased as a result of a rise in non-residents' public debt holdings. It should be recalled that the high gross external debt (aggregate public and private sector debt), which reached 151.6% of GDP at end-2008 and 163.2% of GDP at end-June 2009, is fed by the current account deficits.[58]

Current transfers balance

The surplus of the current transfers balance decreased by €0.9 billion in the January-July period, mainly reflecting a decline in EU payments to general government and, secondarily, an increase in general government payments to the EU.[59]

Capital transfers balance

In the January-July 2009 period, the surplus of the capital transfers balance declined to €1.3 billion, from €2.6 billion in the same period of 2008. This development mainly reflects reduced capital transfers from the EU to the general government sector. Thus, the overall transfers balance (current transfers and capital transfers) recorded a surplus of €2.8 billion, against €5.0 billion in the same period of 2008.

Underlying the decrease in the surplus of the capital transfers balance[60] is primarily the fact

53 In particular, in the January-September 2009 period, the BDI for dry freight rates fell by 71% year-on-year, while the BDTI for oil tanker freight rates fell by 65%. However, in the third quarter of 2009, the BDI rose by 140% year-on-year, while the BDTI fell by 59%, since the crisis affected crude oil transport mainly from the first quarter of the year.

54 Rates in almost all charter parties are expressed in US dollars.

55 In some cases, charterers either defaulted on or renegotiated long-term charter parties to achieve lower freight rates.

56 It should be noted that the decline in tourist receipts goes hand-in-hand with a similar change in the number of both arrivals and overnight stays of tourists. In particular, in the January-July 2009 period, arrivals and overnight stays fell (by 10.3% and 9.8%, respectively) year-on-year.

57 The decline in net interest payments on deposits and loans is attributable to the lower levels of interest rates in the January-July 2009 period compared with the same period of 2008.

58 At end-June 2009, 53.9% of the gross external debt had been incurred by general government, while the rest mainly by the business sector (financial and non-financial corporations).

59 EU current transfers mainly include direct aid and subsidies under 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. It should be noted that in general current transfers do not always match either the amounts of direct aid and subsidies under the CAP or the amounts of regular payments to the Community Budget, given that some other funds are also transferred, including extraordinary contributions and refunds.

60 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.

that the largest part of the CSF III funds has been already absorbed. In particular, from the start of the implementation of CSF III to end-July 2009, the Structural Funds disbursed €22.0 billion, i.e. 97% of the envisaged Community financing. In comparison with other countries covered by the Cohesion Fund, Greece comes third after Ireland and Portugal, but before Spain in terms of rate of absorption of funds.[61] Furthermore, up to the end of April 2009, disbursements under the National Strategic Reference Framework (CSF IV) 2007-2013 were limited[62], given the delays in the implementation of projects and programmes, as was also the case in the other Member States, partly as a result of a new, stricter institutional framework for management and control.[63]

Total net EU transfers (current transfers plus capital transfers minus payments to the Community Budget) in the January-July 2009 period amounted to €2.5 billion, against €4.5 billion in the same period of 2008.

Estimates for 2009 as a whole

The current account deficit for 2009 is expected to decline considerably; as a result, the deficit for 2009 will stand at around 11% of GDP or less, compared with 14.7% in 2008. Taking into account capital transfers, the total deficit is expected to drop to about 9.5% of GDP or even less (2008: 12.9%).

In particular, it is estimated that the decrease in the trade deficit will be significant, in the order of 30%. Moreover, the decline in both world trade volumes and freight rates should adversely affect transport receipts. In 2007 and mostly in the first half of 2008, freight rates rose to historical highs and are not expected —also due to increased deliveries of new ships— to return to their 2007 and 2008 levels soon. It should be noted that *gross* sea transport receipts amounted to 5.5% of GDP in the 2000-2003 period and to 6.8% in the 2004-2008 period. In tourism, receipts are also expected to fall, mainly due to a reduction in the average length of stay and average spending, which will exceed the reduction in arrivals.

With respect to EU transfers, in 2009 payments for projects and programmes under the National Strategic Reference Framework (CSF IV) 2007-2013 are expected to be expedited in parallel with the remaining disbursements under CSF III.[64] Furthermore, direct aid and subsidies under the CAP will remain substantial and are forecast to reach €2.4 billion.[65] Lastly, account should be taken of the recent proposals of the European Commission for simplifying the management of Structural Funds. According to the principal proposal, in 2009 and 2010 the Commission may, at the request of Member States, reimburse 100% of the public costs declared for projects financed by the European Social Fund – thus, Member States will not be obliged to provide national co-financing.[66]

61 European Commission, *Analysis of the budgetary implementation of the Structural and Cohesion Funds in 2008*, May 2009, p. 2.
62 European Commission, op. cit., pp. 5, 16.
63 Up to end-April 2009, receipts from the National Strategic Reference Framework were mostly advances by the Structural Funds and the Cohesion Fund. In accordance with the basic regulations of the European Union (EU) for the period 2007-2013, the European Commission pays in advance to Greece and the other Member States of EU-15 5% of the total support from the Structural Funds (2% in 2007 and 3% in 2008) and 7.5% of the support from the Cohesion Fund (2% in 2007, 3% in 2008 and 2.5% in 2009). Moreover, the European Commission had approved an additional advance of some 2.5% of the total support from the Structural Funds to address the impact of the financial crisis. Greece has received advance payments amounting to €1.5 billion in whole.
64 It should be recalled that, although the implementation of the CSF III should have been completed by 31 December 2008 according to the well-known "n+2" rule, the European Economic Recovery Plan allowed Member States a six-month extension of the time limit to absorb the remaining funds under the CSF III. Already, 9 out of 13 regional programmes and 2 out of 11 operational programmes of the CSF III have been completed. Furthermore, the European Commission has granted Greece an extension until the end of 2009 for projects in fire-stricken areas, whose funding has been fully secured under the Public Investment Programme (press release of the Ministry of Economy and Finance, 1 July 2009).
65 Direct aid and subsidies will be henceforth financed by the European Agricultural Guarantee Fund (EAGF), which replaced the EAGGF Guarantee Section. With regard to the entire period up to 2013, it seems that direct aid and subsidies under the CAP will remain broadly unchanged, unless new CAP implementation measures take effect before 2013, given that the future of the CAP is being discussed in the negotiations regarding the Budget of the European Union for the programming period 2014-2020. See Commission of the European Communities, Communication from the Commission, "Preparing for the "Health Check" of the CAP reform", COM (2007) 722, 20 November 2007; Speech by Commissioner Ms Huebner in the informal meeting of EU Ministers, "Cohesion Policy Response to the Financial Crisis", Marseilles, 26 November 2008; and Speech by Commissioner Ms Boel "CAP post-2013: What future for direct payments", Brno, Czech Republic, 2 June 2009.
66 See European Commission press release IP/09/1175, 22 July 2009.

4.2 FINANCIAL ACCOUNT

In the January-July 2009 period, total financial investment showed a net inflow of €16.2 billion, compared with €18.7 billion in the same period of 2008. In particular, net inflows were recorded under direct investment (€1.8 billion) and portfolio investment (€23.7 billion), while net outflows (of €9.4 billion) were recorded under "other" investment.

Given the structural weaknesses of the Greek economy in terms of input and output market flexibility, and the drag on productive activity from red tape, foreign direct investment is rather limited.[67] The most important inflows for direct investment in Greece involve an amount of €813 million for the participation of Crédit Agricole S.A. (France) in the capital increase of Emporiki Bank (in two instalments, in April and May), as well as an amount of €673 million in July for the increase in the stake of Deutsche Telekom AG in the capital of the Hellenic Telecommunications Organisation (OTE) from 25% to 30%. In the January-July 2009 period, net inflows for direct investment in Greece totalled €2.4 billion (compared with €2.8 billion in the same period of 2008).[68] Net outflows by Greek residents for direct investment abroad amounted to €0.6 billion (compared with €1.3 billion in the same period of 2008). The most important outflows concerned investment activity in the Balkan countries and in Malta.[69]

Under portfolio investment, inflows were recorded for purchases of Greek government bonds and Treasury bills by non-residents amounting to €26.3 billion, compared with €17.0 million in the same period of 2008, while the outflow recorded due to increased purchases of foreign bonds and Treasury bills by Greek residents reached €1.5 billion, compared with €8.1 billion in the same period of 2008.

Under "other" investment, a net outflow of €9.4 billion is attributable to an increase (outflow) of €15.7 billion in domestic credit institutions' and institutional investors' holdings of deposits and repos abroad, which more than offset a €5.3 billion increase in non-residents' fund inflows to deposits and repos in Greece.

Finally, at end-July 2009, Greece's reserve assets stood at €2.7 billion.

67 See also Bank of Greece, *Monetary Policy – Interim Report*, October 2006, Box IV.1, pp. 128-134.

68 Other important investments by non-residents in Greece during this period included inflows of €130 million for the participation of the Austrian company Hofer KG in the capital increase of Aldi Hellas Supermarket LP; €64 million for the completion of the acquisition of Lamda Development by HSBC Property Invest (Luxembourg); €111 million for the acquisition by Dubai Financial Limited (UAE) of the stake of Commerzbank AG (7.74%) in the share capital of MIG; and €95 million for the acquisition of 50% of the company Heron II Thermoelectric Station S.A. by the Dutch company Electrabel International. At the same time, an outflow (disinvestment) of €30 million was recorded concerning the sale to Wind Hellas of the stake of Wind PPC Holding in Tellas S.A. (this amount represents the second out of a total of six instalments – the first one was paid in October 2008).

69 During the period under review, the most important investments abroad by Greek residents concerned outflows of: (a) €185 million for the acquisition of Finansbank Malta by the National Bank of Greece (through its subsidiary NBG Holdings BV in the Netherlands); (b) €114 million for the increase in the stake of EFG Eurobank in its subsidiary Bank Post SA in Romania; (c) €48.2 million for the acquisition of 12.6% of the share capital of Albanian Mobile Communications (controlled by the Albanian State) by Cosmote, which increased its stake in this company to 95%; and (d) €20 million for the participation of Jumbo SA in the capital increase of its subsidiary Jumbo ECB (Bulgaria).

V FISCAL DEVELOPMENTS AND PROSPECTS

1 FISCAL DEVELOPMENTS IN THE JANUARY-JUNE 2009 PERIOD ACCORDING TO ADMINISTRATIVE DATA[1]

The 2009 budget forecast a decrease in the government budget deficit to 3.4% of GDP, from 5.8% in 2008. This deficit (3.4%) was consistent with a general government deficit of 2.0% of GDP. Later on, with the publication of the Updated Stability and Growth Programme 2008-2011 (USGP) at the end of January, the targets for the government budget deficit in 2009 and the general government deficit were revised to 5.0% of GDP (or 5.1% of GDP after a later revision) and to 3.7% of GDP (on a national accounts basis), respectively.

However, in the first half of this year, the government budget deficit (on an administrative basis) rose to 7.3% of GDP, against 3.8% in the corresponding period of 2008. Over the same period, the primary deficit of the government budget almost quadrupled, reaching 4.5% of GDP, compared with 1.2% in 2008 (see Table V.1).

As regards the increase in the government budget deficit during this period, 56.9% came from the ordinary budget and 43.1% from the public investment budget, as a result of both a large shortfall in revenue and an overrun in current expenditure, as well as a speeding up of investment.

The global financial crisis started to impact on the Greek economy towards the end of 2008. The impact became much stronger in 2009 and the international crisis also affected adversely the implementation of the budget in Greece during the first half of 2009.

However, the exceptionally adverse fiscal developments in Greece were mostly attributable to other factors that have been repeatedly highlighted in previous Bank of Greece Reports. These include structural weaknesses and macroeconomic imbalances, which are reflected in, *inter alia*, ineffective cost-cutting measures, a continued rise in tax evasion, as well as the increasing disorganisation and disruption of the tax collection mechanism. Moreover, in the first months of 2009, the disbursement of certain budgeted expenditures, particularly under the public investment budget, was expedited. Finally, there are strong indications that revenue was overestimated and spending was underestimated, both in the budget and in the Updated Stability and Growth Programme.

Ordinary budget revenue

Ordinary budget revenue fell by 0.7% in the first half of the year, compared with a revised[2] budget forecast of a 14.2% increase during this year as a whole (see Table V.1). Available detailed data show a shortfall in the growth of revenue from direct taxes, compared with the budget forecast, as well as a decline in revenue from indirect taxes and non-tax revenue against the corresponding receipts in 2008. The decline in indirect tax revenue reflects both a stagnation of economic activity (or a decline, in certain sectors) and an implied increase in tax-evasion.

The shortfall in revenue from direct taxes during the first half of 2009 (up by 7.3%, against a revised target of an annual 23.9%) is mostly attributable to:

- A year-on-year decrease of 12.1% in corporate income tax revenue, against a (revised) target of a 13.8% increase. This development is associated with a 30% decline in profits in 2008 and probably suggests that budgeted revenue had been overestimated.

- A shortfall in revenue from the settlement of pending tax cases and tax arrears (up by

1 The Ministry of Economy and Finance has not published data on the implementation of the current budget beyond the first half of the year. Note that since 1 January 2009, these data are published on a quarterly (not monthly) basis.

2 The revision takes into account data and information included in the USGP 2008-2011, according to which revenue in 2009 will be by €2,420 million lower than the forecasts of the 2009 Budget. Individual revenue and expenditure categories have also been affected by the revision, as mentioned below.

Table V.1 State budget balance

(million euro)

	January-June			Percentage changes		Annual data						Percentage changes			
	2007	2008	2009*	2008/07	2009*/08	2005	2006	2007	2008*	Budget 2009	Stability Prog. 2009**	2006/05	2007/06	2008*/07	Stability Prog. 2009/08*
I. Revenue[1]	**26,151**	**27,161**	**25,281**	**3.9**	**-6.9**	**47,446**	**52,460**	**56,647[6]**	**60,295**	**69,272**	**66,852**	**10.6**	**8.0**	**6.4**	**10.9**
1. Ordinary budget	23,471	24,807	24,639	5.7	-0.7	44,760	48,685	51,775[6]	55,317	65,572	63,152	8.8	6.3	6.8	14.2
(of which: extraordinary revenue)	0	-	-				773[3]	-	-	1,372[8]	1,372				
2. Public investment budget	2,680	2,354	642	-12.2	-72.7	2,686	3,775	4,872	4,978	3,700	3,700	40.5	29.1	2.2	-25.7
– Own revenue	...	...	79	...	...	63	212	64	310	200	200	236.5	-69.8	384.4	-35.5
– Revenue from the EU	...	...	563	...	...	2,623	3,563	4,811	4,668	3,500	3,500	35.8	35.0	-3.0	-25.0
II. Expenditure[1]	**32,543**	**36,251**	**42,764**	**11.4**	**18.0**	**58,763[5]**	**60,692**	**67,168[7]**	**74,202**	**78,078[9]**	**79,378**	**3.3**	**10.7**	**10.5**	**7.0**
1. Ordinary budget	29,313	32,018	36,624[4]	9.2	14.4	51,239[5]	52,508	58,365[7]	64,578	69,278[9]	70,578	2.5	11.2	10.6	9.3
– Interest payments[2]	6,759	6,177	6,611	-8.6	7.0	9,774	9,589	9,791	11,210	12,000	12,000	-1.9	2.1	14.5	7.0
– Ordinary budget primary expenditure	22,554	25,841	30,013	14.6	16.1	41,465	42,919	48,574	53,368	57,278	58,578	3.5	13.2	9.9	9.8
(of which: tax refunds)	1,477	1,857	2,450	25.7	31.9	2,554	2,392	2,623	3,653	3,300	3,700	-6.3	9.7	39.3	1.3
2. Public investment budget	3,230	4,233	6,140	31.1	45.1	7,524	8,184	8,803	9,624	8,800	8,800	8.8	7.6	9.3	-8.6
III. State budget balance	**-6,392**	**-9,090**	**-17,483**			**-11,318**	**-8,232**	**-10,521**	**-13,907**	**-8,806**	**-12,526**				
% of GDP	-2.8	-3.8	-7.3			-5.8	-3.9	-4.6	-5.8	-3.4	-5.0				
1. Ordinary budget	-5,842	-7,211	-11,985			-6,479	-3,823	-6,590	-9,261	-3,706	-7,426				
2. Public investment budget	-550	-1,879	-5,498			-4,838	-4,409	-3,931	-4,646	-5,100	-5,100				
IV. Ordinary budget primary surplus-balance	**367**	**-2,913**	**-10,872**			**-1,544**	**1,357**	**-730**	**-2,697**	**3,194**	**-526**				
% of GDP	**0.2**	**-1.2**	**-4.5**			**-0.8**	**0.6**	**-0.3**	**-1.1**	**1.2**	**-0.2**				
V. General government deficit-balance															
% of GDP (on a national accounts basis)	**-**	**-**	**-**			**5.1**	**2.9**	**3.6**	**5.6**	**2.0**	**3.7**				
Amortisation payments[2]	19,793	24,004	28,224	21.3	17.6	21,752	16,954	23,543	26,278	29,158	29,158	-22.1	38.9	11.6	11.0
Procurement of defence equipment[2]	314	773	609	146.2	-21.2	1,394	2,075	2,129	2,596	2,200	2,200	48.9	2.6	21.9	-15.3
GDP (at current prices)	226,437	239,141	239,619	5.6	0.2	195,366	210,460	226,437	239,141	260,248	248,556	7.7	7.6	5.6	3.9

Source: Ministry of Economy and Finance, State General Accounting Office.
* Provisional data.
** Budget 2009 data, revised on the basis of the Updated Stability and Growth Programme 2008-2011 of January 2009. In greater detail, a decrease in revenue (of €2,420 million) and an increase in expenditure (of €1,300 million of which €400 million concern higher tax refunds) have been taken into consideration.
1 For comparabilty purposes, tax refunds are included in expenditure and have not been deducted from revenue, a practice followed by the Ministry of Economy and Finance in the last few years.
2 From 2003 onwards, interest and amortisation payments effected by the Ministry of National Defence are recorded in the off-budget item "Procurement of military defence equipment".
3 Including an amount of €149.7 million from the settlement of revenue collected by the Hellenic Communications and Post Commission (EETT), €299.3 million (which has not been included in the 2006 Budget) from the decrease in the capital of the Postal Savings Bank, €34 from the decrease in the capital of the Agricultural Bank of Greece and €290 million from additional dividends of the Deposits and Loans Fund.
4 Including expenditure of €294 million from the settlement of positions vis-à-vis Olympic Airlines in implementation of an arbitration decision.
5 Including a grant of €330 million to the OTE's personnel insurance fund (TAP-OTE) and repayment of debt (€345 million) to the Agricultural Bank of Greece. These amounts are not included in the estimates of the Ministry of Economy and Finance for 2005, as published in the Introductory Report on the 2006 Budget, but were included in the Introductory Report on the 2007 Budget.
6 Including "notional" revenue of €437 million from the settlement of positions vis-à-vis Olympic Airlines.
7 Including "notional" expenditure of €840 million from the settlement of positions vis-à-vis Olympic Airlines, as well as contributions to the Community Budget (€1,108 million) due to the upward revision of past GDP figures.
8 Including revenue from special accounts (now abolished), amounting to €972 million, as well as revenue from the liquidity support package, amounting to €400 million.
9 Including payments out of special accounts (now abolished), amounting to €882 million, as well as expenditure of €790 million for the Intergenerational Solidarity Fund.

38.6% during the first half of 2009, compared with a revised target of an annual increase of 53.1%).

• A shortfall in individual income tax revenue (up by 2.8% during the first half of the year, against a target of a 12.5% increase), partly due to the "freeze" on wage increases in the public sector, the decline in employment and the fact that economic activity and income developments are worse than forecast in the budget.

• Lastly, the fact that, by the end of this period, the single tax on real estate (ETAK) for 2008 and 2009 had not been collected, due to the serious malfunctioning of public administration, weaknesses in the initial design of the new tax and the inefficiency of the tax collection mechanism.

The impact from stagnating economic activity is stronger on indirect taxation, particularly VAT. Specifically, during the first half of the year, indirect tax revenue *fell* by 5.3%, against a revised target of a 7.3% increase. This decline is mainly attributable to receipts[3] from VAT (on both domestic and imported products), which dropped by 10.1% during this period, against a budgeted (revised) annual increase of 6.7%. This development, in addition to a decline in economic activity and a strong deceleration in consumption growth at *current prices*, may only suggest that enterprises are unable to regularly meet their obligations and that there has been a surge in tax evasion. As noted in the past, under deteriorating economic conditions, enterprises increasingly avoid repaying VAT. A decrease is also recorded in receipts from real estate transfer tax (-32.9%), stamp duties (-26.4%), car registration fees (-53.3%) and stock exchange transactions tax (-58.0%).

By contrast, receipts from the minimum excise tax on fuel rose significantly (33.0%). This reflects, on the one hand, a 2.9% increase in taxation per litre in January 2009 and, on the other hand, the fact that the equalisation of the excise tax rate on heating oil with the rate on diesel oil only came into effect on 15 February 2008, while in 2009 it applied from the first day of the year (base effects).

For the rest of the year, ordinary budget revenue is expected to rise significantly due to the collection of the single tax on real estate (ETAK) for 2008 and 2009 —if it is completed— as well as the collection of an extraordinary levy on 2007 incomes and the implementation of the tax measures announced on 25 June 2009 – if they are fully implemented. These measures included a number of arrangements, such as a 14.2% increase in the minimum excise tax on fuel;[4] a special (annual) tax on automobiles with engine capacity of over 1,929; an annual duty and an extraordinary levy (only for 2009) on pleasure boats; an increase in mobile telephony duties and their expansion to (previously tax-free) pre-paid connections; abolition of the tax-free amount for lottery winnings and an increase in gambling taxes; as well as considerable one-off revenue from the reduction of tax evasion and, possibly, the settlement of building code violations. According to the Ministry of Economy and Finance, total revenue under these arrangements within 2009 was expected to reach €2.2 billion. However, since there were delays in the implementation of some measures and taxpayers were reluctant to take advantage of the relevant arrangements, the revenue eventually collected will probably be lower.

Ordinary budget expenditure

Ordinary budget expenditure (including tax refunds) rose by 14.4% in the first half of the year, compared with an increase of 9.2% in the corresponding period of 2008, against a (revised) budgetary forecast of a 9.3% rise[5] for the whole year. As in the previous two years,

3 Receipts from VAT represent 60.0% to 65.0% of revenue from indirect taxation.
4 The excise taxes on diesel, heating, fuel oil and other types of fuel were not increased.
5 The revision took into account data and information included in the USGP 2008-2011, according to which spending in 2009 will increase by €1,300 million over the budgetary forecasts for 2009. Of this amount, €400 million concern higher tax refunds.

strong expenditure growth is attributed to primary expenditure, which rose by an annual 16.1% in the first half of 2009, against a forecast 9.8% increase for the year as a whole (see Table V.1). Available detailed data suggest that underlying the overrun in primary expenditure are, mainly:

- Outlays for government grants, which rose by 31.7% in the first half of the year. This development is mostly attributable to grants to social security funds for the payment of pensions; an "extraordinary social cohesion benefit" (heating allowance), which amounted to around €300 million; as well as a "mortgage allowance" to unemployed and beneficiaries of the pensioners' social solidarity allowance (EKAS) who had taken housing loans before 5 March 2009. It is also attributable to Manpower Employment Organisation grants, as well as other benefit payments.

- Tax refunds, which rose by 31.9% in the first half of the year, against a targeted increase of 1.3%. The large deviation is due to the fact that the budget did not forecast refunds related to the tax on heating oil.

- "Operating costs", which rose by 104.0%, mainly due to the payment of €294 million to Olympic Airways (pursuant to an arbitration award).

- Lastly, payments of pensions to civil servants, which rose by 11.8% during the first half of the year, partly because several civil servants decided to retire early.

In the same period, interest payments evolved in line with budgetary forecasts (up by 7.0%). The average costs of new public sector borrowing[6] in the first half of 2009 remained unchanged over 2008 at 4.6%.[7] The containment of average borrowing costs was achieved through higher recourse to short-term borrowing (Treasury bills) at very low interest rates (from 1.8% to 2.7% during this period). By contrast, the interest rates on medium- and long-term government bonds issued during the first half of the year were high (around 5.0% to 6.0%), having an adverse impact on public debt servicing costs in the *coming years*. This is attributable to the large yield spread between ten-year Greek government bonds and comparable German bonds, which exceeded 300 basis points in March, but fell to slightly below 200 basis points in May. As markets gradually normalised, the spread shrank to around 100 basis points in mid-August and stood at 120-140 basis points ever since (see also Chapter VI.4).[8]

Public investment budget

In the first half of the year, the public investment budget deficit stood at €5,498 million or 2.3% of GDP, compared with a deficit of 0.8% of GDP in the corresponding period of 2008 (see Table V.1). The strong increase in the deficit is attributable to delays in the collection of public investment budget revenue from the Structural Funds of the EU (down by 72.7%), as well as an acceleration in the implementation of projects and a 45.1% increase in investment spending. This acceleration is due to the fact that the deadline for the absorption of funds under CSF III ended on 30 June. Given that the budget for 2009 forecast an 8.6% *decline* in investment spending over 2008, public investment budget expenditure may decline in the second half of the year.

2 NET BORROWING REQUIREMENTS IN THE FIRST NINE MONTHS OF 2009 ACCORDING TO DATA ON A CASH BASIS

During the January-September period, the central government cash deficit doubled to €23,681 million, or 9.9% of GDP, against 4.9% of GDP in the corresponding period of 2008.

6 "Private placements" are not taken into account in the calculation of the average interest rate on new loans. Moreover, the interest rate on each issue is weighted on the basis of the amount of the corresponding loan.
7 *If lending in July (which consisted solely of Treasury bills) is also taken into account, the average cost of new loans in the January-July period is limited to 4.3%.*
8 In the last ten-year bond issue (2 June), the yield spread between Greek and German ten-year bonds was 189 basis points.

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

(million euro)

	Year		January-September		
	2007	2008	2007	2008	2009*
1. State budget	**12,432**	**17,361**	**10,931**	**13,911**	**25,603**
% of GDP	5.5	7.3	4.8	5.8	10.7
– Ordinary budget[2]	8,512[4]	12,585[5,6]	7,541	10,834	19,236[7]
– Public investment budget	3,920	4,776	3,390	3,077	6,367
2. ELEGEP – OPEKEPE[3]	**1,160**	**-254**	**-707**	**-2,258**	**-1,922**
3. Central government (1+2)	**13,592**	**17,107**	**10,224**	**11,653**	**23,681**
% of GDP	6.0	7.2	4.5	4.9	9.9

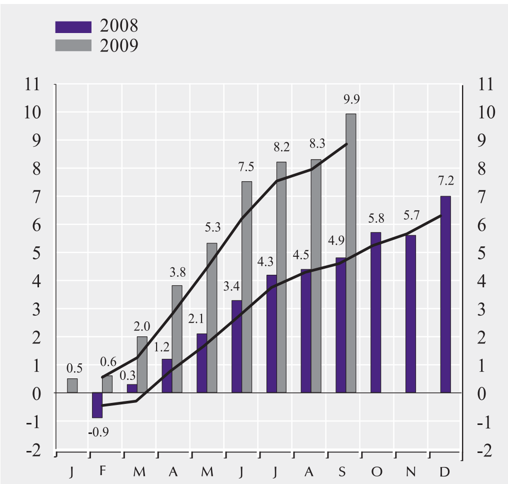
Source: Bank of Greece.
* Provisional data.
1 As shown by the respective accounts with the Bank of Greece and other credit institutions.
2 Including movements in public debt management accounts.
3 Payment and Control Agency for Guidance and Guarantee Community Aids. It replaced DIDAGEP (Agricultural Markets Management Service) as from 3 September 2001.
4 Including proceeds of €1,107.5 million from the sale of OTE shares and €502.8 million from the sale of Postal Savings Bank shares, as well as expenditure of €465.7 million for a grant to the Agricultural Insurance Organisation (OGA).
5 Including proceeds of €430.8 million from the sale of OTE shares, as well as expenditure of €570.8 million for a grant to OGA, but excluding the payment of Greek government debt to the Social Insurance Fund (IKA) by the issuance of bonds (€1,172 million).
6 During the strike of the Bank of Greece personnel in March 2008, public debt service payments of €1,537 million were effected through commercial banks, of which €359 million in interest payments were not reflected in the cash data of the Bank of Greece. If this latter amount is included in interest payments, the net borrowing requirement of the State budget rises from 7.3% to 7.4% of GDP and the net borrowing requirement of central government from 7.2% to 7.3% of GDP.
7 Not taking into account expenditure of €3,769 million for the acquisition of preference shares of Greek banks at the Greek State's disposal pursuant to Law 3723/2008 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 a corporate bond of €531 million, the proceeds of which were given as a grant to OGA to meet its financial obligations to the Greek government.

Moreover, the primary cash deficit of the central government (i.e. the cash deficit net of interest payments) quadrupled and stood at 6.0% of GDP, compared with a deficit of 1.4% of GDP in the corresponding period of 2008. It should be noted that the cash deficit during these nine months benefited from the collection of revenue in the amount of €673.5 million from the sale of OTE (Hellenic Telecommunications Organisation) shares, while in the corresponding period of 2008 there was no revenue from privatisations. Without this revenue, the cash deficit would have been higher by 0.3% of GDP (i.e. 10.2%).

The deficit in the first nine months of 2009 has already exceeded the cash deficit for 2008 as a whole by €6.6 billion (see Table V.2). The year-on-year widening of the cash deficit had been evident since the beginning of the year and this trend intensified every month (see Chart V.1). While in January 2009 the cash

Chart V.1 Net borrowing requirement of central government on a cash basis (January 2008 - September 2009)

(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.

deficit grew by 0.5% of GDP year-on-year, during the first nine months of the year its increase reached 5.0 percentage points of GDP (first nine months of 2009: 9.9% of GDP, first nine months of 2008: 4.9% of GDP).

The higher cash deficit is attributed to both a significant decline in receipts and a strong increase in payments, for the reasons discussed in the analysis of the corresponding aggregates on an administrative basis.

3 PUBLIC DEBT

The stable macroeconomic environment established after the country's entry into the monetary union in 2001 helped create favourable conditions for driving down the debt-to-GDP ratio. From 2000 up to and including 2007, the growth rate of the economy was around 4.0% on average; government borrowing rates fell constantly, reaching historically low levels at end-2005, while significant amounts were collected due to privatisations. Moreover, most of the years in this period saw primary surpluses, albeit smaller than in the 1997-1999 period. The combination of the above factors set the debt-to-GDP ratio on a downward course, declining by 7.8 percentage points of GDP in the eight years up until 2007. However, in 2008, this downward trend was reversed due to a very high general government deficit, which amounted to 5.6% of GDP (plus a "deficit-debt adjustment" equal to 3.3% of GDP associated with financial transactions which, according to the European System of Accounts (ESA), are not recorded in the deficit, but increase public debt). Thus, the debt ratio rose significantly, by 3.6 percentage points, and reached 99.2% of GDP (see Table V.3). At the same time, the deceleration of growth to 2.0% in 2008 and the increase in government borrowing rates to 4.6% (from 3.2% in 2005, 3.8% in 2006 and 4.4% in 2007) strengthened debt dynamics considerably.[9]

Since the beginning of 2009, all the determinants of the debt-to-GDP ratio continued to work in further aggravating debt dynamics. The growth rate of the economy will be negative this year and, as implied by the course of fiscal aggregates so far, it is estimated that the year 2009 will witness a large primary deficit. Moreover, the "deficit-debt adjustment" will exceed 2.0% of GDP, due to the issuance of government bonds with the aim of (i) financing the purchase of bank preference shares (liquidity support provided under Law 3723/2008); and (ii) increasing the capital of the Guarantee Fund for Small and Very Small Enterprises (TEMPME).[10] In addition, although the average government borrowing rate stood at 4.3% during the January-September period, this is attributable solely to exceptionally low interest rates on short-term securities. If these conditions were to remain unchanged for a number of years, the debt-to-GDP ratio would tend to rise constantly. By end-June 2009, the general government debt-to-GDP ratio had already risen to 111.5%, while the central government debt stood at 122% of the estimated annual GDP.

The dynamics of the future evolution of public debt, according to current trends, are adverse. First, economic growth will probably remain weak for quite some time. Second, interest rate developments may be unfavourable – both because there is a risk of further widening the yield spread between Greek government bonds and the corresponding German reference bonds (if markets believe that fiscal adjustment is inadequate) and long-term interest rates may rise worldwide (owing to higher financing requirements in order to cover large fiscal deficits in many countries). In any case, prolonged high deficit and debt levels would intensify market concerns regarding the sustainability of the country's fiscal position, probably causing a further increase in government borrowing rates and deterioration in the dynamics of public debt.

9 As early as April 2008, the Bank of Greece had warned that "more recently, the conditions favouring debt reduction have weakened". See *Annual Report 2007*, page 112.

10 This bond issue is a financial transaction that increases the debt only (not the deficit) and is therefore recorded also as a "deficit-debt adjustment".

Table V.3 Decomposition of changes in the general government debt-to-GDP ratio[1]

(percentages of GDP)

	2000	2001	2002	2003	2004	2005	2006	2007	2008*
General government debt-to-GDP ratio	103.4	103.7	101.7	97.4	98.6	100.0	97.1	95.6	99.2
Changes in the general government debt-to-GDP ratio	-8.9	0.3	-2.1	-4.2	1.1	1.4	-2.9	-1.6	3.6
– Primary balance	-3.6	-2.0	-0.7	0.7	2.6	0.7	-1.3	-0.5	1.2
– Change in GDP and change in interest rates	-12.5	-0.9	-1.4	-4.5	-2.3	-0.5	-3.1	-2.9	-0.9
– Deficit-debt adjustment[2]	7.3	3.2	0.1	-0.4	0.9	1.2	1.5	1.8	3.3

Sources: Ministry of Economy and Finance, General Directorate of Economic Policy, "Hellas: Macroeconomic Aggregates" (Oct. 2009).
*Provisional data.
1 Changes in the debt ratio have been decomposed using the following formula:

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

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

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

Therefore, in order to break the vicious circle of a mounting debt and worsening market expectations, fiscal policy top priority should be to gradually drive down the debt-to-GDP ratio. In order to reduce it to 60% of GDP within 10 years, large primary surpluses in the order of 5.5% to 6.5% of GDP are required on an annual basis.

In addition to higher debt, 2008 also witnessed a strong increase in government-guaranteed loans, which reached €22.2 million or 9.0% of GDP at end-2008, compared with around 6.1% of GDP in the 2000-2002 period. These loans increased significantly in 2009 as well, but there are no official data on this development for the time being. Moreover, the public sector has substantial liabilities mostly towards suppliers (e.g. pharmaceutical and medical suppliers, public works contractors, IT companies, etc.), which, by all indications, exceed €12 billion.

The negative impact of high fiscal deficits and high public debt on the economy are discussed in detail in the Appendix to this chapter. It should be stressed, however, that Greece should at the moment be reducing the debt on a fast pace, in order to be in a position to deal with the pressures that population ageing will exert on public expenditure, especially after 2015. Instead, the debt-to-GDP ratio is on the rise again.

4 THE EXCESSIVE DEFICIT PROCEDURE

The Excessive Deficit Procedure for Greece was triggered on 24 March 2009, when the European Commission concluded that Greece (among other countries) was running an excessive deficit and urged the ECOFIN Council to adopt a recommendation for the correction of this excessive deficit.[11] According to the Euro-

11 See (i) Commission of the European Communities, "Commission Opinion on the existence of an excessive deficit in Greece", SEC (2009) 563, 24 March 2009, pp. 4-5; (ii) Commission of the European Communities, "Recommendation on the existence of an excessive deficit in Greece", SEC (2009) 564, 24 March 2009, pp. 3-4; (iii) Commission of the European Communities, "Recommendation to Greece with a view to bringing an end to the situation of an excessive government deficit", SEC (2009) 565/2, 24 March 2009, p.3.

pean Commission estimates, the general government deficit in Greece has been in excess of the 3% reference value in the years 2007 and 2008, remained above 3% in 2009 and will exceed 4% in 2010, unless there is a policy change. The Commission concluded that there were no "special circumstances" in Greece, e.g. a significant decline in economic activity or other extraordinary events, to justify an excessive deficit in 2007 and 2008. It also noted that in 2007 and 2008 there was no serious economic downturn; by contrast the economic conditions in Greece were good. In view of the existing macroeconomic imbalances and the ongoing repricing of risks in financial markets, which add to the already heavy burden of debt, the Commission judged that the deficit should be reduced rapidly by 2010.

According to paragraph 6 of Article 104 of the Treaty, the EU Council of General Affairs issued on 27 April 2009 a legal decision about the existence of an excessive fiscal deficit in Greece, as well as a recommendation, under paragraph 7 of Article 104 of the Treaty, about the remedial actions to be taken.[12] Based on forecasts published by the Commission in January 2009 (according to which Greece's GDP would increase by 0.2% in 2009 and by 0.7% in 2010), the Council asked Greece to reduce its fiscal deficit below the 3% reference value latest by 2010 (as per the Greek government's commitment). According to the Council recommendation, by 27 October 2009, the Greek government will have to adopt permanent measures for the restraint of expenditure so as to support fiscal adjustment in 2009 and should implement additional permanent measures to ensure the correction of the excessive deficit by 2010. Moreover, the Council noted that Greece should make effort to control factors, other than net borrowing, that change public debt levels, and to improve the collection and processing of economic and, in particular, general government data. Finally, the Council called on Greece to improve the quality and sustainability of its public finances and, with a view to recovering competitiveness losses and addressing the existing external imbalances, to urgently implement bold structural reforms. The Committee, in order to assess (after 27 October) whether the Greek authorities undertook effective remedial actions for correcting the excessive deficit, will take into consideration any changes in the economic conditions compared with the projections that had been the basis of the Council recommendation.

12 These Council decisions were the formal publication of texts that were discussed and approved by the Ministers of Finance on 3 April 2009 in their informal meeting in Prague.

APPENDIX TO CHAPTER V
THE IMPLICATIONS OF HIGH PUBLIC DEBT

Public borrowing is, in principle and under certain circumstances, an important tool that supports economic policy. Recourse to borrowing enables authorities to overcome a recession (by following a counter-cyclical policy), cope with emergencies (e.g. natural disasters), carry out infrastructure works or finance investments in sectors such as health and education, which improve the quality of human capital and accelerate economic growth.

However, fiscal deficits that have been accumulating over the years increase public debt substantially, leading to important, long-term implications. High public deficits and debts affect the allocation of the factors of production, economic activity and income distribution. They also influence the expectations and decisions of economic agents (businesses, workers and households) and constrain the possibilities and the effectiveness of fiscal policy. In order to reduce high public debt, painful economic measures are required. The implications of high public debt are summarised below.

Distributive implications

Government expenditure that aims at servicing and repaying public debt involves the transfer of income from the population as a whole (which is burdened with direct and indirect taxes as well as with social expenditure cuts) to holders of government paper, who usually constitute a rather small subset of a country's population and belong as a rule to high income brackets. Consequently, as it has been documented (especially for the US), high public debt raises a country's income inequality, since middle- or low-income groups are burdened with tax without acquiring substantial interest income, contrary to high-income groups.

Especially in Greece, where the largest part of public debt is held today by non-residents, there is a transfer of income from residents to non-residents (as shown by the balance of payments figures).

Macroeconomic implications

As it has become clear in the course of the current financial crisis, markets were very cautious towards countries with high public debt levels, demanding a high default premium. On account of this, such countries, e.g. Greece, Italy and others, were obliged to borrow at almost double the interest rates than Germany. This means that, *ceteris paribus*, the higher the debt, the higher the borrowing cost. To the extent that it is necessary to resort to new borrowing to be able to make interest payments, a *debt-deficit spiral* could occur, where the increase in interest rates leads to higher interest payments and, consequently, to a further increase in borrowing, which in turn results to new rises in interest rates, etc. (see Buiter, 1985).

To the extent that high public debt leads to higher interest rates, the effect of "crowding out" private investment will be accelerated, impacting on the economy adversely. Certainly, such a rise may be negligible for individual euro area Member States under normal circumstances. The crisis showed, however, that, even within the euro area, interest rate spreads may widen considerably in turbulent times.[1]

1 According to a recent OECD study (OECD, 2009), the widening of interest rate spreads of euro area Member States' securities was affected by (i) international investors' increasing risk aversion and their flight to quality; (ii) the unsatisfactory fiscal performance of certain countries that have been recording high deficits and debts for many years; (iii) the expected worsening of fiscal imbalances; and (iv) forecasts about the future budgetary cost of population ageing. In addition, the interest rate spread increases due to low liquidity in government securities markets. OECD's latest finding is also corroborated by a recent study carried out by the European Central Bank (*Monthly Bulletin*, September 2009, Box 4, "New evidence on credit and liquidity premia in selected euro area government yields"). This study makes a distinction between credit risk and liquidity risk by examining the relationship between the yields of ten-year French and German government bonds and those of bonds issued by agencies and backed by full government guarantee (the case of bonds issued by the German *Kreditanstalt für Wiederaufbau (KfW)* and by the French *Caisse d'Amortissement de la Dette Sociale*, CADES, is examined). These agency bonds that have the full guarantee of the respective government bear the same credit risk as the relevant country's. As the study shows, bonds issued by KfW and CADES, offer almost the same yields. Therefore, any difference between the yields of the bonds issued, on the one hand, by these agencies (KfW, CADES) and, on the other, by the respective governments reflects exclusively the liquidity risk or effect (whether investors are willing to bear an extra cost – lower yield – in order to have the possibility of liquidating the securities immediately). Therefore, the widening of the interest rate spread between German and French government securities is primarily attributed to the liquidity effect (and not to differences in credit risk), due to higher liquidity in the German bond market. The liquidity effect is expected to have influenced the yields of bonds issued by other euro area Member States as well. However, in certain cases (as in Greece and Ireland) the greatest impact on interest rate spreads comes from the existing significant fiscal imbalances and the unfavourable outlook.

Increased uncertainty from the accumulation of high debt turns investors to quick returns, discouraging long-term investment that enhances the economy's total factor productivity. Therefore, the existence of government securities that bring income at almost zero risk can only limit the resources available for high-risk investment with long-term yield. A recent empirical study (Tanzi and Chalk, 2000) on the European Union has shown that high public debt exerts upward pressures on interest rates and impacts negatively on private investment.

Over the medium to longer term, the crowding out of private investment leads to slower fixed capital formation. In the long term, therefore, high public debt weakens the productive capacity of the economy and, consequently, *slows down economic growth.*

Macroeconomic implications similar to the crowding out of private investment arise also from the fact that high public debt dampens the incentive to invest, since private investors expect an increase in future taxes on the return on capital (debt overhang – see Krugman, 1988). The expectation of additional taxes and the climate of uncertainty surrounding the future servicing of debt postpone or even discourage decisions on new investment, reducing the stock of fixed capital in the economy and slowing down both economic growth and the rate of increase in real wages and real consumption.

Additionally, increased interest rates on account of high debt make the borrowing cost of financial institutions harder to bear. Therefore, adverse implications stemming from high public debt are then diffused to the economy in the form of higher lending rates that weigh on consumers and enterprises, restraining bank lending and investment activities.

The potential decline in the rate of accumulation of fixed capital causes the debt burden to "shift" from the present generation to the next ones, which will have a smaller stock of productive capital at their disposal.

Distortions

The expenditure for interest payments on public debt is nowadays considered to be the actual debt "burden". Since tax revenue provides the means for making interest payments, tax rates are higher than what they would have been, had the obligation to make interest payments not existed. However, taxes generate distortions, as well as efficiency or deadweight losses, especially when associated with high tax rates.

The ratio of interest payments to GDP shows how many percentage points the average tax burden has to increase to be able to finance interest payments. In the case of Greece, the general government's interest payments amounted to 4.4% of GDP (or €10.5 billion) in 2008, but it is estimated that they will rise to about 5% of GDP in 2009. As a consequence, public debt servicing burdens the budget by 5% of GDP, which has to be covered either by cutting back on other expenditure (e.g. for health or education) or by imposing additional taxes that reduce economic efficiency. It should be noted, however, that within the European Union the possibility for a Member State to increase tax rates is limited due to tax competition. For instance, in previous years there was a generalised trend to reduce tax rates on corporate profits. The need to increase tax revenue due to the implications of the crisis for public finance can adversely affect an economy, if it leads to increased taxation on corporate profits, as this would drive companies to relocate to areas with more favourable tax treatment.[2]

To the extent that there are regulations requiring financial institutions to invest in government securities (as was the case in Greece until 1993), distortions are introduced in the capital market.

It is also pointed out that if a country is trying to keep its already high public debt below cer-

2 Alternatively, only policies coordinated at the European Union level would not create such negative externalities. However, developments so far indicate that cooperation in the field of tax policy is difficult to achieve.

tain limits — hence reducing its increased debt servicing costs — in conditions of economic and fiscal crisis, it will be most likely obliged to resort to "easy" solutions, such as restraining public investment and cutting back on expenditure for the improvement of human capital (e.g. education and health). Such solutions compress total factor productivity and slow down potential long-term economic growth (Balassone and Franco, 2000).

Limitations on fiscal policy options and efficiency

High public debt limits considerably the possibility to conduct stability-oriented fiscal policy in periods of economic downturn. If a country's public debt is already high (e.g. 100% of GDP), the margins for conducting expansionary fiscal policy (which leads to annual deficits, borrowing and the further rise of debt) are extremely narrow. Markets will consider the fiscal situation unsustainable and will require a very high risk premium, making the borrowing cost almost prohibitive. Difficulties may also occur in refinancing the existing debt.

For this reason, since the onset of the economic crisis, the European Commission made it clear to Greece that, owing to the country's high public debt, there was no room for an expansionary fiscal policy aimed at stabilising the economy, contrary to other EU countries.

Besides, a recent IMF study (IMF, 2009b) points out that the *efficiency* of fiscal policy, i.e. its contribution to economic recovery, gradually diminishes when debt levels exceed 60% of GDP, as consumers and investors anticipate with certainty that the current fiscal expansion entails a future tax burden, which discourages spending or investment decisions (Sutherland, 1997). According to the same study, *when debt levels exceed 100% of GDP, fiscal policy becomes totally inefficient.*

Of particular interest is the recent study of KEPE (Athanasiou, 2009), according to which an expansionary fiscal policy may lead to a decline in economic activity, because of the high public debt of Greece and the fact that 79% of this debt is held by non-residents. This will happen, if the expansionary policy leads to an increase in external lending rates (on the total amount of debt and not only on new borrowing) or if e.g. markets judge that an expansionary fiscal policy in a country with such a high debt level deteriorates its fiscal position.[3] Since 79% of the additional interest will be transferred to foreign countries ("leakage from the circular flow of income"), the decrease of GDP will be higher than the increase caused by fiscal expansion.

Furthermore, according to recent studies (Deroose and Turrini, 2005, Tagkalakis, 2009), decisions on fiscal adjustment and structural reforms are interconnected. For example, specific reforms may imply direct budgetary costs, contradicting any fiscal adjustment effort (e.g. if the effort to make the labour market more flexible is combined with a reduction in employment tax in order for such flexibility to be accepted), while the benefits they generate may materialise in the future. Therefore, high debt and increased debt servicing costs may indirectly affect both the credibility and the implementation of structural reform policies. Additionally, the accumulation of high deficits over a number of years and the constant increase in indebtedness may undermine the credibility of the economic policy as a whole, not to mention confidence in the pursued reforms, thus building up political pressure to abandon policies that might involve long-term benefits for an economy (such as reforms in the labour and services markets and in the social security system). Certainly, as also mentioned in Chapter I, there exist significant structural reforms with zero or low budgetary cost, which are deemed necessary as a complement to the fiscal adjustment effort in Greece at the current juncture.

High debt may discourage long-term decision-making, encouraging short-termism instead.

3 It is noted of course that, when the average duration of the debt is long, several years are required for the total debt to be influenced by a rise in interest rates.

Therefore, against the backdrop of the crisis, countries with financing problems may turn to the issuance of short-term securities to meet their borrowing requirement, thereby increasing uncertainty due to the change in the structure of their portfolios. Hasty decisions with negative long-term implications may also relate to the allocation of resources (e.g. cuts on productive expenditure).

Risks

The higher the debt-to-GDP ratio of a country is, the higher the risk of a fiscal crisis in this country ("catastrophic" debt dynamics) will be. Even if markets erroneously believe that a country might not be able to meet its obligations and impose higher interest rates, these fears could still come true (self-fulfilling expectations – Blanchard 2003). In this respect, out of the three determinants of the debt ratio, authorities can control just one, i.e. the primary surplus, and this only in part. The other two determinants (interest rate and economic growth rate) are not controlled by the government. Interest rates are now set in globalised markets and vary according to each country's credit rating. As the current global crisis has demonstrated, a country can quite easily and unexpectedly, without any fault on its part, be faced with a problem of public debt.[4] This means that even if the debt-to-GDP ratio reaches 60%, as specified in the Stability and Growth Pact, this can not eliminate the risk of fiscal aberration in the event of a protracted recession. Therefore, when it comes to countries such as Greece, there is a need for constant vigilance and emphasis on fiscal consolidation and on the drastic reduction of public debt as a percentage of GDP. Otherwise, the continued fiscal aberration will weigh heavily on the economy.

Finally, when a large part of the debt is held by international investors (as in the case of Greece), the country is exposed to risks from a sudden shift in their behaviour. For instance, it is possible that international investors, for their own reasons, will proceed to the restructuring of their portfolios (or to the repricing of risks), which will dampen demand for Greek securities, leading to lower prices and considerably higher yields.

Irrespective of the current economic crisis, persistent high deficits and debts exert constant pressure on public finances. This may lead to a domino of wrong choices as regards debt servicing and the allocation of available resources, but it may also impair in the long run the ability of public authorities to take the appropriate strategic decisions on fiscal consolidation and economic growth. This factor heightens uncertainty and weakens international investors' confidence, leading to higher estimates about the economic risk surrounding a country.

Future risks

The accumulation of high deficits over a number of years has led Greece to very high public debt levels. In addition, the current adverse international economic conditions affected public finances considerably in 2009, resulting to a swelling of the debt to 111.5% of GDP at end-June 2009 (compared to 99.2% at the end of 2008). Taking under consideration the abovementioned macroeconomic and distributive implications of very high public debt, the need to take measures that will reduce deficits and will restore public debt to its downward course is pressing.

However, recent European Commission studies imply that, in order to properly evaluate the full extent of a country's fiscal problem, future fiscal obligations (social security, health, medical care and other expenditure) stemming from the anticipated population ageing need to be taken into account. According to the Commission's estimates (EU Ageing Working Group), in Greece, future fiscal obligations owing to population ageing will increase by

4 For example, at the end of 2007 Ireland's debt accounted for just 24.8% of GDP, whereas, according to IMF estimates, by the end of 2014 it will amount to 126.0% of GDP.

15.9 percentage points of GDP from 2007 to 2060, while for the 25 Member States of the European Union that took part in the survey the average additional burden will be 4.7 percentage points of GDP. Since the impact on public debt is expected to be severe, regardless of the current crisis, fiscal adjustment and the effective reform of the social security system are imperative.

A recent IMF study on Greece (IMF, 2009d) uses a more comprehensive evaluation method of the country's future fiscal obligations. In particular, it adopts a public sector balance sheet approach and calculates the public sector's current net worth (NW) based on estimates of its assets and liabilities and of the net capital stock. Then, based on a long-term (until 2060) macroeconomic and fiscal scenario (that takes into account, among other things, the impact of population ageing), the IMF study calculates the net present value (NPV) of future primary surpluses/deficits.[5] The resulting NPV reflects the accumulation of assets and liabilities stemming from the current fiscal and structural policies and the implications of the expected population ageing. By adding the current NW and the NPV of future primary surpluses/deficits, the IMF calculates the comprehensive net worth (CNW) of the country's public sector, as well as its annual change in the future. According to the IMF, the current NW in 2008 is estimated at -21.9% of GDP, the NPV of future primary surpluses at -373.2% of GDP and their sum, i.e. the CNW, at -395.1% of GDP. Given the current fiscal and structural policies and based on IMF forecasts on economic growth, it is estimated that in 2014 the current NW will amount to -53.8% of GDP, the NPV of future primary surpluses to -480,2% of GDP and the CNW to -533.9% of GDP. In other words, even though the recorded public debt (recorded liabilities) reached 99.2% of GDP in 2008, if the future fiscal implications of current policies are also taken into account, then the real overall debt burden (recorded or not) of the Greek State in 2008 was 395.1% of GDP. Moreover, if the stance of fiscal and structural policies does not change, in five years from now this burden will widen further to 533.9% of GDP. These figures reveal the full extent of the country's fiscal problem, given the current demographic trends and the future outlook and assuming that no bold decisions are taken in respect to fiscal and structural policies. Therefore, substantial fiscal consolidation and the promotion of structural reforms that will boost potential growth are urgently called for, so as to deal effectively with the implications of population ageing.

Necessary actions

The attempt to reduce high public debt requires the acceleration of fiscal adjustment in the years to come. On account of the economic crisis and of the potentially slow or delayed economic recovery, a substantial reduction of this debt can not come from a more favourable relationship between real interest rates and real GDP growth. Furthermore, according to a recent ECB study (ECB, 2009, Box 10, "Experience with government debt reduction in euro area countries"), future proceeds from the sale of banks' financial assets acquired during the crisis are subject to uncertainty for all European Union Member States; there is also increased future risk from a potential activation of government guarantees on loans.

Consequently, the main effort to reduce public debt needs to focus on the creation of primary surpluses. According to international literature (e.g. Alesina and Perotti, 1997, Alesina and Ardagna, 1998) and to recent studies carried out by the ECB (ECB 2009, *ibid.*) and the IMF (Cotarelli and Viñals, 2009), a fiscal adjustment that is based mainly on expenditure cuts is more likely to succeed and lead to accelerated growth. This is because a policy of substantial expenditure containment can convince the public that it constitutes a structural fiscal improvement which will contribute, on the one hand, to alleviating the tax burden and, on the

5 This will be the NPV of future deficits, if future obligations are higher than future assets.

other, to strengthening the credibility and effectiveness of the overall economic policy. By contrast, if the adjustment focuses exclusively or mainly on revenue (by increasing tax rates and imposing new taxes), the chances of success will be slimmer, as individuals, growing aware of the extra tax burden, will limit their spending. This policy might also be abandoned due to the distortions it creates in economic incentives (e.g. through the taxation of labour) and in international competitiveness (e.g. if it relates to a state-controlled increase in indirect taxes or in the prices of services).[6] In Greece, there is certainly ample room for increasing revenue by combatting tax evasion, through the restructuring of the tax control system.

Additionally, according to the ECB study (ECB, 2009) and the international literature (Lane and Perotti, 2003, Tagkalakis, 2006), fiscal adjustment based on the reduction of personnel outlays may slow down unit labour cost growth in total economy, therefore managing to enhance competitiveness, employment and investment and to boost potential growth.

The effort to reduce high public debt by containing expenditure and utilising available resources in a more efficient way presupposes the improvement of the institutional framework and the enhancement of transparency during budget preparation and execution. The European Commission (European Commission, 2009) as well as the ECB (ECB 2009, Box 9, "Domestic fiscal rules and institutions as a complement to the EU fiscal framework") and the IMF (Cotarelli and Viñals, 2009) assign particular importance to the role of national fiscal rules, including a medium-term fiscal framework, as a factor that enhances the credibility and the effectiveness of a fiscal consolidation program. Fiscal rules should be explicit, simple, quantified and transparent, so as to obtain the approval of national parliaments. However, adherence to these rules should be monitored by independent fiscal institutions possibly accountable to the national parliament annually. According to the Commission, the ECB and international researchers (e.g. Debrun *et al.*, 2008), both fiscal rules and independent institutions that monitor and evaluate their implementation have helped many countries strengthen their fiscal discipline and effectively curb the government's squandering of funds and could serve as a useful complement to the European Union fiscal rules.

Against the current adverse macroeconomic background and the subsequent worsening of fiscal imbalances, the ECB study suggests that Member States pursue independently specific debt-reducing objectives, in order to enhance the credibility of their effort for fiscal adjustment and exit from the crisis. According to a recent IMF study (Cotarreli and Viñals, 2009) focusing on the policies necessary for coping with the budgetary cost of the economic crisis and of population ageing, developed economies are faced with an extremely challenging fiscal situation. More specifically, in order to reduce the debt-to-GDP ratio below 60% within the next two decades, these economies should gradually and at a steady pace move, on average, from a cyclically adjusted primary deficit of 3.5% of GDP in 2010 to a surplus of 4.5% of GDP in 2020. This means that a correction of 8 percentage points has to be made within a period of ten years and that primary surpluses must be maintained at similar levels (around 4.5% of GDP) for the next ten years, despite the expected increase in pension expenditure. Concrete and strong political will and effective actions are therefore required in order for these problems to be addressed. The IMF suggests that priority should be given to the reform of health and social security systems. Moreover, having considered previous successful efforts of fiscal consolidation and public debt reduction (e.g. in the US in the 1990s), it proposes the freez-

6 Considerable structural reforms that reduce government consumption, on the one hand, and improve the effectiveness of social transfers, on the other, have helped Finland, Ireland and the Netherlands to reduce their primary expenditure and to create significant primary surpluses that led to the drastic reduction of public debt. Ireland's public debt fell by 69.2% of GDP from 1994 to 2006, the Netherlands' public debt fell by 32.9% from 1994 to 2007 and Finland's public debt fell by 24.4% of GDP from 1995 to 2008 (ECB, 2009).

ing of real per capita primary expenditure for a number of years. IMF researchers acknowledge that fiscal adjustment can be achieved by broadening the tax base and combatting tax evasion, as well as by modifying the tax system to take advantage of taxes that address "negative externalities", such as environmental pollution and climate change (temperature rise) owing to the greenhouse effect.

The findings of studies compiled by the ECB, the IMF and other researchers are of particular importance for Greece and have direct relevance to the European Commission's assessments on the country's public finances (European Commission, 2009). Moreover, they broadly coincide with the recommendations made by the ECOFIN Council (Council of the European Union, 2009) in March and April 2009 and with IMF's proposals (IMF 2009c) on the reduction of deficits by emphasising on current expenditure, combatting tax evasion and enhancing transparency and control during state budget preparation and execution, as well as on creating a reliable medium-term fiscal framework.

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VI MONEY, CREDIT AND CAPITAL MARKETS

1 MONETARY DEVELOPMENTS IN GREECE

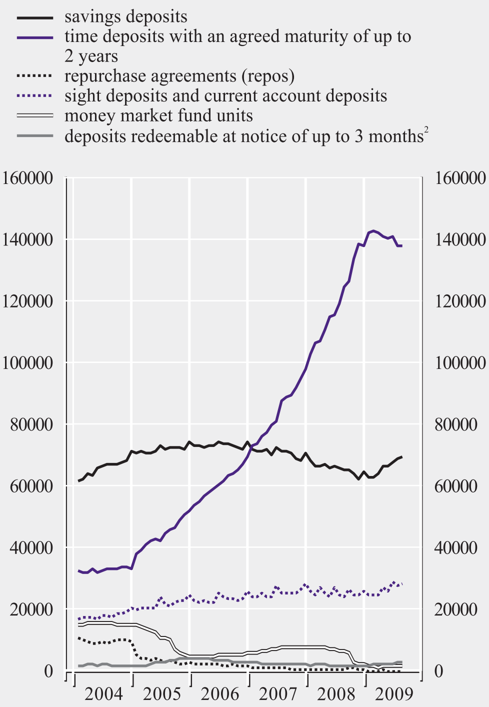
1.1 MONETARY AGGREGATES

The annual growth rate of M3[1] weakened further during the January-August 2009 period, standing at 6.2% in August (2008 Q4: 14.4% – see Table VI.1), still remaining higher than in the euro area. This weakening is mainly associated with the slowdown in the annual growth rate of total financing of the economy, as well as with lower short-term interest rates,[2] which dissuaded investing in assets included in M3, thus helping to limit the shift of funds from assets not included in M3 to assets included therein (particularly with regard to deposits with an agreed maturity of up to two years[3]).

Turning to M3 components, overnight deposits started to gradually increase in the second quarter of 2009, after a continuous decline for about a year and a half. This development is mainly associated with the lower opportunity cost of overnight deposits, as the negative spread between overnight and time deposit rates was reduced. This increase was also due to savers' heightened uncertainty and their resulting shift towards more liquid deposits.[4] Hence, the annual growth rate in this category of deposits registered an overall increase.[5] By contrast, the growth rate of time deposits, which had remained at particularly high levels since early 2005, declined substantially (see Table VI.1). The annual growth rate of total M3 deposits slowed in the period under review (August 2009: 9.4%, 2009 Q2: 12.0%, 2008 Q4: 15.3%). With regard to other M3 components, both investment in repos and money market fund shares/units declined further (see Table VI.1 and Chart VI.1).

Chart VI.1 Deposits, repurchase agreements and money market fund units in Greece[1] (January 2004-August 2009)

(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.

1.2 BANK DEPOSIT RATES

Short-term[6] interest rates in Greece declined significantly across all categories in the January-August 2009 period (see Chart VI.2), reflecting the effect of cuts in key ECB rates and the gradual improvement in funding conditions for banks in money and capital markets. It should be reminded that these interest rates[7] were particularly high[8] at end-2008 due to the prevailing uncertainty after the collapse of major financial institutions. The cuts, in almost all categories, were greater than the total decline in key ECB rates over the same period

1 This aggregate represents Greece's contribution to the relevant euro area aggregate, excluding currency in circulation.
2 See Section 1.2 below.
3 It should be noted that in the January-August 2009 period, this category of deposits registered a net flow of -€35 million (January-August 2008: €26,610 million).
4 These include savings, sight and current account deposits.
5 In April 2009, this growth rate turned positive for the first time since June 2006.
6 The largest share of deposits in Greece has a maturity of up to one year.
7 Especially time deposit rates.
8 The level of interest rates also depends on competition between credit institutions.

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

(non-seasonally adjusted data)

	Outstanding balances on 31.08.2009 (million euro)	Annual percentage changes[1]										
		2004	2005	2006	2007	2008				2009		
		Q4[2]	Q4[2]	Q4[2]	Q4[2]	Q1[2]	Q2[2]	Q3[2]	Q4[2]	Q1[2]	Q2[2]	August[3]
1. Overnight deposits	97,942.7	16.8	9.3	0.7	-0.9	-2.8	-4.4	-6.3	-7.0	-5.9	0.5	9.3
1.1 Sight deposits and current account deposits	28,579.9	19.1	20.2	1.8	10.3	6.2	2.6	-1.3	-3.6	-3.9	3.2	17.3
1.2 Savings deposits	69,362.8	16.1	6.3	0.2	-4.6	-5.8	-6.8	-8.1	-7.9	-6.3	-0.3	6.5
2. Time deposits with an agreed maturity of up to 2 years	137,793.0	5.3	45.2	37.5	42.2	42.1	43.0	38.3	39.1	31.5	21.6	8.8
3. Deposits redeemable at notice of up to 3 months[4]	2,967.9	2.8	105.2	-24.4	-20.3	-20.0	-18.0	-22.9	-24.1	-15.3	7.6	45.5
4. Total deposits (1+2+3)	238,703.6	13.1	20.7	12.1	15.9	16	16.5	14.3	15.3	13.4	12.0	9.4
5. Repurchase agreements	234.8	-12.6	-72.8	-35.7	-54.3	-55.7	-50.9	-39.3	-11.4	-55.3	-53.2	-50.5
6. Money market fund shares/units	1,705.6	-1.9	-51.8	-2.5	40.5	28.1	9.3	-11.2	-58.8	-75.3	-79.7	-74.8
7. Debt securities issued with a maturity of up to 2 years[5]	1,238.0	-0.3	-42.2	24.2	-	-	-	-	-	-	-	-
8. M3 excluding currency in circulation (4+5+6+7)	241,881.9	9.2	6.9	10.6	14.7	15.2	16.2	15.0	14.4	11.2	9.2	6.2

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-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.

(150 basis points).[9] As interest rate cuts were, on average, lower than the deceleration of inflation during the period under review, average real (deflated) interest rates[10] on deposits rose on an annual basis over the same period. In particular, the average *real* interest rate on overnight deposits rose to -0.28%, from 3.31% during the corresponding period of 2008, whereas interest rates on time deposits with an agreed maturity of up to one year grew to 2.07% (January-August 2008: 0.11%).[11]

Deposit rates in the euro area also followed a downward course, but their decrease was comparatively smaller than in Greece; hence the interest rate differential vis-à-vis Greece narrowed in the key deposit categories (see Tables VI.2A and VI.2B). As regards the most significant category of deposits, i.e. time deposits with an agreed maturity of up to one year, the positive interest rate differential between Greece and the euro area narrowed (August 2009: 52 basis points, December 2008: 161 basis points). The fact that this type of interest rate remains one of the highest in the euro area shows that Greek banks are still facing a relatively higher cost of funding from deposits compared with the euro area as a whole. It should be noted that since April the share of all types of time deposits by households and enterprises in total deposits has started to shrink.

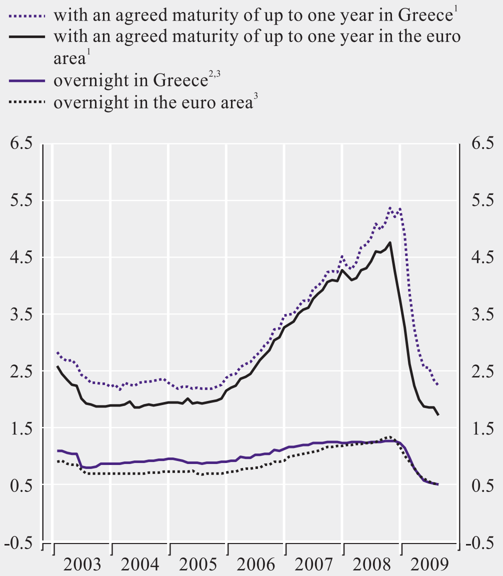
2 CREDIT TO THE ECONOMY – BANK CREDIT TO ENTERPRISES AND HOUSEHOLDS

2.1 CREDIT TO THE ECONOMY

The annual rate of increase in the stock of **total credit extended to the economy** by domestic Monetary Financial Institutions (MFIs)[12] followed a downward course, after having stabilised in the first three months of 2009, and came to 9.3% in August (2008 Q4: 16.6%, see Chart VI.3 and Table VI.3). This reflected the strong slowdown in credit to the private sector (enterprises and households); by contrast, rate of growth of credit to general government increased overall, albeit with some fluctuations.

Chart VI.2 Bank interest rates on new deposits by households in Greece and the euro area (January 2003-August 2009)

(percentages per annum)



Sources: Bank of Greece and ECB.
1 Monthly average rate.
2 The interest rate on savings deposits is used, as these deposits represent the bulk of overnight deposits and their interest rate is almost identical to the overnight rate.
3 End-of-month rate.

9 The interest rate on new overnight deposits by households (December 2008: 1.24%) decreased by 74 basis points, whereas interest rates on new deposits with an agreed maturity of up to one year (December 2008: 5.36%) and on repos (December 2008: 2.52%) recorded a much more significant decrease (by 312 and 224 basis points, respectively).

10 The average real interest rate is calculated using the average nominal rate for a given period, net of the average inflation for the same period.

11 In August 2009, the real overnight deposit rate came to -0.28% and the real interest rate on time deposits with an agreed maturity of up to one year came to 1.46%.

12 Bank credit to general government, enterprises and households (stock) is calculated as the sum of outstanding bank loans, and holdings of government securities and corporate bonds, *plus* the outstanding amounts of securitised loans and securitised corporate bonds. Credit *growth* is calculated as the difference in outstanding stock bank credit between two points in time, which determine the reference period. Loan write-offs during the reference period are added and the sum is adjusted for changes in the value of Greek government bonds (incorporated in the outstanding amount of credit to general government), as well as for foreign exchange valuation differences in respect of loans denominated in foreign currency, to show the *net flow* of credit. Specifically, valuation differences due to the appreciation of the euro vis-à-vis foreign currencies are added, whereas valuation differences due to the depreciation of the euro vis-à-vis foreign currencies are deducted. Changes in the outstanding amounts of credit for individual loan categories are calculated in a similar manner. Finally, it should be noted the net flows and rates of change in credit for the first eight months of 2009 also include loans and corporate bonds of about €4 billion transferred by domestic credit institutions to their subsidiaries abroad.

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

(percentages per annum)

	August 2008	December 2008	August 2009	Change Dec. 2008/ Aug. 2009 (percentage points)
Overnight[1]				
Weighted average interest rate in the euro area	1.29	1.16	0.50	-0.66
Maximum interest rate	2.81	2.21	1.26	-0.95
Minimum interest rate	0.18	0.17	0.08	-0.09
Interest rate in Greece	1.26	1.24	0.50	-0.74
Interest rate differential between Greece and the euro area	-0.03	0.08	0.00	-0.08
With an agreed maturity of up to one year[2]				
Weighted average interest rate in the euro area	4.59	3.75	1.72	-2.03
Maximum interest rate	5.47	6.02	4.05	-1.97
Minimum interest rate	3.15	2.59	0.45	-2.14
Interest rate in Greece	4.99	5.36	2.24	-3.12
Interest rate differential between Greece and the euro area	0.40	1.61	0.52	-1.09

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

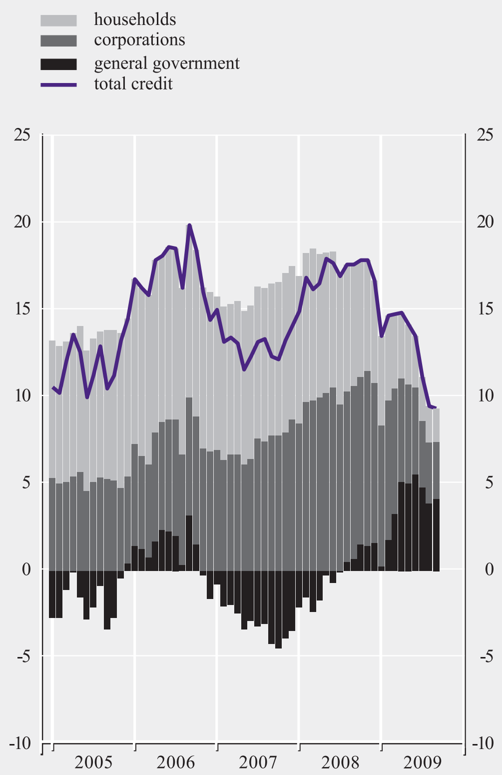
Table VI.2B Bank interest rates on new deposits by households in euro area countries[1]

	Overnight[2]		With an agreed maturity of up to 1 year[3]	
	December 2008	August 2009	December 2008	August 2009
Austria	2.03	0.71	3.55	1.22
Belgium	0.79	0.42	2.88	0.94
Cyprus	1.58	1.26	6.02	4.05
Finland	0.87	0.42	3.26	1.17
France	0.18	0.12	3.27	1.37
Germany	1.85	0.84	3.21	1.18
Greece	**1.24**	**0.50**	**5.36**	**2.24**
Ireland	1.04	0.60	3.17[4]	1.27[4]
Italy	1.23	0.31	3.01	1.05
Luxembourg	2.21	0.82	2.59	0.45
Malta	0.57	0.28	3.05	1.87
Netherlands	0.72	0.50	4.30	1.92
Portugal	0.17	0.08	3.68	1.58
Slovakia	0.57	0.33	2.93	1.24
Slovenia	0.43	0.23	4.45	2.27
Spain	0.69	0.42	4.17	2.28

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

Chart VI.3 Greece: Total credit to the economy by domestic MFIs and its sectoral breakdown (December 2004-August 2009)

(annual percentage changes, shares in percentage points)



Source: Bank of Greece.
Note: Comprising the outstanding amounts of MFI loans to corporations, households and general government, MFI holdings of government securities and corporate bonds and the outstanding amounts of 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. For a more detailed definition of credit, see footnote 12 in the main text.

The growth of credit to general government remained very strong in August 2009, standing at 28.5% (2008 Q4: 8.1%, see Table VI.3).[13]

2.2 BANK CREDIT TO ENTERPRISES AND HOUSEHOLDS

The annual rate of increase in **credit to the private sector** by domestic MFIs (loans, securitised loans and corporate bonds) moderated in the January-August 2009 period (August 2009: 6.0%, 2008 Q4: 18.3%, see Table VI.3). This development was driven by the lower growth rate of the stock of credit primarily to enterprises and secondarily to households (see Chart VI.3). Net monthly flows[14] of credit to enterprises and households remained particularly low in the reviewed period compared with those before the escalation of the financial crisis. Underlying the weak rates of credit expansion to the private sector —on the demand side— were the economic stagnation and/or contraction of economic activity and the cautiousness of enterprises and households to take on new loans, given the uncertainty caused by the international financial and economic crisis. At the same time, on the supply side, banks tightened credit standards in view of heightened credit risk and their effort to stem the rise in non-performing loans.[15] In any event, it is difficult to determine the individual contribution of loan demand and loan supply to the total weakening of credit expansion to the private sector.

The notable slowdown in **credit to enterprises** in the first eight months of the year (August 2009: 7.3%, 2008 Q4: 21.6%, see Table VI.3) is mainly associated with moderate supply on the part of banks. According to the results of the Bank Lending Survey (July 2009),[16] banks applied stricter credit standards in the second quarter of 2009, whereas demand for bank loans grew

13 The particularly high annual growth rates of credit to general government after January reflect the rise in domestic MFI holdings of government bonds, a development also seen in the euro area. On the supply side, this development is due to increased issues of government bonds. The net central government borrowing requirement in Greece amounted to €20 billion (8.3% of GDP) in the eight-month period January-August 2009, up by 87.4% in year-on-year. On the demand side, MFIs' holdings of these securities rose owing to the profit prospects offered by their yields (see Section 4 of the present chapter), as well as because MFIs may use them as collateral to obtain financing from the Eurosystem. Furthermore, these instruments offer banks a more attractive combination of yield and security than loan portfolios, given the latter's increased credit risk (see ECB, *Monthly Bulletin*, June 2009, p. 21, "Recent developments in MFIs purchases of debt securities issued by the euro area general government sector"). Domestic MFI holdings of Greek government bonds registered a significant positive net flow between January and June 2009. However, negative monthly flows were recorded in July and August owing to the sale of government bonds by MFIs, which perhaps used the opportunity to realise capital gains given the upward trend in prices.

14 Net credit flows are calculated as the change in outstanding credit over a given period (of one or more months), adjusted for write-offs and foreign exchange valuation differences.

15 Non-performing loans to the private sector as a percentage of total credit extended by banks rose in the first half of 2009 compared with end-2008 and was significantly higher than the EU average (see Section 6 of this Chapter).

16 The survey is conducted by the Bank of Greece on a quarterly basis as part of a Eurosystem-wide survey.

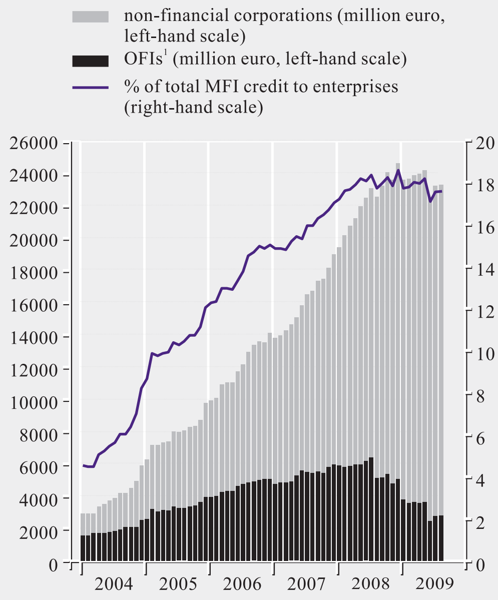
Table VI.3 Credit[1] to the economy by domestic MFIs

(annual percentage changes, non-seasonally adjusted data)

	2005	2006	2007	2008*					2009*		
	Q4[2]	Q4[2]	Q4[2]	Q1[2]	Q2[2]	Q3[2]	Q4[2]	December[3]	Q1[2]	Q2[2]	August[3]
1. Total financing by MFIs	13.8	15.6	13.5	16.1	17.3	17.4	16.6	13.4	14.4	13.5	9.3
2. Financing of general government	-0.6	-1.8	-16.1	-9.4	-3.2	3.8	8.1	1.4	16.7	33.3	28.5
3. Financing of enterprises and households	19.8	21.7	21.7	22.6	22.1	20.2	18.3	15.9	14.1	9.9	6.0
3.1 Enterprises	12.3	17.3	20.1	23.1	24.1	22.6	21.6	18.7	17.0	11.8	7.3
3.2 Households	30.3	26.9	23.6	22.0	19.9	17.6	14.8	12.8	11.1	7.8	4.7
of which:											
3.2.1 Housing loans	31.1	28.4	23.3	20.9	18.5	16.3	13.4	11.5	10.1	7.3	4.8
3.2.2 Consumer loans	30.3	23.7	22.6	23.3	22.1	21.0	18.4	16.0	13.5	9.1	4.8

Source: Bank of Greece.
* Revised data after Q1 2008.
1 Including MFI loans, holdings of corporate bonds and government securities, as well as securitised bank loans and corporate bonds. The rates of change are adjusted for loan write-offs and foreign exchange valuation differences in respect of loans denominated in foreign (non-euro) currencies. It should be noted that the rates of change in financing to enterprises take into account loans and corporate bonds transferred by domestic MFIs to subsidiaries abroad in the first eight months of 2009.
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.

Chart VI.4 MFI credit to enterprises through bond issuance in Greece (January 2004-August 2009)



Source: Bank of Greece.
1 The share of insurance companies in this sector does not exceed 1%.

slightly given the needs of enterprises for working capital and their debt restructuring (which affects the terms and manner of repayment of existing borrowing[17]). However, the weakening of economic activity, lower corporate turnover and the significant drop in investment activity were already dampening corporate loan demand and credit growth rates. It is estimated that this development, which is not recorded in the results of the July survey, will be particularly important in the next months. Government measures on state-guaranteed corporate loans[18] and indirect support for the construction sector[19] should make a positive contribution, whereas, according to recent estimates, the ongoing support scheme for small and very small enterprises boosted their funding also in the third quarter of the year.[20]

As the annual rate of credit expansion to enterprises was still higher than the estimated annual rate of change in nominal GDP, the total stock of corporate financing as a percentage of estimated annual GDP came to 55.2% in August 2009 (August 2008: 53.2%). Taking only bank loans into account, this percentage was 39.1% in August 2009, i.e. 13.7% lower than the corresponding euro area rate. MFI holdings of corporate bonds still accounted for a significant share of total credit to enterprises in August 2009 (17.6%), albeit lower than in December 2008 (18.6% – see Chart VI.4). [21,22]

17 Enterprises usually restructure their debt in order to take advantage of repayment facilities or lower interest rates (whilst banks facilitate enterprises in order to limit the probability of default). It should also be noted that debt restructuring by substituting short-term with long-term debt is not considered as a change in demand.

18 Greek banks are now in a position to grant state-guaranteed loans to enterprises of all sectors and sizes under the temporary state aid framework to tackle the crisis. The scheme's objectives are to boost liquidity in the real economy and support employment. The new scheme was first approved by the European Commission (3.6.2009), then entered into force pursuant to two Decisions of the Minister of Economy and Finance (2/49086/0025/3.7.2009 and 2/54979/0025/23.7.2009) and is now implemented by the General Accounting Office. The state guarantee covers up to 70% of the loan and the scheme's budget amounts to €2 billion. The deadline for enterprises to join the scheme expires at end-2010 and the expected duration of the state's guarantee is four years (with the possibility of a one-year extension). An enterprise may join the scheme provided it meets the following conditions: that it was not an ailing company until 1.7.2008 (companies which ran into difficulties later as a result of the crisis are entitled to join) and that no jobs will be cut in the two years following its entry into the scheme. Furthermore, a support scheme for small and very small enterprises in the sectors of manufacturing, tourism, trade and services, with a total budget of €1.05 billion, has also been announced and is being implemented by banks under the 2007-2013 National Strategic Reference Framework.

19 According to Law 3775/2009, Article 23, for those who take on mortgage loans until 31.12.2010 (for either residences or commercial premises), the Greek State guarantees up to 25% of the value indicated in the contract for the part of the loan which is uncovered. This scheme is already being implemented by the General Accounting Office. Furthermore, the Development Ministry's programme "Save energy at home" aimed at improving energy consumption in buildings constructed before 1980, i.e. before the entry into force of the Heat Insulation Regulation (insulation, replacement of doors, shutters and glazing, etc.), is expected to be included in the National Strategic Reference Framework 2007-2013. With a budget of €400 million, the scheme should boost construction-related professions and also support the households' budget by cutting their energy bill. Given that financing under this programme is estimated to cover 30-50% of the cost per building, the Ministry of Development expects that total expenses, including owner participation, will inject €1 billion into the construction sector.

20 According to a review of the results of the Credit Guarantee Fund for Small and Very Small Enterprises (TEMPME), from 1 January to 9 October 2009 (first and second phase of the scheme), loans totalling €4.9 billion, with a state guarantee of €3.9 billion, were granted to 50,619 small and very small enterprises. The total value of loans granted to 27,069 enterprises during the scheme's first phase amounted to €3.2 billion (state guarantees totalled €2.6 billion). The total value of loans provided for in the budget is expected to reach €9.5 billion.

21 This practice has been widely used in recent years, mostly because of the tax advantages (Law 3156/2003) offered by corporate bond issues. Almost all such issues are absorbed by banks and the relevant securities are not traded in a regulated secondary market.

22 If the sale of corporate bonds worth about €3.8 billion by domestic MFIs to foreign MFIs is also taken into account, enterprises drew an additional net amount of €2.4 billion through corporate bond issues in the period January-August 2009.

Table VI.4 Credit[1] to the domestic private sector by domestic MFIs

(non-seasonally adjusted data)

	Outstanding balances on 30.08.09 (million euro)	Annual percentage changes										
		2005	2006	2007	2008*					2009*		
		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]	132,234	12.3	17.3	20.1	23.1	24.1	22.6	21.6	18.7	17.0	11.8	7.3
1. Trade	33,322	13.0	9.9	17.9	19.7	21.5	22.6	22.2	19.5	19.0	14.7	7.8
2. Industry[5]	24,232	12.5	9.5	11.0	14.0	16.1	17.9	17.3	15.8	13.5	6.9	0.2
3. Construction	11,253	-	28.9	28.5	33.7	36.6	35.8	37.3	35.2	27.9	15.2	5.1
4. Shipping	10,370	31.7	17.8	25.3	25.5	25.1	23.6	22.7	17.2	19.0	14.0	7.1
5. Tourism	7,196	8.4	11.0	21.0	24.1	25.7	27.4	24.3	19.7	16.9	11.0	6.4
6. Other non-monetary financial institutions (non-MFI)	5,920	97.3	35.1	14.7	18.6	16.9	7.8	-2.1	-8.7	-8.3	-7.2	5.0
7. Transport and communications (excluding shipping)	5,707	-	51.9	39.6	60.1	60.6	30.1	35.6	26.8	18.1	10.2	21.2
8. Agriculture	3,913	8.5	11.0	10.7	15.0	22.8	19.7	20.4	20.3	15.6	8.8	3.5
9. Electricity - gas - water supply	3,630	-	3.0	40.2	39.5	20.4	26.8	36.4	29.8	25.2	30.8	14.2
10. Other sectors	26,691	-16.1	28.8	27.4	28.9	29.5	25.4	23.6	23.4	22.1	16.7	12.7
B. Households	118,472	30.3	26.9	23.6	22.0	19.9	17.6	14.8	12.8	11.1	7.8	4.7
1. Housing loans	79,144	31.1	28.4	23.3	20.9	18.5	16.3	13.4	11.5	10.1	7.4	4.8
2. Consumer loans	36,445	30.3	23.7	22.6	23.3	22.1	21.0	18.4	16.0	13.5	9.1	4.8
– Credit cards	9,879	12.8	5.7	6.3	11.2	13.5	13.9	12.4	10.0	7.8	4.6	1.5
– Other consumer loans[6]	26,566	45.0	35.4	30.9	29.1	25.9	23.9	20.9	18.4	15.8	10.9	6.1
3. Other loans	2,883	11.5	30.6	42.2	34.1	30.7	13.8	7.5	9.5	6.9	4.0	-1.3
Total	250,706	19.8	21.7	21.7	22.6	22.1	20.2	18.3	15.9	14.1	9.9	6.0

Source: Bank of Greece.
* Revised data after Q1 2008.
1 Including MFI loans and holdings of corporate bonds, as well as securitised bank loans and securitised corporate bonds. The rates of change take into account loan write-offs and foreign exchange valuation differences in respect of loans denominated in foreign (non-euro) currencies. It should be noted that the rates of change in financing to enterprises take into account loans and corporate bonds transferred by domestic MFIs to subsidiaries abroad in the first eight months of 2009.
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 shares in total financing, with the exception of "other sectors". Rates of change are adjusted for loan write-offs.
5 Comprising manufacturing and mining/quarrying.
6 Comprising personal loans and loans against supporting documents.

Breaking down credit expansion by sector of economic activity (see Table VI.4), the annual rate of increase in the stock of credit is found to have fallen strongly in almost all sectors during January-August 2009. In particular, an examination of the most significant sectors (based on their contribution to total financing) shows that the greatest slack was recorded in the rate of credit expansion to construction firms (August 2009: 5.1%, 2008 Q4: 37.3%) and to industrial firms, which reached particularly low levels (August 2009: 0.2%, 2008 Q4: 17.3%).[23] With regard to the construction sector, the relevant indicators (NSSG private construction volume indicator on the basis of permits issued and IOBE industrial confidence indicator[24]) followed particularly negative annual rates of change due to the lower activity and prevailing uncertainty in this sector. The lower rate of credit expansion to industrial firms is associated with the drop in the industrial output indicator and, more particularly, the manufacturing production indicator,[25] as well as with the aforementioned significant decrease in investment activity.[26] The annual rate of credit expansion to trade also slowed considerably (August 2009: 7.8%, 2008 Q4: 22.2%). The net flow of bank loans to commercial firms in the first eight months of 2009 was particularly high compared to most other sectors, but it was considerably lower against the corresponding period of 2008. This flow was decisively affected by the implementation of the scheme to boost liquidity in small- and medium-sized enterprises over the same period.

The annual rate of **credit expansion to households** continued to follow a downward trend in the first eight months of the year and came to 4.7% in August 2009 (2008 Q4: 14.8%, see Chart VI.3). This rate remained significantly higher compared with the negative rate of growth of household financing in the euro area (August 2009: -0.2%).[27] In the eight months to August 2009, the net flow of household financing in Greece narrowed to about 1/5 of the corresponding flow in the same period of 2008.

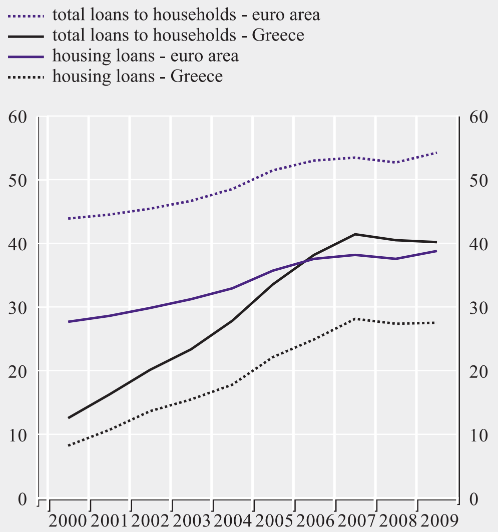
The stock of credit extended to households by MFIs (loans and securitised loans) stood at 49.4% of GDP in August 2009 (August 2008: 47.5%, see Chart VI.5). Net of securitisations, the outstanding balance of bank loans to households amounted to 40.2% of GDP in August 2009, compared with 54.3% in the euro area.

In particular, the annual growth rate of the outstanding balance of **housing loans** declined further during the reviewed period and came to 4.8% in August 2009 (2008 Q4: 13.4%). It should be noted that this rate had already started to moderate in April 2007, partly as a result of the slight correction in housing prices, which was reflected in their rates of growth from 2007 onwards (see Box IV.1). Furthermore, the slowdown that continued into the first eight months of 2009 reflected the tightening of banks' credit standards, as well as the cautiousness of enterprises and households to take on new debt obligations.[28] However, according to the Bank Lending Survey, the drop in housing loan rates[29] boosted demand for bank loans in the second quarter of the year.[30] In any event, year-on-year monthly flows of housing loans in January-August 2009 are shown in the Survey to have remained significantly lower.

23 It should be noted that the net flow of bank loans to construction firms came to just €67 million in the first eight months of 2009, against €2.5 billion in the corresponding period of 2008, whereas the net flow of financing to industrial firms was -€462 million over the same period of 2009, against a positive flow of €2.9 billion in the corresponding period of 2008. According to the IOBE Business Survey (July 2009), construction firms in difficulty consider that low demand and, to a lesser extent, contained bank supply are the most important factors.
24 See Chapter IV.1.
25 See Chapter IV.1.
26 According to the NSSG quarterly national accounts, real gross fixed capital formation recorded a 16.5% year-on-year decrease in the second quarter of 2009 (2009 Q1: -6.3%).
27 These findings should be interpreted with caution, as annual rates of change in household loans in Greece and the euro area are not directly comparable, given that the rate of change in household loans in the euro area is not adjusted for the securitisation of loans.
28 According to the July 2009 Bank Lending Survey, banks' credit standards remained almost unchanged in the second quarter of 2009 compared with the previous quarter, but still remain particularly tight. It should be noted that this is the first stabilisation of credit standards since the onset of the financial crisis.
29 Since the beginning of the year, households are moving into variable-rate housing loans.
30 State guarantees on housing loans are expected to have a positive impact on demand, see footnote 19.

Chart VI.5 Bank loans[1] to households in Greece and the euro area (2000-August 2009)

(percentage of GDP[2])



Sources: Bank of Greece and ECB (outstanding loans); Eurostat and NSSG (for GDP).
1 Excluding the outstanding amounts of securitised loans.
2 Estimates for the 2009 GDP (Bank of Greece and Eurostat).

The annual rate of increase in the outstanding balance of **consumer loans** decelerated significantly to 4.8% in August 2009 from 18.4% in the fourth quarter of 2008. This deceleration reflects the significant drop in the net flow of consumer loans between January and August 2009 (to €463 million against €3.9 billion in the corresponding period of 2008) as a result of the contained supply on the part of banks and lower demand.[31] Household demand for consumer loans, which dropped in the first quarter of 2009 compared with the preceding quarter (Bank Lending Survey), rose only slightly in the second quarter as a result of the opportunities that opened up in the car market[32] and perhaps also the need for covering consumer expenses that tend to be inflexible compared with income.[33,34]

Following banks' tightening of credit standards, already since 2008, and prior projections about a deceleration of economic activity in 2009, which negatively affected loan demand, the annual growth rates of private sector financing saw a steady contraction since the beginning of the year, as was to be expected and as pointed out in recent reports. Similarly, the rate of credit expansion to the private sector in the euro area as a whole also followed a downward trend, standing at particularly low levels[35] (August 2009: Greece 6.0%, euro area: 1.1%[36]). The net flow[37] of private financing (net of MFI holdings of securitised corporate bonds) in Greece and the euro area in the first eight months of 2009 was lower by 79% and 86% year-on-year, respectively.

Improved financing conditions for domestic MFIs play a significant role in boosting credit expansion to the private sector in 2009. Breaking down MFI financing, deposits still account for the largest share. The ratio of corporate loans

31 The Bank Lending Survey (July 2009) shows that, contrary to housing loans, the credit standards of which stabilised, credit standards applied on consumer loans were tightened in the second quarter of 2009, whereas in the first quarter they were only slightly stricter than in the preceding quarter.

32 In the car market, these opportunities included special offers on car prices (which lasted 4 months) and the halving of car registration fees as of 7 August 2009. The added advantage of collateral in this category of loans has become more important in the current economic environment, as it results in more favourable terms of lending compared with other consumer loans. According to IOBE (Business Survey, July 2009) consumers were less willing to purchase a car in the next twelve months.

33 The IOBE indicator also revealed very low consumer confidence levels (*also* compared to the EU levels) and negative expectations on household disposable income for 2009 (see for example, IOBE survey, July 2009). The rate of increase in households' real disposable income is expected to slowdown significantly in 2009.

34 It should be noted that in 2010 Greece is expected to implement the Directive of the European Community on consumer credit, which aims at a future unification of EU national markets and relates to issues of improved information regarding banks' credit standards and safeguarding the rights of EU consumers. After the implementation of the Directive, all EU consumers will receive the same information by means of the Standard European Consumer Credit Information form in order to compare different offers and choose the most appropriate credit agreement for their needs and financial situation in their country of residence or another Member State. The Directive applies to credit agreements involving amounts from €200 to €75,000, as well as credit cards. Greek and other European consumers will have access to credit products from all Member States and thus will be offered a wider range of options.

35 Credit expansion to the private sector in the euro area had already started to slow down in early 2008.

36 These findings should be interpreted with caution, as the annual rates of change in private financing in Greece and the euro area are not directly comparable. However, these rates do not change significantly when adjusted on a common base (i.e. excluding corporate loans and taking into account securitised loans other than corporate ones).

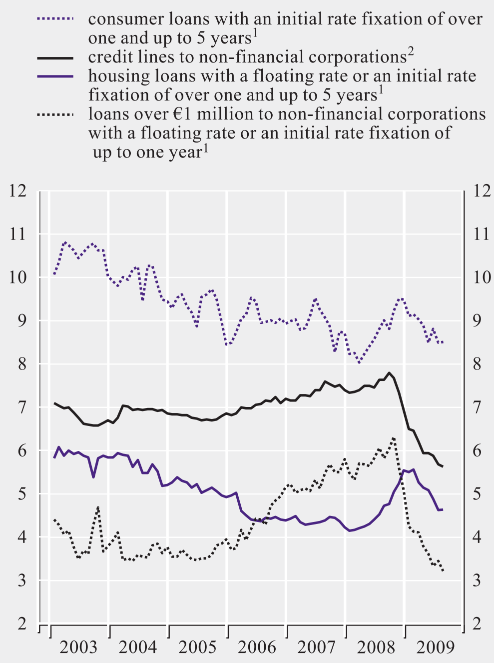
37 For the sake of comparability, net flows are calculated on the basis of a common definition of private financing in Greece and the euro area. The stock of credit, which forms the basis for the calculation of changes incorporated in net financing flows (see footnote 14), includes the sum of loans, corporate bonds and securitised loans. It does not comprise MFI equity holdings (for the euro area) and securitised corporate bonds.

has been observed to be lower in Greece than in the EU.[38] Greek banks have significantly increased funds drawn from the Eurosystem, thus offsetting their initial difficulty in raising funds through the international interbank markets. Monthly credit flows to domestic MFIs increased in the first eight months of the year, chiefly through recourse to Eurosystem facilities,[39] interbank markets, and capital increases. Furthermore, in recent months, Greek banks capitalised on the possibilities offered by the government liquidity support plan (Law 3723/2008) and, at the same time, improved their access to money and capital markets.

The slowdown in annual credit expansion to the private sector is expected to continue in the coming months, as loan demand will be negatively affected by subdued economic activity, whereas MFI credit standards are expected to remain tight. ECB measures for providing financing support to the economy[40] will continue to boost the supply of loans by banks, whilst the observed **relatively low interest rates on MFI loans** by MFIs to enterprises and households will have a positive impact on loan demand.

Chart VI.6 Bank interest rates on new loans in Greece (January 2003-August 2009)

(percentages per annum)



Source: Bank of Greece.
1 Monthly average rate.
2 End-of-month rate.

3 BANK LENDING RATES, INTEREST RATE SPREAD AND SPREAD DIFFERENTIALS BETWEEN GREECE AND THE EURO AREA

In the January-August 2009 period, the bank interest rates on new loans in Greece registered a strong decline in almost all categories (see Table VI.5A and Chart VI.6), reversing the previous year's upward trend. This weakening was partly attributable to ECB rate cuts and improved fund-raising conditions for domestic MFIs (mostly from the Eurosystem). The most significant declines were recorded in interest rates on new corporate and housing loans, whereas the decline in new consumer loan rates was smaller. The cuts in lending rates in Greece were lower, in almost all cases, than the total reduction in ECB key rates (by 150 basis points in the course of 2009) and interbank market rates,[41] considering that they were affected by higher risk premia incorporated in Greek interest rates due to greater credit risks faced by Greek banks.[42]

As lending rates fell more in the euro area as a whole than in Greece, the positive rate differential between Greece and the euro area in most loan categories widened further (see

38 See also Section 6 below.
39 With regard to bank financing by the Eurosystem, there is still regular supply of liquidity to euro area banks for one week or longer periods and, since October 2008, the Eurosystem has been accepting a broader range of bank assets as collateral (e.g. in repurchase operations). Finally, since June 2009, banks in the euro area were given the possibility to borrow every three months an unlimited amount of Eurosystem funds (against collateral) for one year at a rate of 1% (see Chapter III.2). Euro area banks raised €517 billion and Greek banks €35 billion in auctions held in June and October.
40 See previous footnote and ECB, *Monthly Bulletin*, June 2009, p. 9, "Governing Council Decisions on non-standard measures".
41 The three-month Euribor rate was reduced by 207 basis points in January-August 2009.
42 It should be noted that Greek banks' funding conditions were also negatively affected by the year-on-year increase in the average yield spread of Greek government bonds against the corresponding German bonds in the January-August 2009 period.

Table VI.5A Bank interest rates on new loans in the euro area and Greece

(percentages per annum)

	August 2008	December 2008	August 2009	Change Dec. 2008/ Aug. 2009 (percentage points
A. Loans with a floating rate or an initial rate fixation of up to one year				
A.1. Loans up to €1 million to non-financial corporations				
Weighted average interest rate in the euro area	6.27	5.38	3.42	-1.96
Maximum interest rate	7.93	7.30	6.36	-0.94
Minimum interest rate	5.62	4.54	2.42	-2.12
Interest rate in Greece	7.11	6.18	4.41	-1.77
Interest rate differential between Greece and the euro area	0.84	0.80	0.99	0.19
A.2. Loans of more than €1 million to non-financial corporations				
Weighted average interest rate in the euro area	5.44	4.28	2.32	-1.96
Maximum interest rate	7.13	5.93	5.22	-0.71
Minimum interest rate	5.07	3.97	1.51	-2.46
Interest rate in Greece	5.82	5.07	3.22	-1.85
Interest rate differential between Greece and the euro area	0.38	0.79	0.90	0.11
A.3. Housing loans				
Weighted average interest rate in the euro area	5.77	5.09	3.00	-2.09
Maximum interest rate	6.91	6.59	5.88	-0.71
Minimum interest rate	5.21	3.81	2.01	-1.80
Interest rate in Greece	5.34	4.92	3.27	-1.65
Interest rate differential between Greece and the euro area	-0.43	-0.17	0.27	0.44
A.4. Consumer loans				
Weighted average interest rate in the euro area	8.85	8.22	7.96	-0.26
Maximum interest rate	12.13	13.02	11.58	-1.44
Minimum interest rate	6.17	4.76	3.37	-1.39
Interest rate in Greece	8.73	8.76	8.54	-0.22
Interest rate differential between Greece and the euro area	-0.12	0.54	0.58	0.04
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	5.36	5.06	4.06	-1.00
Maximum interest rate	6.82	7.30	5.95	-1.35
Minimum interest rate	4.46	3.96	2.79	-1.17
Interest rate in Greece	4.72	5.53	4.65	-0.88
Interest rate differential between Greece and the euro area	-0.64	0.47	0.59	0.12
B.1. Consumer loans				
Weighted average interest rate in the euro area	7.22	7.03	6.51	-0.52
Maximum interest rate	12.55	12.62	15.35	2.73
Minimum interest rate	5.80	5.47	5.07	-0.40
Interest rate in Greece	9.00	9.49	8.51	-0.98
Interest rate differential between Greece and the euro area	1.78	2.46	2.00	-0.46

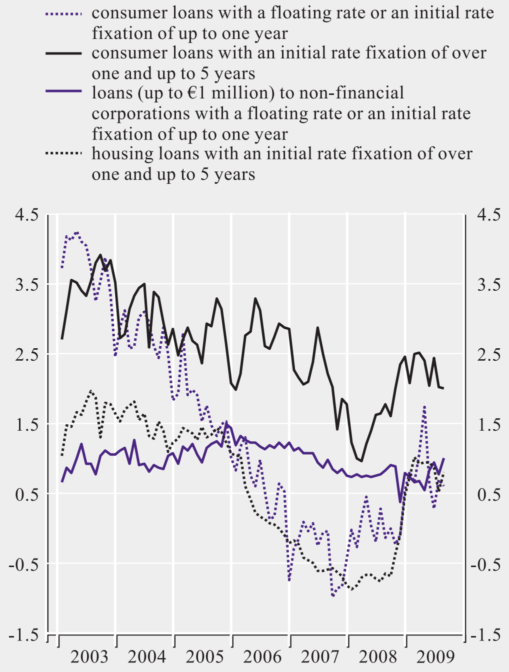
Sources: ECB and euro area NCBs.
1 Monthly average rates.

Tables VI.5A and VI.5B), with the exception of consumer loans with an initial rate fixation of over one and up to five years (see Table VI.5A and Chart VI.7).

More specifically, the average interest rate on housing loans in Greece decreased by 149 basis points in the period under review (August 2009: 3.72%, December 2008: 5.21%). Focusing on housing loans with a floating rate or an initial rate fixation of up to one year, for which borrowers opted throughout the year, rates fell by 165 basis points,[43] i.e. less than in the euro area (209 basis points). As a result, Greek interest rates were higher (by 27 basis points) than the corresponding rates in the euro area. August also saw an increased differential (59 basis points) in the second most important category of housing loans, i.e. loans with an initial rate fixation of over one and up to five years, as the Greek rate fell by 88 basis points, i.e. less than in the euro area (100 basis points). It should be noted that, for the first time since early 2006, interest rates in all categories of housing loans were slightly higher than the corresponding euro area rates.

Chart VI.7 Bank interest rates on new loans: differentials between Greece and the euro area (January 2003-August 2009)

(percentage points)



Sources: Bank of Greece and ECB.

The average interest rate on consumer loans with agreed maturity stood at 8.99% in August 2009, 47 basis points higher than in December 2008, thus reflecting the decline (by 98 basis points) in interest rates on loans with an initial rate fixation of more than one and up to five years. The drop in the interest rates on this category of loans in the euro area was lower (52 basis points), and thus the differential between euro area and Greek interest rates narrowed (August 2009: 200 basis points) compared with end-2008. Consumer loans with a floating smaller rate or an initial rate fixation of over one year also followed a downward trend in the reviewed period. Given that this interest rate fell by 22 basis points, compared with a 26 basis points decrease in the euro area, the differential between them rose to 58 basis points in August.

The interest rate on consumer loans without an agreed maturity, including credit card loans, decreased by 50 basis points, less than the corresponding decrease in the euro area, resulting in a further widening of the differential between them in August to 507 basis points. It should be noted that, even though this differential is the highest in the past five years, the interest rate in this category is not among the highest in euro area countries. Furthermore, as has been repeatedly stressed, this differential is chiefly attributable to the broad participation of credit card loans in this category. Credit card loans involve increased administrative costs and higher credit risks, as their level of security is comparatively low, which is reflected in higher interest rates in Greece. By contrast, in most euro area countries, credit cards are chiefly used to facilitate transactions

43 The significant drop in rates for this category of housing loans (with a floating rate or initial rate fixation of up to one year) resulted in the shift of households towards this category of loans. Thus, its participation in total new housing loans rose to 64.3% in January-August 2009 from 29.1% in the same period of 2008.

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. 2008	Aug. 2009	Dec. 2008	Aug. 2009	Dec. 2008	Aug. 2009	Dec. 2008	Aug. 2009	Dec. 2008	Aug. 2009
Austria	4.89	2.42	4.49	1.86	5.61	3.21	6.44	4.78	6.03	5.07
Belgium	4.77	2.72	3.97	1.75	4.87	3.04	6.60	4.65	8.03	7.11
Cyprus	...[3]	6.36	...[3]	3.99	...[3]	5.88	...[3]	7.23	...[3]	...[3]
Finland	4.61	2.58	3.97	1.90	4.07	2.20	4.91	3.46	5.93	5.16
France	5.08	2.82	4.30	1.66	5.52	3.65	8.43	7.58	7.23	6.57
Germany	5.25	3.26	4.35	2.80	5.38	3.48	4.76	5.55	5.47	5.28
Greece	**6.18**	**4.41**	**5.07**	**3.22**	**4.92**	**3.27**	**8.76**	**8.54**	**9.49**	**8.51**
Ireland	5.95	3.58	4.99	3.01	4.33	2.62	5.66	4.22	...[3]	...[3]
Italy	5.31	3.09	4.17	2.14	4.91	2.54	11.72	11.08	8.70	8.80
Luxembourg	4.54	2.54	3.97	2.29	4.22	2.01	...[3]	...[3]	6.20	5.08
Malta	5.81	5.67	4.71	4.96	...[3]	3.40	...[3]	5.62	...[3]	...[3]
Netherlands	4.82	3.52	4.01	1.51	5.32	3.98	10.95	10.37	...[3]	...[3]
Portugal	7.26	5.43	5.77	3.14	4.96	2.35	8.10	6.01	12.62	12.82
Slovakia	...[3]	5.23	...[3]	2.76	...[3]	5.46	...[3]	7.80	...[3]	15.35
Slovenia	6.39	5.88	5.93	5.22	6.28	3.57	6.89	5.22	7.96	7.39
Spain	5.51	3.87	4.30	2.11	5.63	2.80	10.94	11.58	9.51	9.04

Sources: ECB and euro area NCBs.
1 Despite the efforts to harmonise statistical methodologies across the euro area, considerable heterogeneity remains in the classification of banking products, which is partly due to differences in national conventions and practices, as well as in regulatory and fiscal arrangements.
2 Monthly average rates.
3 These countries do not publish data on the respective interest rates.

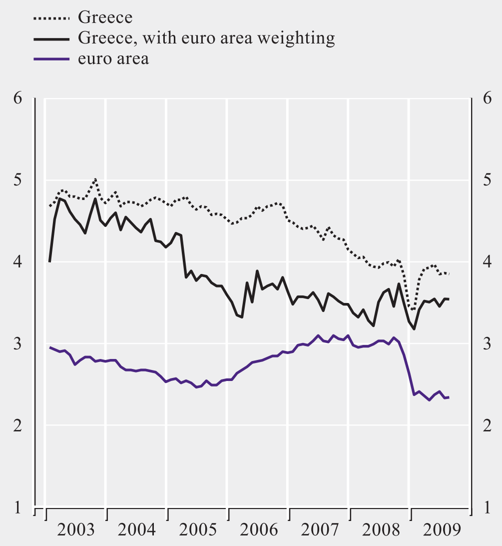
and the relevant outstanding amounts are settled in full.[44]

The average interest rate on loans to non-financial corporations in Greece dropped by 176 basis points in the period under review (August 2009: 4.38%, December 2008: 6.14%), reflecting the significant interest rate cuts across all individual loan categories. As rates in the euro area declined faster, the differential between the already higher Greek interest rates and the relevant euro area rates widened further, in almost all categories of loans to non-financial corporations. The largest differentials were recorded in the interest rate on loans without an agreed maturity[45] (August 2009: 158 basis points, December 2008: 87 basis points) and in the interest rate on loans of up to €1 million with a floating rate or an initial rate fixation of up to one year (from 80 basis points to 99 basis points).

The interest rate spread, i.e. the difference between the weighted average rate on new bank loans and the corresponding rate on new deposits, rose (by 40 basis points) in January-August 2009 and came to 3.85% in August. The Greek interest rate spread has been rising since the beginning of the year, for the first time after an almost continuous decline in the past ten years, reflecting the smaller decrease in lending rates than deposit rates (partly due to higher risk premia incorporated in lending rates given the higher credit risk of Greek banks). The interest rate spread remains higher than in the euro area (August 2009: 2.39%, see Table VI.6 and Chart VI.8) and in fact, the difference between the two spreads (August 2009: 146 basis points) has almost doubled compared to end-2008 (82 basis points).[46] The reasons why the Greek interest rate spread is higher than in the euro area (already mentioned in previous Bank of Greece reports) are associated with inherent characteristics of the domestic banking system.[47] Furthermore, this difference is also explained by the fact that domestic credit institutions have higher provisions (as a percentage of their assets), compared with the average for euro area institutions. Finally, the higher interest rate spread in Greece is also associated with the different composition of deposits and loans in Greece compared with the euro area. In particular, loans without an agreed maturity, including credit card loans which have the highest interest rates, account for a greater share of total consumer loans than in the euro area. Had the composition of loans and deposits in Greece been the same as in the euro area, the interest rate spread in Greece would have been 3.54% in August (i.e. 31 basis points smaller), and its differential over the corresponding euro area rate would have declined to 115 basis points.

Chart VI.8 Average interest rate spread between new loans and new deposits in Greece and the euro area (January 2003-August 2009)

(percentages points)



Sources: Bank of Greece and ECB.

44 Furthermore, in certain countries, credit card loans are also granted by non-MFIs and, to the extent that this happens, their interest rates are not recorded in bank rates.

45 It should be noted that loans of this category (the interest rates on which stood at 5.83% in August) are mainly granted through credit lines and account for almost 1/3 of corporate loans.

46 In December 2008, the differential between the Greek interest rate spread and the relevant spread in the euro area was the lowest in the past 6 years.

47 These include, *inter alia*, the relatively large number of small depositors and borrowers; higher borrowing costs for Greek banks in the interbank market; a higher ratio of non-performing to total loans compared with the euro area; and the longer time needed for the realisation of collateral in Greece.

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
July 2009	5.34	1.47	3.87	3.54	2.35
Aug. 2009	5.25	1.40	3.85	3.54	2.39

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 shares, the calculation of the average interest rate is based on the average of the shares over the past twelve months.

4 THE GOVERNMENT BOND MARKET

The effects of the international crisis, which were strongly felt in the Greek bond market over the last months of 2008 and early 2009,[48] started to fade in March-September 2009. During that period, investors' concerns regarding the fallout of the crisis on the Greek economy subsided to a large extent. As a result, Greek government bond yields in the secondary market declined markedly and their spread vis-à-vis the corresponding German bonds narrowed significantly compared to March 2009, when they had risen to the highest levels seen since the entry of Greece into the euro area.

More specifically, Greek government bond yields in the secondary market increased from early October 2008 to early March 2009, as the intensifying impact of the financial crisis on the real economy, heightened uncertainty and resulting risk aversion by investors favoured German bonds, which have the highest credit rating and the highest degree of liquidity among euro area countries. Yields on shorter-term Greek government bonds (with a maturity of up to three years) did not follow this pattern, as they dropped in line with the cuts in ECB key rates. Since mid-March 2009, however, gradually improving investment conditions[49,50] in money and capital markets shifted investors towards higher-risk assets such as emerging market securities, shares, as well as government and corporate bonds of lower credit rating. This

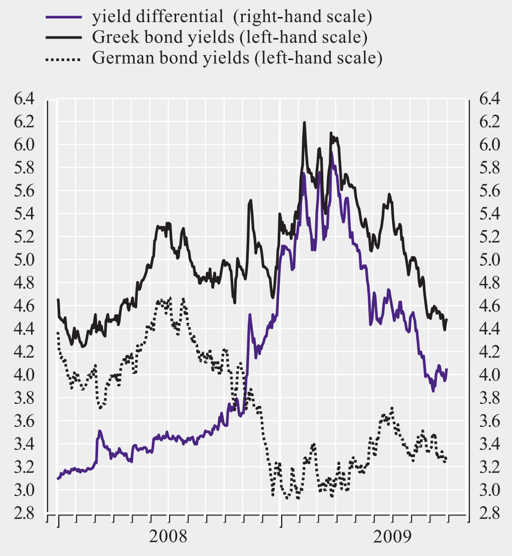
48 During that period, the risk premium for bonds in all the euro area countries rose against the corresponding German bonds, particularly those of euro area countries with significant fiscal and other imbalances (such as expected high fiscal deficit, high public debt and high current account deficit) as well as a lower degree of liquidity in the bond market.

49 Underlying this improvement were also the coordinated interventions by governments and central banks to address the crisis, and certain indications that the decline in economic activity in the United States and Europe is smoother than expected. These developments led to some optimism that the recovery of the world economy could start sooner.

50 The volatility of Greek government bond yields (the standard deviation of the change in daily yields on the 10-year bond) which provides an indication of the degree of investors' uncertainty, despite having declined slightly in the course of the reviewed period, stood at levels more than double the average of the past five years.

Chart VI.9 Yields on the 10-year Greek and German government bonds (January 2008-September 2009)

(daily data; yields in percentages per annum, yield differential in percentage points)



Source: Bank of Greece.

development favoured Greek government bonds, which saw a significant decline in their yields, particularly in the case of short- and medium-term bonds.

The yield spread between the 10-year Greek and the corresponding German bond widened considerably and in March 2009 reached its highest level since the country's entry into EMU (6 March 2009: 314 basis points,[51] 31 December 2008: 228 basis points – see chart VI.9).[52,53] But this spread subsequently declined and at end-September 2009 came to 127 basis points.[54] A recent study[55] reveals that factors such as public debt servicing and the future strain on public finances because of the expected additional expenditure for pensions explain, to a great extent, the yield spread between Greek and German bonds in the first semester of 2009.

The gradual easing of tensions in world money and capital markets shifted the Greek government bond yield curve downwards until end-September. But the slope of the yield curve became steeper (see Chart VI.10), since the yield spread between 10- and 3-year bonds widened by 145 basis points against end-2008 and came to 231 basis points at end-September 2009. The yield on the Greek 10-year government bond fell at end-September 2009 to 4.51%, by 72 basis points against end-December 2008 (see Chart VI.9).

The average daily value of transactions in the Electronic Secondary Market for Securities (HDAT) declined by 31% year-on-year in January-September 2009 to €1.1 billion,[56] (see Chart VI.11). The average bid-ask spread of bonds fell to 38 basis points in August 2009 from 56 basis points[57] in December 2008, reflecting the gradual improvement of conditions in the secondary market.

51 However, this level was still significantly lower than before the country's entry into the euro area.

52 Underlying this development were negative reports by credit rating agencies on the Greek economy and the downgrading of Greece's credit rating from A to A– by Standard and Poor's.

53 Government bond spreads in other euro area countries (Ireland and, to a lesser extent, Italy and Portugal) broadened markedly in the same period, reflecting investors' differentiated approach depending on the public finances of the bond-issuing country (credit risk), as well as the liquidity risk in its bond market. In certain euro area countries (such as France) there are indications that higher yield spreads reflect the impact of liquidity, whereas in other countries they mainly reflect credit risk. For more detail, see "New evidence on credit and liquidity premia in selected euro area sovereign yields", ECB, *Monthly Bulletin*, September 2009, and Chapter II.2 of this Report.

54 It should be noted that since May 2009, the yield spread between the 10-year Greek and the corresponding German bond is no longer the highest in the euro area, but is currently second to that of Ireland.

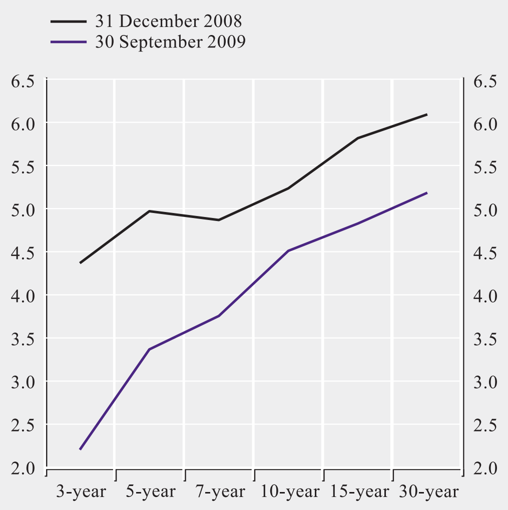
55 According to an OECD study, the yield spread between Greek and German bonds in the second half of 2009 can be explained as follows: about 40% by the relatively high cost of public debt servicing, 15% by the expected rise in expenditure for pensions, 15% by investors' general risk aversion, only 10% by expected higher public deficits and liquidity conditions in the domestic bond market, 5% by Greek banks' exposure to Central and Eastern European countries, with the remaining 15% being unexplained. It should be noted that the impact of public debt servicing was stronger in Greece and Italy in comparison with other countries (Austria, Belgium, Spain, Finland, France, Ireland, the Netherlands and Portugal). Also the effect of the expected additional expenditure for pensions was more significant in our country and less so in Ireland, Portugal, Belgium and Spain, whereas the effect of risk aversion, the expected rise in public deficit and liquidity conditions in Greece was relatively low in Greece and close to the average for the remaining countries under review. For more detail, see OECD, "What drives sovereign risk premiums? An analysis of recent evidence from the euro area", Economics Department Working Paper no. 718, 2009.

56 Also, the average daily value of transactions in the Book-Entry Securities System of the Bank of Greece (which, apart from HDAT transactions, also includes purchases and sales between banks and their clients in the OTC market) fell to €11.1 billion in January-September 2009 against €21.4 billion in the corresponding period of 2008.

57 It should be noted that in 2008, because of the adverse conditions in the secondary market, bid-ask spreads permitted by HDAT regulations increased significantly depending on the maturity of the traded instruments.

Chart VI.10 Greek government paper yield curves

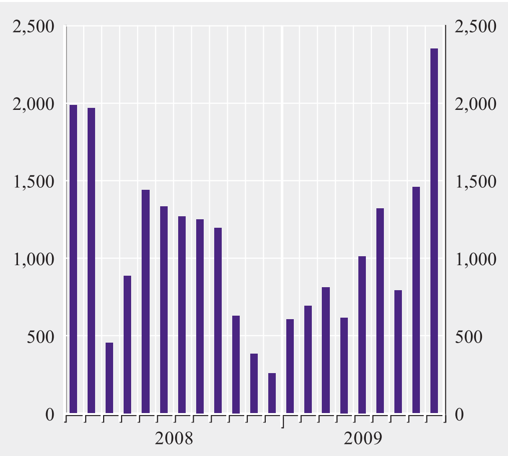
(yields in percentages per annum)



Source: Bank of Greece.

Chart VI.11 Average daily value of transactions in the Electronic Secondary Securities Market (HDAT) (January 2008-September 2009)

(million euro)



Source: Bank of Greece.

A key feature of activity in the primary market for Greek government paper during the reviewed period was the significant increase in funds raised, because of the significantly widened government deficit, higher principal payments in the first half of the year,[58] and the accelerated implementation of the government's borrowing programme. The total nominal issuance value almost doubled year-on-year and came to €66.5 billion[59] (see Table VI.7). However, excluding three- and six-month Treasury bills maturing in 2009, the total issuance value was close to €59.6 billion.

In 2009, there was a considerable change in the maturity structure, as Treasury bill issues rose significantly (January-September 2009: 18%, January-September 2008: 4%), whereas bond issues concerned exclusively bonds with maturities of ten years or more. The Greek government opted for this in order to make the most of the strong demand for shorter-term bonds and avoid a long-term increase in the debt servicing cost given the high interest rates on longer-maturity government bonds. In light of these developments, the weighted average maturity of new Greek government securities issued in the period under review declined considerably.[60]

Interest rates on Greek government bonds rose to high levels in the first months of 2009,[61] because of higher yields in the secondary market, whereas the interest rates on Greek Treasury bills dropped to historic lows in the course of the year.[62] Average borrowing costs fell as a whole in January-September 2009 compared to 2008, coming to about 4.3%, because of the much broader participation of Treasury bills in total new loans.

More particularly, the Greek government issued three new and reopened benchmark bonds (maturing in 3, 5, and 10 years) through

58 In the January-August 2009 period, redemptions of Greek Treasury bills/government bonds and interest payments stood at €31.0 billion and €8.0 billion respectively, compared with €20.8 billion and €7.5 billion in the corresponding 2008 period.

59 Moreover, the Greek government made use of the existing flexible Euro Commercial Paper programme. This programme offers the issuer the opportunity for immediate securities issuance, at a fixed or floating rate, in euro or other currencies, with a maturity of 1 to 365 days and on money-market terms.

60 According to the latest available data on public debt, the weighted average maturity of Greek government paper issued in January-March 2009 fell to 5.12 years compared with 10.96 in 2008.

61 This increase burdened the servicing costs for new government bond issues.

62 The interest rate on 3- 6- and 12-month Treasury bills issued in July 2009 stood at the historically low levels of 1.12%, 0.91% and 0.58% respectively.

Table VI.7 Greek government paper issues

	January-September					
	2008			2009		
Type of security	Million euro	Percentage of total		Million euro	Percentage of total	
Treasury bills	*1,393*	*3.9*		*11,916*	*17.9*	
Bonds[1]	*34,050*	*96.1*	*100.0*	*54,544*	*82.1*	*100.0*
3-year	7,052		20.7	14,612		26.8
4-year*	-		-	5,808		10.6
5-year*	5,822		17.1	17,889		32.8
8-year*	3,550		10.4	-		-
10-year	5,862		17.2	16,235		29.8
15-year	3,457		10.2	-		-
23-year	3,966		11.6	-		-
30-year	3,741		11.0	-		-
50-year*	600		1.8	-		-
Total	**35,443**	**100.0**		**66,460**	**100.0**	

Source: Ministry of Economy and Finance.
1 Reopenings of past issues have been classified on the basis of their initial (rather than residual) maturity.
* Issued through private placement.

syndication. Moreover, floating rate bonds maturing in 4 and 5 years were issued through private placement, whereas Treasury bills were issued through auction procedures.

Despite the pressures on Greek government bonds during the current crisis, investors' interest in Greek government bonds in the primary market was stronger than in 2008.[63] Demand for auctioned issues outstripped supply by about six times, whereas demand was also strong for syndicated new issues.

5 STOCK MARKET DEVELOPMENTS

The downward trend of the Athens Exchange (Athex) composite **share price index** in 2008 continued into early March 2009,[64] but from then onwards up to end-September 2009, the Athex composite index rose considerably (see Chart VI.12). Fund raising also registered a remarkable rise in January-September 2009 (see Table VI.8), albeit exclusively because of the financial sector.

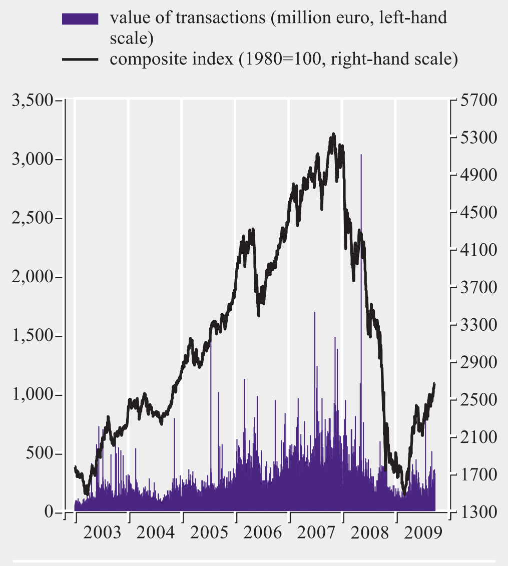
From early 2009 until the first ten days of March, the downward course of share prices on Athex and world stock markets was associated with investors' risk aversion due to heightened uncertainty about the impact of the crisis on the economy and corporate profitability.[65] Additional pressures on Athex share prices came from disinvestment by foreign investors, which was partly due to repatriation of funds in order to meet obligations in their home countries.

The strong upward course of both the Athex composite index and the share price indices in most international markets after mid-March was due to the increased risk appetite on the

63 According to balance of payments statistics, the net inflow of foreign capital for investment in Greek government securities (Greek government bonds and Treasury bills) in January-July 2009 came to about €26 billion, against €17 billion in the corresponding period of 2008. Holdings of Greek government bonds by Greek banks increased in the period under review, because of their better yield-risk ratio compared with the corresponding paper in other countries and the ability to use them to raise liquidity from the ECB.
64 On 9 March 2009, the Athex share price index approached the lowest level of the past six years.
65 Net corporate profits (after tax and minority rights) fell by about 39% in the first half of 2009 year-on-year.

Chart VI.12 Athens Exchange: composite share price index and value of transactions (January 2003-September 2009)

(daily data)



part of investors amid an improved investment climate.[66] Another contributing factor for the domestic stock market was the resilience of Greek banks during the crisis, given that their key aggregates remained essentially sound and that the slowdown in economic activity was less pronounced in Greece than in the euro area.

Another positive contribution came from the increased trading on the Athex by foreign investors (with net inflows in April 2009, for the first time since July 2008[67]) and by domestic investors.[68] As a result, at end-September 2009, the Athex composite index rose by 49% year-on-year (but in January-September 2009 it averaged 46% lower than in the corresponding period of 2008).[69] The latter significantly outperformed the Dow Jones Euro Stoxx (20.9)[70], registering the third highest performance among euro area stock markets (see Chart VI.13). The valuation of Athex shares, as measured by the P/E ratio, was 14.4 at end-September 2009, having almost doubled year-on-year. The corresponding ratio for European stock markets followed a similar course (14.3).

66 With regard to the reasons that led to this development, see footnote 49.
67 At the same time, the continuous decline in foreign investors' holdings of Athex shares was reversed. Hence, their holdings stood at 49.8% at end-September 2009 (December 2008: 47.8%).
68 In April and May 2009, Greek investors carried out 52.4% and 58.3% of trading on the Athex, compared with 35.7% and 30.2% in 2008. The subsequent months also saw higher percentages in comparison with 2008, albeit on a downward trend, and these shares came to 38% at end-August 2009 (August 2008: 33%).
69 The increase in the medium capitalisation index (54.8%) was higher than that of the Athex composite index, whereas the small capitalisation index registered a large shortfall (13.3%). The growth rate in the large capitalisation index slightly exceeded that of the Athex composite index.
70 It should be recalled that in 2008, the rate of change (decrease) in the Athex composite share price index was stronger compared with the Dow Jones Euro Stoxx and that in the past five years, the Athex composite index has been registering a steadily higher average volatility than the European index.

Table VI.8 Fund-raising through the Athens Exchange

(million euro)

	Number of firms		Funds raised[1]	
	January-September		January-September	
Business sector	2008	2009*	2008	2009*
Listed companies	15	17	438.9	3,251.2
Newly listed companies	2	-	3.8	0.0
Total	**17**	**17**	**442.7**	**3,251.2**
Financial sector – Banks	1	5	8.6	2,837.3
Non-financial sector	16	12	434.1	413.9

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.

In January-September 2009, the **average daily value of transactions** fell by about 47% compared with the corresponding period of 2008 and stood at €185.7 million. This development reflects, however, the above-mentioned decline in the Athex **average** composite index over that period.

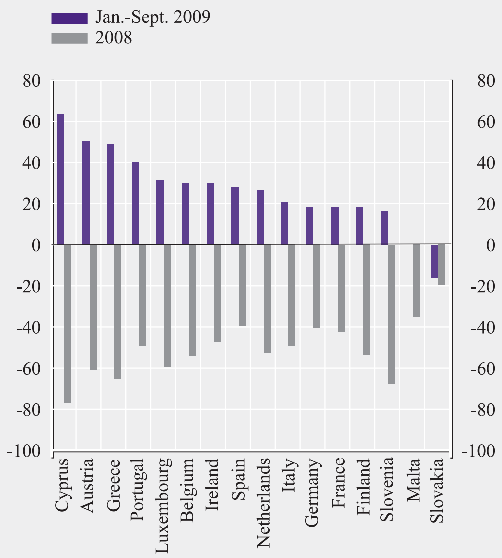
Total funds raised through the stock market recorded a remarkable increase in January-September 2009, rising to €3.3 billion compared with just €0.4 billion in the corresponding period of 2008 (see Table VI.8). This development is almost exclusively attributed to funds raised by financial corporations, given that those raised by non-financial corporations not only accounted for a small share of the total (13%), but also fell year-on-year. Moreover, total funds raised in 2009 related to company shares already listed on the Athex.

Despite a decrease in **bank** profitability in the first half of 2009,[71] the growth rate in the bank share price index in the period under review (86.2%) was higher than that of the Athex composite index, whereas the decline in the average daily value of transactions in bank shares was almost equal to that of total transactions on the Athex. Underlying the rise in bank share prices was the gradually increasing appetite of investors to hold bank shares, a trend also observed in international markets following the strong decline in bank share prices in 2008. Furthermore, the rise in the Athex bank share price index was significantly higher than that of the relevant euro area index (57.9%). Investors assessed Greek banks' resilience to the financial turmoil positively, whilst the new fiscal adjustment programmes in South-Eastern European countries with the support of the international community also made a positive contribution, thus mitigating regional risk for Greek banks active in the area.

Finally, with regard to institutional developments, the ban on short selling[72] was lifted at the beginning of June 2009 and share trading of a new Exchange Traded Fund, which tracks the Athens composite index, started at end-June.

Chart VI. 13 Stock market indices: euro area countries

(percentage changes)



Source: Bank of Greece.

6 DEVELOPMENTS IN THE BANKING SECTOR DURING THE FIRST HALF OF 2009

The Greek banking system faced important challenges during the first half of 2009 but its stability has been preserved. In fact, the gradual improvement of conditions on international money and capital markets from March 2009 onwards and the implementation of measures provided for in Law 3723/2008 helped reinforce the resilience of the banking system. However, constant vigilance is warranted in view of the ongoing slowdown of economic activity in Greece and South-Eastern

71 According to data for the first half of 2009, net profits of banking groups whose shares are listed on the Athex decreased by 52% against the corresponding 2008 period. It should be noted that the profitability of Greek banks in the second quarter of 2009 improved in comparison with the first quarter. See next section for more details.

72 Investors may sell shares not in their possession, following the conclusion of a loan agreement for the same number and type of stocks on the Athens Derivatives Exchange (ADEX).

Table VI.9 Key vulnerability and shock-absorption capacity indicators of Greek commercial banks and banking groups

(percentages)

	Banks		Banking groups	
	December 2008	June 2009	December 2008	June 2009
Asset quality[1]				
Non-performing loans (NPLs) - total	5.0	6.8		
– Housing loans	5.3	6.8		
– Consumer loans	8.2	10.7		
– Business loans	4.3	5.9		
Accumulated provisions over NPLs	48.9	41.1		
Liquidity				
Loan-to-deposit ratio	108.4	104.1	115.1	111.7
Liquid asset ratio	19.0	20.3		
Asset/liability maturity mismatch ratio	-7.1	-6.9		
Capital adequacy				
Capital adequacy ratio	10.7	12.4	9.4	10.9
Tier I ratio	8.7	10.6	7.9	9.6
	H1 2008	H1 2009	H1 2008	H1 2009
Profitability[2]				
Net interest margin	2.3	1.7	3.0	2.6
Cost-to-income ratio	53.9	52.8	53.0	51.9
Return on assets - ROA (after tax)	0.7	0.2	1.1	0.5
Return on equity - ROE (after tax)	11.7	5.0	15.7	7.7

Source: Bank of Greece and financial statements of commercial banks and banking groups.
1 Profitability data refer only to Athex-listed Greek commercial banks and their groups.

European countries where Greek banks are active, which affects the quality of banks' loan portfolios, as well as their profitability.[73] Subdued economic activity and its effects on credit risk constitute, according to recent estimates, the main source of risks for banks in the EU as well. Moreover, European banks also continue to be adversely affected by their exposure to complex financial products, in contrast with Greek banks, which are virtually not at all exposed to such products.

Particularly on the side of banking risks, the further deterioration of real economy in Greece, as well as in other countries where Greek banks are active, has weighed on the financial situation of enterprises[74] and households. This led to an increase in the ratio of non-performing loans to total loans (NPL ratio) in Greece to 6.8% at the end of the first half of 2009, up from 5% at end-2008. This ratio rose across all loan categories (see Table VI.9).[75] Another negative development was the decrease in the ratio of accumulated provisions to non-performing loans (June 2009: 41.1%, December 2008: 48.9%). Although this ratio does not take into account the sizeable guarantees and collateral held by Greek banks, its continued decline should be taken into con-

73 Subdued economic activity affects banks' profitability in two ways. On the one hand, it dampens loan demand, thus resulting in lower interest income. On the other hand, it worsens the quality of their loan portfolio, thus requiring higher provisions against credit risk.
74 Data on bounced cheques (see Box VI.1) provide useful information on liquidity and credit risks for *businesses*.
75 At the same time, a considerable rise was registered in the NPL ratio for loans granted by Greek banks' subsidiaries and branches abroad.

Table VI.10 Financial results of Greek commercial banks and banking groups (H1 2008-H1 2009)

(amounts in million euro)

	Banks			Banking groups		
	H1 2008	H1 2009	Change (%)	H1 2008	H1 2009	Change (%)
Operating income	**4,877**	**5,170**	**6.0**	**7,347**	**7,686**	**4.6**
Net interest income	3,901	3,628	-7.0	5,454	5,394	-1.1
– Interest income	11,152	10,030	-10.1	13,321	12,509	-6.1
– Interest expenses	7,251	6,402	-11.7	7,867	7,114	-9.6
Net non-interest income	976	1,542	58.0	1,893	2,292	21.1
– Net fee income	631	579	-8.1	1,293	1,032	-20.2
– Income from financial operations	-68	720	-	113	951	743.2
– Other income	414	242	-41.4	488	309	-36.6
Operating costs	**2,627**	**2,728**	**3.8**	**3,893**	**3,989**	**2.5**
Staff costs	1,573	1,625	3.3	2,224	2,263	1.8
Administrative costs	869	902	3.8	1,355	1,372	1.3
Depreciation	172	184	7.1	290	324	11.9
Other costs	13	17	31.2	25	29	18.2
Net income (operating income less costs)	**2,250**	**2,442**	**8.5**	**3,457**	**3,704**	**7.2**
Provisions for credit risk (impairment charges)	749	1,695	126.3	910	2,298	152.4
Pre-tax profits	**1,501**	**747**	**-50.3**	**2,546**	**1,406**	**-44.8**
Taxes	281	243	-13.3	476	413	-13.2
After tax profits	**1,221**	**503**	**-58.8**	**2,071**	**994**	**-52.0**

Source: Financial statements of Greek commercial banks with shares listed on the Athens Exchange.

sideration by banks when drawing their provisioning policy. The exposure of Greek banks to market risks also rose because of their increased holdings of government paper. However, capital requirements for market risk still account for only a small share of total capital requirements.

In contrast with the above-mentioned risks, liquidity risk declined. In June 2009, the loan-to-deposit ratios (banks: 104.1%, banking groups: 111.7% – see Table VI.9) were improved compared with end-2008, and remained well below the EU-27 average (2008: 121.5%). The liquid asset ratio and the mismatch ratio[76] remained above the supervisory minimum levels and improved slightly (see Table VI.9). The liquidity risk was reduced because of: (i) the full exploitation of the liquidity support measures provided for in Law 3723/2008, (ii) the rise in deposits, (iii) the moderation of credit expansion, (iv) improved conditions in money and capital markets in the second quarter of 2009, and (v) restored investor confidence in Greek banks.[77]

The profitability of Greek commercial banks and banking groups dropped considerably in the first half of 2009 compared with the first half of 2008 (see Table VI.10). This was mainly because provisions for credit risk almost doubled and, to a lesser extent, net

76 These ratios were established pursuant to BoG Governor's Act 2560/1.4.2005. The "liquid asset ratio" is calculated by dividing the cumulative stock of "liquid assets" with a maturity of up to 30 days by the total loan capital of up to one year and the minimum is set at 20%. The "mismatch ratio" is calculated by dividing the cumulative stock of assets net of liabilities with a maturity of up to 30 days to the total loan capital of up to one year and the minimum is set at -20%.

77 A strong indication of this is that Greek banks raised funds through bond issues without Greek state guarantees.

interest rates and fee income decreased. A positive contribution was made by profits from financial operations and the investment portfolio, which reflected the rise in the prices of medium- and long-term Greek government bonds and shares of firms listed on the Athex in the second quarter of 2009. Operating costs grew at a lower rate than operating income. As a result, the efficiency ratio (operating costs to operating income) improved by about one percentage point (see Table VI.9).

The key profitability indicators registered a decline. The net interest rate margin fell, given that lower interest income was not fully offset by cuts in interest expenses; a significant drop was also recorded in return on equity (ROE) and return on assets (ROA) compared with the first half of 2008 (see Table VI.9).

Contrary to profitability, the Capital Adequacy Ratio (CAR) and the Tier I ratio improved considerably.[78] This is due to the significant increase in banks' supervisory own funds with the issuance of preferred shares (worth €3.8 billion) that were bought by the Greek State's pursuant to Law 3723/2008, as well as to the successful completion of capital increases in certain banks.[79] Risk-weighted assets remained almost unchanged, as subdued credit growth helped contain capital requirements for credit risk.

Turning to the implementation of Law 3723/2008, by end-September 2009 €3.8 billion (out of the earmarked €5 billion) of the capital injection measures and €4.5 billion (out of the earmarked €8 billion) of liquidity provision through the issuance of special government bonds had been used. On the contrary, only a small part has been used (€3 billion out of the earmarked €15 billion) of state guarantees to credit institutions, due to the relatively high cost for credit institutions and to the gradually improving conditions on money and capital markets in the euro area. Consequently, out of a total budget of €28 billion provided for, €11.3 billion have been utilised so far. The utilisation rate in Greece (40%) corresponds to the EU average. It should be recalled that the sum of €28 billion accounted for 11.7% of GDP in 2008, i.e. a rate lower than the corresponding euro area (26.5%) and EU-27 average (23%) in the same year.

78 Strong capital adequacy is a prerequisite for the stability of the banking system. This is why coordinated efforts have been made internationally with a view to transforming and strengthening the supervisory framework on capital adequacy (see Chapter II and Box II.2 of this report).

79 See Section 5 of this Chapter.

Box VI.1

BOUNCED CHEQUES: DEVELOPMENTS AND POLICY MEASURES

The number and total value of bounced cheques in the Greek economy provide conclusive evidence on firms' liquidity and credit risk. In Greece, "Tiresias SA" has been collecting and disseminating detailed monthly data on the evolution of bounced cheques since January 2001.[1] "Tiresias SA" specialises in collecting and disseminating information on the financial behaviour of firms and individuals. Specifically, through reliable information systems, it provides data on the concentration of loan exposures to individuals and small enterprises, on mortgages and prenotations and other data that contribute to the prevention of fraud in bank transactions. This information is highly useful to banks, because it enables them to limit their exposure to non-performing loans, especially those caused by systematic bad debtors, thereby making more funds available for the financing of productive activities on more favourable terms.

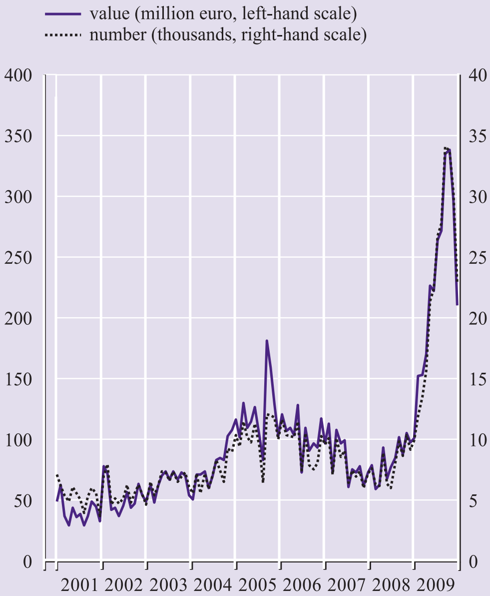
1 On an annual basis, this information has been available since 1993.

As regards the number and total value of bound cheques, three cycles are distinguished (see the chart in this Box): the upward cycle from January 2001 to July 2005, the downward cycle from August 2005 to December 2007 and the strongly upward cycle observed since early 2008, which reflects the implications of the current financial crisis.

In greater detail, between January 2001 and August 2009, the number of bounced cheques has tripled and their total value has quadrupled. At the end of August 2009, there were 22.9 thousand bounced cheques with a total value of €209.9 million. In July and August 2009, these figures showed signs of reversing the strongly upward trend observed from January 2008 to June 2009 (see the chart in this Box), but they are still about three times higher than the pre-crisis average. However, the ratio of the value of bounced cheques to total credit to the private sector has recorded only a small increase (January 2001: 0.08%, August 2009: 0.10%).

Number and value of bounced cheques (January 2001-August 2009)

(monthly data)



Source: Tiresias S.A.

These developments warrant continuous vigilance and, if need be, legal measures to address the problem. Experience to date has shown that the main reason for the expanding problem of bounced cheques is the uncontrolled exchange between entrepreneurs of *postdated cheques*, which are issued without coverage (the so-called cheque kiting). Various methods have been applied worldwide to address this problem. One of these is the adoption of different procedures for granting access to the credit institutions' cheque book facility, depending on the customers' risk rating. In this context, a credit institution may give customers with relatively lower solvency cheque books with a specific pre-printed maximum amount. Another method is guarantor liability, which makes credit institutions liable to pay themselves any bounced cheques up to a specific amount or percentage. Finally, a third method involves the mandatory use of crossed cheques in business transactions that exceed a specific amount; this would contribute not only to reducing bounced cheques, but also to restricting black economy and combatting money laundering.

MONETARY POLICY MEASURES OF THE EUROSYSTEM

15 JANUARY 2009

The Governing Council of the ECB decides that:

– the interest rate on the main refinancing operations of the Eurosystem will be decreased by 50 basis points to 2.00 %, starting from the operation to be settled on 21 January 2009;

– the interest rate on the marginal lending facility will be set at 3.00%, with effect from 21 January 2009;

– the interest rate on the deposit facility will be set at 1.00%, with effect from 21 January 2009.

These decisions are in line with the Governing Council's decision of 18 December 2008 to restore the width of the corridor of standing facility rates around the interest rate on the main refinancing operations to 200 basis points.

5 FEBRUARY 2009

The Governing Council of the ECB decides 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 2.00%, 3.00% and 1.00% respectively.

5 MARCH 2009

The Governing Council of the ECB decides that:

– the interest rate on the main refinancing operations will be decreased by 50 basis points to 1.50%, starting from the operation to be settled on 11 March 2009;

– the interest rate on the marginal lending facility will be decreased by 50 basis points to 2.50%, with effect from 11 March 2009;

– the interest rate on the deposit facility will be decreased by 50 basis points to 0.50%, with effect from 11 March 2009.

2 APRIL 2009

The Governing Council of the ECB decides that:

– the interest rate on the main refinancing operations will be decreased by 25 basis points to 1.25%, starting from the operations to be settled on 8 April 2009;

– the interest rate on the marginal lending facility will be decreased by 25 basis points to 2.25%, with effect from 8 April 2009;

– the interest rate on the deposit facility will be decreased by 25 basis points to 0.25%, with effect from 8 April 2009.

7 MAY 2009

The Governing Council of the ECB decides that:

– the interest rate on the main refinancing operations will be decreased by 25 basis points to 1.00%, starting from the operation to be settled on 13 May 2009;

– the interest rate on the marginal lending facility will be decreased by 50 basis points to 1.75%, with effect from 13 May 2009;

– the interest rate on the deposit facility will remain unchanged at 0.25%.

The Governing Council of the ECB also decides that:

(a) regular longer-term refinancing operations with a maturity of one year will be conducted on a quarterly basis. The first operation with a twelve-month maturity will take place on 23 June 2009;

(b) as of 8 July 2009 the European Investment Bank will have access, if and when appropriate for its treasury management, to the Eurosystem's open market operations and standing facilities through the Banque centrale du Luxembourg;

(c) the Eurosystem will purchase euro-denominated covered bonds issued in the euro area.

4 JUNE 2009

The Governing Council of the ECB decides 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.

In addition, the Governing Council of the ECB decides upon the technical modalities related to the purchase of euro-denominated covered bonds. Specifically, it concludes that, in the period from July 2009 to the end of June 2010, it will purchase €60 billion in covered bonds. The purchases will be conducted in both the primary and the secondary markets.

2 JULY, 6 AUGUST, 3 SEPTEMBER AND 8 OCTOBER 2009

The Governing Council of the ECB decides 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.

GLOSSARY

Community Support Framework (CSF): compiled by the Commission of the European Communities in co-operation with the Member State and approved by the Commission. It includes the country's growth strategy, activity priorities and financing resources (participation of the Community, national public expenditure, participation of the private sector).

Deposit facility: a standing facility of the Eurosystem, which counterparties may use to make overnight deposits, remunerated at a pre-specified interest rate, at a national central bank.

Deposits redeemable at notice: this instrument comprises savings deposits which the depositor may withdraw once he has given notification thereof within a predetermined time period. At some instances, it is possible to withdraw part of the amount deposited at notice or before, subject to penalty.

Deposits with an agreed maturity (time deposits): deposits with a fixed maturity, which, according to the national practice, are either not convertible into cash before their maturity or are convertible into cash subject to penalty. They include some non-negotiable instruments, such as non-negotiable certificates of (private) deposit.

Effective (nominal/real) exchange rates: nominal effective exchange rates are weighted averages of bilateral exchange rates. Real effective exchange rates are nominal effective exchange rates deflated by a weighted average of foreign, relative to domestic, prices or costs. They are, thus, measures of price and cost competitiveness.

EONIA (euro overnight index average): a measure of the interest rate prevailing in the euro interbank overnight market, based on transactions.

EURIBOR (euro interbank offered rate): the rate at which a prime bank is willing to lend funds in euro to another prime bank, computed daily for interbank deposits with different maturities of up to 12 months.

Euro area: the area encompassing those EU Member States in which the euro has been adopted as the single currency in accordance with the Treaty and in which a single monetary policy is conducted under the responsibility of the Governing Council of the ECB. It currently comprises 16 countries: Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia and Spain.

European Central Bank (ECB): the ECB lies at the centre of the European System of Central Banks (ESCB) and the Eurosystem and has its own legal personality under Community law. It ensures that the tasks conferred upon the Eurosystem and the ESCB are implemented either through its own activities or through those of the national central banks, pursuant to the Statute of the ESCB and of the ECB. The ECB is governed by the Governing Council and the Executive Board, and, as a third decision-making body, by the General Council.

European System of Central Banks (ESCB): the ESCB is composed of the ECB and the national central banks of all 27 EU Member States, i.e. it includes the national central banks of those EU member states whose currency is not the euro. The ESCB is governed by the Governing Council and the Executive Board, and, as a third decision-making body, by the General Council.

Eurosystem: comprises the ECB and the national central banks of those Member States that have adopted the euro. There are currently 16 national central banks in the Eurosystem. The Eurosystem is governed by the Governing Council and the Executive Board of the ECB.

Executive Board: one of the decision-making bodies of the ECB. It comprises the President and the Vice-President of the ECB and four other members all of whom are appointed by common accord by the Heads of State or Government of the EU Member States that have adopted the euro.

General government: as defined in the European System of Accounts 1995 (ESA 95) comprises central, regional and local government as well as social security organisations.

Governing Council: the supreme decision-making body of the ECB. It comprises all the members of the Executive Board plus the governors of the national central banks of those EU Member States that have adopted the euro.

Harmonised Index of Consumer Prices (HICP): a measure of consumer prices which is compiled by Eurostat and harmonised across all EU Member States.

Key ECB interest rates: the interest rates, set by the ECB, which reflect the stance of the monetary policy of the ECB. The key ECB interest rates are: the interest rate on the main refinancing operations; the interest rate on the marginal lending facility; and the interest rate on the deposit facility.

Main refinancing operation: a regular open market operation executed by the Eurosystem. Main refinancing operations are conducted through weekly standard tenders usually with a maturity of one week and with no quantitative limitation.

Marginal lending facility: a standing facility of the Eurosystem, which counterparties may use to receive overnight credit from a national central bank at a pre-specified interest rate against eligible assets.

Monetary aggregates: a monetary aggregate is the sum total of currency in circulation plus the overdue amounts of certain liabilities of monetary financial institutions (MFIs) and central governments which have a high degree of "moneyness" (or liquidity in a broad sense). The narrow monetary aggregate M1, as defined by the Eurosystem, comprises currency in circulation plus overnight deposits which non-MFI euro area residents (other than central government) keep with euro area institutions that issue money. The monetary aggregate M2 comprises M1 plus deposits with an agreed maturity of up to two years plus deposits redeemable at a notice of up to three months. The broad monetary aggregate M3 comprises M2 and repurchase agreements (repos), money market fund shares/units, money market paper and debt securities with a maturity of up to two years.

Monetary Financial Institutions (MFIs): financial institutions which together form the money-issuing sector of the euro area. These include the ECB, euro area national central banks, as well as resident credit institutions and money market mutual funds.

Overnight deposits: deposits due on the next working day. This instrument comprises both fully transferable (through cheques etc.) and non-transferable deposits convertible into cash upon request or by close of business the next working day. Particularly for Greece, this instrument includes sight deposits, deposits in current accounts and savings deposits.

Standing facility: a national central bank facility available to counterparties on their own initiative. The Eurosystem offers two overnight standing facilities: the marginal lending facility and the deposit facility.

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
2005		100.0	3.5	100.0	3.4	100.0	3.7	100.0	3.1	100.0	3.2
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
2008	I	108.8	4.3	108.9	5.0	108.8	3.3	107.3	2.9	106.5	2.3
	II	111.4	4.8	112.3	5.6	110.1	3.6	109.5	3.6	108.9	3.0
	III	110.7	4.7	110.3	5.1	111.3	4.2	109.2	3.7	108.5	3.2
	IV	111.4	2.9	110.6	1.7	112.6	4.5	111.2	3.5	110.7	3.4
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	115.5	0.7	109.0	-1.2	114.9	3.3	111.4	2.1	110.9	2.3
2007	Jan.	104.5	2.7	103.9	2.3	105.2	3.3	104.5	3.1	104.4	3.1
	Feb.	103.2	2.7	101.7	2.0	105.2	3.4	103.1	3.3	102.6	3.5
	March	105.5	2.6	105.5	2.1	105.5	3.4	105.3	3.1	105.2	3.2
	Apr.	106.2	2.5	106.2	1.8	106.1	3.5	105.6	3.0	105.6	3.2
	May	106.5	2.6	106.7	1.9	106.1	3.6	105.7	2.9	105.7	3.1
	June	106.3	2.6	106.3	1.9	106.4	3.6	105.9	2.8	105.9	3.0
	July	105.5	2.5	104.8	1.6	106.6	3.7	105.1	2.9	105.0	3.2
	Aug.	104.8	2.5	103.3	1.7	106.8	3.6	104.3	2.9	103.9	3.1
	Sept.	106.9	2.9	106.7	2.6	107.0	3.4	106.4	2.7	106.3	2.8
	Oct.	107.6	3.1	107.8	3.0	107.3	3.3	107.0	2.7	106.7	2.5
	Nov.	108.4	3.9	109.0	4.5	107.6	3.2	107.4	2.9	106.9	2.5
	Dec.	108.8	3.9	109.2	4.3	108.4	3.3	107.9	3.0	107.4	2.5
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

Source: Calculations based on NSSG data.

Table 2 Harmonised index of consumer prices: general index and basic sub-indices

Period		General index		Unprocessed food		Processed food		Non-energy industrial goods	
		(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		100.0	3.5	100.0	-1.5	100.0	2.8	100.0	2.8
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
2008	I	109.0	4.3	108.3	4.1	113.6	5.4	103.2	1.3
	II	111.7	4.8	108.9	4.5	115.2	6.3	107.4	2.2
	III	111.0	4.8	104.7	1.6	114.8	5.7	104.4	2.3
	IV	111.9	3.1	111.4	5.7	115.0	2.9	108.6	2.2
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
2007	Jan.	104.8	3.0	104.8	3.5	107.8	5.6	103.0	2.5
	Feb.	103.1	3.0	103.2	-1.2	107.5	5.0	98.0	3.5
	March	105.7	2.8	104.2	0.0	107.9	4.5	104.8	2.7
	Apr.	106.5	2.6	105.6	0.2	108.3	4.7	104.8	2.1
	May	106.7	2.6	104.9	1.6	108.3	3.6	105.3	1.9
	June	106.6	2.6	102.0	2.6	108.5	2.8	105.4	1.9
	July	105.8	2.7	101.3	3.4	108.4	2.5	102.4	2.6
	Aug.	104.8	2.7	102.9	4.6	108.5	2.7	98.3	2.2
	Sept.	107.1	2.9	104.8	4.9	109.2	2.4	105.4	2.0
	Oct.	107.9	3.0	105.7	2.6	110.8	2.7	106.1	1.8
	Nov.	108.7	3.9	105.0	2.8	112.2	4.0	106.2	1.8
	Dec.	109.2	3.9	105.8	2.2	112.4	4.3	106.4	1.8
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

Source: Calculations based on NSSG data.

Table 2 Harmonised index of consumer prices: general index and basic sub-indices *(continued)*

Period		Energy		Services		HICP excluding unprocessed food and energy	
		(2005=100)	Percentage change over previous year	(2005=100)	Percentage change over previous year	(2005=100)	Percentage change over previous year
2005		100.0	13.6	100.0	3.6	100.0	3.2
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
2008	I	125.4	21.2	108.9	3.1	107.7	2.9
	II	133.8	19.2	110.5	3.6	110.2	3.6
	III	135.8	21.1	111.6	4.1	109.7	3.8
	IV	113.9	-4.6	112.9	4.4	111.8	3.5
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
2007	Jan.	101.4	-3.8	105.7	3.7	105.1	3.6
	Feb.	102.6	-2.3	105.4	3.8	103.2	4.0
	March	106.2	-1.2	105.8	3.7	105.8	3.5
	Apr.	110.3	-1.5	106.7	3.5	106.3	3.2
	May	113.2	-0.2	106.5	3.8	106.4	3.1
	June	113.3	0.1	106.8	3.8	106.6	2.9
	July	112.9	-3.2	107.2	4.0	105.7	3.3
	Aug.	111.6	-3.7	107.2	3.9	104.4	3.3
	Sept.	112.0	1.7	107.3	3.7	107.0	2.9
	Oct.	114.4	7.7	107.6	3.3	107.6	2.6
	Nov.	121.9	17.6	107.8	3.4	108.0	2.9
	Dec.	121.7	16.8	108.8	3.2	108.5	2.9
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

Source: Calculations based on NSSG 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	Fuels (2005=100)	Percentage change over previous year	General index excl. energy (2005=100)	Percentage change over previous year
2005		100.0	5.9	100.0	13.2	100.0	43.9	100.0	3.0
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
2008	I	119.6	11.5	129.2	21.4	140.8	43.5	114.4	6.9
	II	125.8	13.5	143.0	25.4	168.5	45.6	116.5	7.2
	III	128.6	14.2	148.4	27.1	169.0	41.5	117.9	7.2
	IV	117.9	1.3	120.1	-3.5	105.0	-22.0	116.8	4.2
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
2007	Jan.	106.4	1.2	104.1	-1.9	92.1	-17.2	106.8	2.1
	Feb.	107.0	1.3	106.2	-0.6	97.8	-12.0	106.8	1.7
	March	108.3	1.9	108.8	0.7	104.4	-8.2	107.4	2.0
	Apr.	110.4	2.5	112.8	2.0	112.4	-9.2	108.7	2.2
	May	110.9	2.7	114.3	3.5	116.7	-5.1	108.7	1.9
	June	111.1	2.8	115.1	4.3	118.3	-3.5	108.7	1.7
	July	111.8	2.5	116.2	3.1	120.2	-6.1	109.1	1.8
	Aug.	112.2	2.6	116.1	2.7	116.7	-5.8	109.7	2.0
	Sept.	113.6	5.2	117.9	9.2	121.4	13.6	110.8	3.1
	Oct.	114.9	7.2	120.4	13.5	126.4	24.3	111.7	4.1
	Nov.	117.0	9.6	126.0	19.4	140.8	40.6	112.2	5.0
	Dec.	117.4	9.8	127.0	20.3	136.7	36.2	112.3	5.0
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

Source: Calculations based on NSSG 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
2005		100.0	3.7	100.0	0.3	100.0	8.8	100.0	1.2
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
2008	I	113.2	8.5	108.0	3.6	111.5	8.1	107.3	2.5
	II	118.2	10.0	108.9	3.3	116.8	10.1	108.2	2.3
	III	119.2	9.8	109.7	3.6	118.6	10.1	109.1	2.8
	IV	108.9	-2.4	109.1	2.3	111.3	0.4	109.0	2.3
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
2007	Jan.	103.3	-0.1	103.9	2.2	101.9	-1.3	104.4	3.4
	Feb.	104.4	0.6	104.3	2.0	103.1	-0.8	104.6	3.2
	March	105.4	0.7	104.8	2.3	104.3	-0.1	105.0	3.4
	Apr.	107.3	1.9	105.5	2.7	105.5	0.5	105.4	3.3
	May	107.3	2.0	105.2	2.4	106.1	0.9	105.7	3.2
	June	107.8	2.3	105.5	2.5	106.6	1.2	106.1	3.1
	July	108.5	2.4	105.6	2.7	107.7	2.3	106.1	3.1
	Aug.	108.0	1.0	105.7	2.0	107.2	2.3	106.1	2.8
	Sept.	109.2	4.1	106.2	2.3	108.2	4.3	106.4	3.0
	Oct.	110.4	5.8	106.7	2.9	109.8	6.1	106.4	2.7
	Nov.	112.3	7.7	106.6	2.7	111.7	8.2	106.5	2.5
	Dec.	112.0	7.8	106.8	3.3	110.9	8.0	106.6	2.6
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				

Source: Calculations based on NSSG data.

Table 5 Employed persons of 15 years and over, by branch of economic activity

(thousands)

	Q2 2009	
	Total employed persons	Salaried employees
Total	**4,531.9**	**2,922.1**
Agriculture, forestry and fishing	516.0	46.8
Mining and quarrying	14.0	12.7
Manufacturing	516.0	380.5
Electricity, gas, steam and air conditioning supply	30.5	29.8
Water supply, sewerage, waste management and remediation activities	29.9	29.2
Construction	366.6	251.4
Wholesale and retail trade; repair of motor vehicles and motorcycles	828.2	439.8
Transportation and storage	219.8	152.7
Accommodation and food service activities	314.8	190.2
Information and communication	82.2	72.9
Financial and insurance activities	111.7	102.3
Real estate activities	8.7	1.4
Professional, scientific and technical activities	232.2	106.5
Administrative and support service activities	78.6	63.4
Public administration and defence; compulsory social security	378.6	378.6
Education	331.9	304.8
Human health and social work activities	225.9	192.2
Arts, entertainment and recreation	55.9	39.7
Other service activities	86.3	45.4
Activities of households as employers;	87.1	80.6
Activities of extraterritorial organisations and bodies	1.1	1.1

Source: NSSG, Labour Force Survey.

Table 6 Balance of payments

(million euro)

	January-July			July		
	2007	2008	2009	2007	2008	2009
I CURRENT ACCOUNT BALANCE (I.A+I.B+I.C+I.D)	**-19,063.2**	**-21,558.7**	**-16,614.4**	**-2,305.4**	**-2,412.1**	**-1,874.6**
I.A TRADE BALANCE (I.A.1–I.A.2)	***-23,279.3***	***-26,857.4***	***-18,318.2***	***-4,247.9***	***-4,080.0***	***-2,955.2***
Oil trade balance	-4,971.2	-7,180.2	-4,311.0	-959.2	-1,223.1	-709.5
Non-oil trade balance	-18,308.1	-19,677.2	-14,007.2	-3,288.7	-2,856.9	-2,245.7
Ship balance	-2,900.3	-2,973.9	-2,241.8	-636.5	-426.5	-403.7
Trade balance excl. oil and ships	-15,407.8	-16,703.3	-11,765.4	-2,652.2	-2,430.4	-1,842.0
I.A.1 Exports of goods	*9,766.9*	*11,394.6*	*8,777.4*	*1,527.2*	*1,876.9*	*1,337.0*
Oil	1,604.9	2,370.5	1,674.2	282.9	312.0	304.4
Ships (receipts)	1,206.4	1,099.5	524.5	225.8	167.8	51.4
Other goods	6,955.6	7,924.6	6,578.7	1,018.5	1,397.1	981.2
I.A.2 Imports of goods	*33,046.2*	*38,251.9*	*27,095.6*	*5,775.2*	*5,956.9*	*4,292.2*
Oil	6,576.1	9,550.7	5,985.3	1,242.1	1,535.1	1,013.9
Ships (payments)	4,106.7	4,073.4	2,766.3	862.3	594.3	455.1
Other goods	22,363.4	24,627.8	18,344.1	3,670.8	3,827.5	2,823.2
I.B SERVICES BALANCE (I.B.1–I.B.2)	***8,450.8***	***9,341.7***	***6,354.8***	***2,692.5***	***3,066.3***	***2,113.3***
I.B.1 Receipts	*16,554.6*	*19,181.3*	*14,680.7*	*4,088.6*	*4,630.3*	*3,453.0*
Travel	5,645.6	5,931.4	5,014.4	2,296.0	2,302.4	1,917.8
Transport	9,199.8	11,431.3	7,986.0	1,508.8	2,025.1	1,254.2
Other services	1,709.2	1,818.6	1,680.3	283.7	302.8	281.0
I.B.2 Payments	*8,103.8*	*9,839.6*	*8,325.9*	*1,396.1*	*1,564.0*	*1,339.7*
Travel	1,333.1	1,495.7	1,445.7	199.1	205.9	225.1
Transport	4,303.7	5,522.5	4,059.8	727.9	905.8	637.5
Other services	2,467.0	2,821.4	2,820.4	469.2	452.3	477.1
I.C INCOME BALANCE (I.C.1–I.C.2)	***-5,584.2***	***-6,477.5***	***-6,199.7***	***-1,140.5***	***-1,449.4***	***-1,128.3***
I.C.1 Receipts	*2,663.9*	*3,296.9*	*2,711.8*	*363.8*	*498.8*	*362.2*
Wages, salaries	210.5	213.4	182.5	35.9	29.8	46.1
Interest, dividends, profits	2,453.5	3,083.5	2,529.3	327.9	469.0	316.1
I.C.2 Payments	*8,248.1*	*9,774.4*	*8,911.5*	*1,504.4*	*1,948.2*	*1,490.5*
Wages, salaries	186.4	200.0	236.9	26.4	34.7	39.2
Interest, dividends, profits	8,061.7	9,574.4	8,674.6	1,477.9	1,913.5	1,451.2
I.D CURRENT TRANSFERS BALANCE (I.D.1–I.D.2)	***1,349.5***	***2,434.5***	***1,548.7***	***390.7***	***51.1***	***95.5***
I.D.1 Receipts	*3,775.8*	*4,694.3*	*3,962.1*	*676.7*	*325.5*	*318.1*
General government (mainly transfers from the EU)	2,533.7	3,367.8	2,774.5	490.2	114.1	156.3
Other sectors (emigrants' remittances etc.)	1,242.1	1,326.5	1,187.6	186.5	211.4	161.8
I.D.2 Payments	*2,426.3*	*2,259.8*	*2,413.4*	*286.0*	*274.4*	*222.5*
General government (mainly payments to the EU)	1,792.0	1,495.2	1,624.8	185.1	160.2	104.4
Other sectors	634.3	764.6	788.6	100.9	114.2	118.1
II CAPITAL TRANSFERS BALANCE (II.1– II.2)	**2,490.4**	**2,585.4**	**1,256.2**	**153.1**	**401.5**	**354.6**
II.1 Receipts	*2,679.0*	*2,959.9*	*1,436.3*	*192.6*	*432.5*	*385.7*
General government (mainly transfers from the EU)	2,540.3	2,770.5	1,311.2	167.3	418.0	365.5
Other sectors	138.8	189.4	125.1	25.3	14.6	20.2
II.2 Payments	188.7	374.5	180.1	39.4	31.1	31.1
General government (mainly payments to the EU)	16.8	181.1	7.9	2.3	1.6	1.6
Other sectors	171.9	193.3	172.2	37.1	29.5	29.5
III CURRENT ACCOUNT AND CAPITAL TRANSFERS BALANCE (I+II)	**-16,572.9**	**-18,973.3**	**-15,358.2**	**-2,152.2**	**-2,010.6**	**-1,520.0**
IV FINANCIAL ACCOUNT BALANCE (IV.A+IV.B+IV.C+IV.D)	**16,453.3**	**18,815.1**	**16,046.5**	**1,842.0**	**1,764.9**	**1,723.5**
IV.A DIRECT INVESTMENT[1]	***-2,002.5***	***1,511.7***	***1,814.0***	***189.5***	***-37.9***	***614.0***
By residents abroad	-2,894.9	-1,292.3	-600.3	-155.2	-125.9	-94.7
By non-residents in Greece	892.4	2,804.1	2,414.3	344.7	88.0	708.6
IV.B PORTFOLIO INVESTMENT[1]	***15,432.9***	***8,388.9***	***23,739.5***	***2,222.1***	***8,072.9***	***4,769.1***
Assets	-9,567.8	-7,716.2	-2,547.1	-1,188.6	386.2	-832.7
Liabilities	25,000.7	16,105.1	26,286.6	3,410.7	7,686.8	5,601.7
IV.C OTHER INVESTMENT[1]	***3,072.9***	***8,832.5***	***-9,356.0***	***-446.6***	***-6,253.1***	***-3,675.5***
Assets	-9,917.9	-15,551.8	-15,744.0	-1,148.2	-6,664.4	-246.2
Liabilities	12,990.8	24,384.3	6,388.0	701.6	411.3	-3,429.3
(General government loans)	-1,884.4	-399.3	-1,829.2	-117.1	-59.0	-94.2
IV.D CHANGE IN RESERVE ASSETS[2]	***-50.0***	***82.0***	***-151.0***	***-123.0***	***-17.0***	***16.0***
V ERRORS AND OMISSIONS	**119.6**	**158.2**	**-688.3**	**310.3**	**245.7**	**-203.6**
RESERVE ASSETS[3]				***2,219.0***	***2,410.0***	***2,672.0***

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]

(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)	Money market paper and debt securities up to two years (9)	M3[2] (10)=(6)+(7)+(8)+(9)
2004		468.4	2,480.5	2,948.9	1,040.5	1,642.9	5,632.2	229.7	604.9	102.3	6,568.2
2005		532.8	2,946.8	3,479.6	1,123.6	1,549.6	6,152.9	221.9	615.8	126.2	7,116.8
2006		592.2	3,164.3	3,756.5	1,414.8	1,557.1	6,728.4	248.0	614.1	198.6	7,789.1
2007		638.5	3,262.0	3,900.5	1,984.9	1,539.7	7,425.1	283.0	660.4	316.2	8,684.8
2008		722.9	3,320.3	4,043.2	2,503.9	1,565.7	8,112.9	330.1	726.3	268.8	9,438.1
2007	Jan.	575.6	3,106.1	3,681.8	1,446.4	1,558.4	6,686.5	262.3	641.5	220.7	7,811.3
	Feb.	578.7	3,095.3	3,674.0	1,469.6	1,547.1	6,690.7	268.8	651.9	231.7	7,843.0
	March	588.5	3,146.9	3,735.4	1,534.1	1,544.8	6,814.3	282.0	666.2	239.8	8,002.3
	Apr.	594.7	3,160.7	3,755.4	1,567.8	1,537.1	6,860.3	281.6	681.7	241.6	8,065.3
	May	597.6	3,179.4	3,777.0	1,599.7	1,533.4	6,910.1	285.2	702.3	254.3	8,152.0
	June	604.9	3,240.3	3,845.2	1,634.3	1,526.3	7,005.8	282.2	698.9	241.7	8,228.7
	July	612.9	3,218.0	3,830.9	1,694.8	1,516.1	7,041.8	287.1	712.4	239.1	8,280.4
	Aug.	610.6	3,137.8	3,748.4	1,765.4	1,508.1	7,022.0	297.6	705.9	259.9	8,285.5
	Sept.	610.4	3,212.2	3,822.6	1,795.6	1,501.6	7,119.9	295.4	682.2	281.5	8,378.9
	Oct.	613.5	3,176.1	3,789.6	1,890.9	1,525.1	7,205.7	293.5	684.0	297.9	8,481.2
	Nov.	618.6	3,210.9	3,829.5	1,916.0	1,518.8	7,264.3	301.8	696.7	312.4	8,575.2
	Dec.	638.5	3,262.0	3,900.5	1,984.9	1,539.7	7,425.1	283.0	660.4	316.2	8,684.8
2008	Jan.	623.1	3,235.3	3,858.5	2,052.0	1,548.0	7,458.5	307.3	737.2	295.3	8,798.3
	Feb.	628.7	3,179.1	3,807.9	2,127.3	1,545.3	7,480.5	314.3	749.6	273.8	8,818.2
	March	632.9	3,226.4	3,859.3	2,144.1	1,551.0	7,554.3	314.0	742.5	279.0	8,889.9
	Apr.	641.4	3,203.5	3,844.9	2,240.7	1,550.2	7,635.8	328.9	751.3	270.1	8,986.0
	May	645.7	3,229.1	3,874.9	2,278.6	1,546.6	7,700.1	333.3	755.8	286.3	9,075.6
	June	652.1	3,269.4	3,921.5	2,280.4	1,543.2	7,745.1	330.3	733.0	283.1	9,091.4
	July	658.8	3,187.2	3,846.0	2,381.6	1,533.8	7,761.5	333.1	743.2	287.6	9,125.5
	Aug.	656.1	3,140.9	3,797.0	2,441.4	1,531.5	7,769.9	343.1	757.9	278.8	9,149.6
	Sept.	657.2	3,226.2	3,883.4	2,443.8	1,521.5	7,848.7	345.6	731.1	288.2	9,213.5
	Oct.	698.9	3,252.2	3,951.1	2,513.0	1,517.3	7,981.4	351.0	729.8	278.1	9,340.3
	Nov.	703.7	3,272.4	3,976.2	2,529.9	1,521.8	8,027.8	336.6	739.7	276.4	9,380.6
	Dec.	722.9	3,320.3	4,043.2	2,503.9	1,565.7	8,112.9	330.1	726.3	268.8	9,438.1
2009	Jan.	712.3	3,387.6	4,099.9	2,393.3	1,611.3	8,104.5	324.0	759.9	219.0	9,407.4
	Feb.	716.0	3,390.2	4,106.2	2,356.2	1,634.5	8,096.8	327.4	779.9	217.3	9,421.5
	March	720.0	3,415.0	4,134.9	2,307.5	1,655.0	8,097.4	338.5	780.8	196.6	9,413.3
	Apr.	729.2	3,473.6	4,202.8	2,291.9	1,676.1	8,170.8	338.2	781.8	207.3	9,498.1
	May	732.0	3,493.3	4,225.3	2,246.6	1,692.3	8,164.1	336.2	771.6	200.4	9,472.3
	June	735.0	3,581.5	4,316.5	2,173.7	1,704.1	8,194.3	347.2	741.5	183.6	9,466.7
	July	745.5	3,578.3	4,323.8	2,139.7	1,723.2	8,186.7	320.0	758.0	174.4	9,439.1
	Aug.*	741.2	3,587.5	4,328.7	2,099.7	1,740.4	8,168.8	310.3	759.3	155.2	9,393.6

Source: ECB.
* Provisional data.
1 Monetary aggregates comprise monetary liabilities of MFIs and central government (Post Office, Treasury) vis-à-vis non-MFI euro area residents excluding central government.
2 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 billion euro, not seasonally adjusted)

End of period		Overnight deposits			Deposits with an agreed maturity up to two years	Deposits redeemable at notice up to three months[1]	Repurchase agreements (repos)	Money market fund shares/units	Debt securities up to two years[2]	Total[3] (M3 excluding currency in circulation) (7)=(1)+(2)+ +(3)+(4)+ +(5)+(6)
			Sight deposits and current accounts	Savings deposits						
		(1)	(1.1)	(1.2)	(2)	(3)	(4)	(5)	(6)	
2004		91.7	20.7	71.0	33.4	1.9	9.5	15.2	0.5	152.3
2005		99.2	24.8	74.4	51.8	4.4	2.7	4.9	0.4	163.4
2006		100.1	26.0	74.1	69.3	2.9	1.6	5.8	0.5	180.2
2007		98.8	28.2	70.6	97.6	2.3	0.7	7.9	–1.6	205.7
2008		90.6	25.7	64.9	137.8	1.9	0.4	2.3	2.1	235.1
2007	Jan.	95.5	23.9	71.7	72.9	2.9	1.5	5.9	0.4	179.1
	Feb.	95.0	24.0	71.0	73.7	2.8	1.4	6.2	0.3	179.5
	March	96.7	25.3	71.4	76.0	2.7	1.2	6.5	0.3	183.4
	Apr.	96.2	24.4	71.8	77.3	2.7	1.1	6.7	0.2	184.2
	May	94.3	24.4	69.8	79.4	2.7	1.3	7.0	-0.5	184.2
	June	99.8	27.5	72.2	80.8	2.7	1.4	7.5	-1.1	191.0
	July	96.7	25.3	71.4	87.8	2.6	1.0	7.6	-1.8	194.0
	Aug.	96.5	25.4	71.1	88.4	2.6	0.9	7.8	-1.9	194.3
	Sept.	96.1	25.3	70.8	89.1	2.5	0.8	7.8	-1.7	194.6
	Oct.	94.3	25.3	69.0	92.0	2.4	0.9	8.0	-1.8	195.8
	Nov.	94.6	26.5	68.1	94.9	2.3	0.8	8.1	-1.6	199.0
	Dec.	98.8	28.2	70.6	97.6	2.3	0.7	7.9	-1.6	205.7
2008	Jan.	93.7	25.7	68.0	102.9	2.1	0.7	7.7	-1.1	206.1
	Feb.	91.1	24.7	66.4	106.3	2.2	0.6	7.8	-0.5	207.6
	March	93.3	27.2	66.2	107.1	2.1	0.6	7.8	0.2	211.2
	Apr.	92.2	25.4	66.8	110.6	2.1	0.5	7.6	0.4	213.4
	May	90.2	24.4	65.8	114.9	2.0	0.6	7.4	0.6	215.8
	June	94.0	27.4	66.5	115.6	2.0	0.6	7.3	1.4	220.9
	July	90.6	24.8	65.8	119.2	1.9	0.5	6.9	1.9	221.0
	Aug.	89.5	24.4	65.1	124.2	1.9	0.5	6.8	2.2	225.1
	Sept.	91.5	26.5	65.0	126.4	2.0	0.9	6.3	2.5	229.5
	Oct.	89.0	24.8	64.2	133.7	2.0	1.1	3.0	2.2	231.1
	Nov.	86.9	24.5	62.4	138.2	2.0	0.5	2.5	2.2	232.3
	Dec.	90.6	25.7	64.9	137.8	1.9	0.4	2.3	2.1	235.1
2009	Jan.	87.8	24.9	62.9	142.0	2.1	0.3	2.0	1.8	236.0
	Feb.	87.7	24.8	62.9	142.3	2.1	0.3	1.9	1.6	235.9
	March	88.5	24.6	63.9	142.0	2.1	0.2	1.5	1.5	235.8
	Apr.	93.2	26.9	66.2	140.8	2.4	0.3	1.5	2.0	240.2
	May	92.0	25.7	66.3	140.3	2.5	0.3	1.5	1.9	238.5
	June	97.0	29.2	67.8	140.7	2.7	0.3	1.6	2.0	244.2
	July	96.4	27.8	68.6	137.8	2.9	0.3	1.7	1.8	240.8
	Aug.	97.9	28.6	69.3	137.8	3.0	0.2	1.7	1.2	241.9

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.

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		Breakdown by type		
			In euro	In other currencies	Sight deposits	Savings deposits	Time deposits[2]
2004		128,424.6	110,206.7	18,217.9	18,274.2	73,954.2	36,196.1
2005		156,857.7	135,797.3	21,060.4	22,180.2	79,800.8	54,876.1
2006		173,370.4	151,321.5	22,048.9	23,525.0	77,858.2	71,987.2
2007		197,233.6	173,493.8	23,739.8	25,014.1	73,561.9	98,657.6
2008		227,246.6	200,631.7	26,614.8	21,819.5	67,328.3	138,098.8
2007	Jan.	171,937.9	149,321.7	22,616.2	20,943.4	75,322.8	75,671.7
	Feb.	172,166.2	150,424.2	21,742.0	21,109.9	74,619.3	76,437.1
	March	176,068.3	154,217.8	21,850.5	22,393.4	74,931.5	78,743.4
	Apr.	177,261.9	155,599.4	21,662.5	21,878.6	75,236.8	80,146.5
	May	177,486.2	154,859.0	22,627.2	21,160.9	73,954.4	82,370.9
	June	184,148.2	161,027.9	23,120.2	24,695.0	75,647.6	83,805.6
	July	188,181.4	164,079.4	24,102.0	22,986.4	74,519.2	90,675.9
	Aug.	188,054.4	163,993.2	24,061.2	22,398.6	74,358.8	91,297.0
	Sept.	188,469.8	164,667.0	23,802.8	22,697.5	73,977.4	91,794.9
	Oct.	187,503.6	163,407.0	24,096.6	22,480.6	72,098.4	92,924.6
	Nov.	190,515.3	166,375.1	24,140.1	23,484.5	71,094.6	95,936.3
	Dec.	197,233.6	173,493.8	23,739.8	25,014.1	73,562.0	98,657.6
2008	Jan.	196,029.3	171,471.0	24,558.4	21,730.7	70,740.5	103,558.2
	Feb.	197,402.8	172,633.7	24,769.0	21,120.5	69,152.9	107,129.4
	March	200,449.4	176,402.8	24,046.5	23,638.8	68,859.6	107,950.9
	Apr.	202,569.8	177,766.0	24,803.9	22,180.8	69,469.5	110,919.5
	May	204,884.2	179,218.0	25,666.2	21,494.7	68,386.4	115,003.1
	June	209,079.3	183,406.2	25,673.0	23,992.6	69,113.2	115,973.4
	July	209,789.6	182,926.7	26,862.8	21,779.6	68,266.6	119,743.4
	Aug.	213,380.5	183,997.1	29,383.4	21,087.0	67,628.4	124,665.1
	Sept.	217,309.1	187,754.2	29,555.0	22,865.0	67,505.7	126,938.4
	Oct.	222,016.1	191,243.7	30,772.4	21,220.1	66,784.6	134,011.4
	Nov.	223,573.2	192,418.3	31,154.8	20,110.1	64,962.1	138,501.0
	Dec.	227,246.6	200,631.7	26,614.8	21,819.5	67,328.3	138,098.8
2009	Jan.	228,575.7	200,330.3	28,245.4	20,677.5	65,526.4	142,371.8
	Feb.	229,135.0	201,123.7	28,011.4	20,830.7	65,570.3	142,734.0
	March	230,077.2	205,500.1	24,577.2	20,745.6	66,556.9	142,774.7
	Apr.	233,781.5	209,547.7	24,233.7	22,923.0	69,222.0	141,636.5
	May	232,033.2	208,321.3	23,711.9	21,702.7	69,329.2	141,001.3
	June	237,260.8	214,261.2	22,999.6	24,853.6	71,093.8	141,313.4
	July	234,201.8	211,534.4	22,667.3	23,691.2	72,079.6	138,430.9
	Aug.	235,898.4	212,425.4	23,473.0	24,540.1	72,881.4	138,476.9

Source: Bank of Greece.
1 Other Monetary Financial Institutions (OMFIs) comprise credit institutions (other than the Bank of Greece) and money market funds.
2 Including blocked deposits.

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]
2004		2.05	2.08	2.11	2.15	2.20	2.27
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		3.86	4.27	4.63	4.72	4.76	4.81
2007	Jan.	3.56	3.62	3.75	3.89	3.99	4.06
	Feb.	3.57	3.65	3.82	3.94	4.03	4.09
	March	3.69	3.84	3.89	4.00	4.06	4.11
	Apr.	3.82	3.86	3.98	4.10	4.19	4.25
	May	3.79	3.92	4.07	4.20	4.30	4.37
	June	3.96	4.10	4.15	4.28	4.40	4.51
	July	4.06	4.11	4.22	4.36	4.47	4.56
	Aug.	4.05	4.31	4.54	4.59	4.63	4.67
	Sept.	4.03	4.43	4.74	4.75	4.73	4.72
	Oct.	3.94	4.24	4.69	4.66	4.65	4.65
	Nov.	4.02	4.22	4.64	4.63	4.62	4.61
	Dec.	3.88	4.71	4.85	4.82	4.80	4.79
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

Source: Bloomberg.
1 Euro overnight index average (EONIA).
2 Euro interbank offered rates (EURIBOR).

Table 11 Greek government paper yields

(percentages per annum, period averages)

Period		Yield on one-year Treasury bills	Bond yields 3-year	5-year	7-year	10-year	15-year	20-year[1]	32-year
2004		2.27	2.87	3.37	3.81	4.26	4.53	4.77	, , ,
2005		2.33	2.65	2.92	3.22	3.59	3.80	3.92	4.14
2006		3.44	3.58	3.72	3.87	4.07	4.16	4.23	4.42
2007		4.45	4.21	4.30	4.34	4.50	4.67	–	4.81
2008		4.82	4.27	4.51	4.54	4.80	5.18	–	5.30
2007	Jan.	4.06	4.01	4.08	4.13	4.28	4.33	4.38	4.51
	Feb.	4.09	4.03	4.09	4.14	4.30	4.35	4.40	4.54
	March	4.11	4.00	4.04	4.08	4.20	4.27	4.33	4.49
	Apr.	4.25	4.17	4.24	4.28	4.40	4.46	4.52	4.70
	May	4.37	4.31	4.37	4.40	4.51	4.59	–	4.77
	June	4.51	4.52	4.65	4.68	4.80	4.97	–	5.05
	July	4.56	4.54	4.64	4.67	4.79	4.96	–	5.02
	Aug.	4.67	4.28	4.41	4.47	4.62	4.85	–	4.91
	Sept.	4.72	4.20	4.34	4.39	4.56	4.82	–	4.92
	Oct.	4.65	4.19	4.34	4.39	4.58	4.82	–	4.92
	Nov.	4.61	4.08	4.16	4.20	4.43	4.73	–	4.88
	Dec.	4.80	4.16	4.28	4.29	4.53	4.83	–	4.97
2008	Jan.	4.50	3.88	4.02	4.17	4.40	4.76	–	4.95
	Feb.	4.35	3.68	3.83	4.09	4.36	4.79	–	4.99
	March	4.67	3.92	4.10	4.24	4.42	4.95	–	5.16
	Apr.	4.81	4.15	4.31	4.32	4.54	5.05	–	5.20
	May	4.99	4.35	4.46	4.46	4.74	5.08	–	5.21
	June	5.36	4.97	5.08	4.96	5.17	5.37	–	5.40
	July	5.39	4.94	5.04	4.98	5.15	5.38	–	5.44
	Aug.	5.32	4.53	4.64	4.63	4.87	5.15	–	5.25
	Sept.	5.38	4.42	4.65	4.65	4.88	5.26	–	5.36
	Oct.	5.26	3.97	4.48	4.53	4.93	5.22	–	5.26
	Nov.	4.35	4.12	4.65	4.70	5.09	5.49	–	5.52
	Dec.	3.45	4.28	4.89	4.76	5.08	5.67	–	5.82
2009	Jan.	2.61	3.93	5.22	5.26	5.60	6.21	–	6.46
	Feb.	2.13	3.91	5.19	5.25	5.70	6.13	–	6.26
	March	1.90	4.03	5.07	5.14	5.87	6.10	–	6.27
	Apr.	1.77	3.63	4.72	4.71	5.50	5.78	–	5.86
	May	1.64	3.10	4.14	4.53	5.22	5.54	–	5.71
	June	1.61	3.05	4.20	4.55	5.33	5.73	–	5.93
	July	1.41	2.57	3.62	3.99	4.89	5.40	–	5.70
	Aug.	1.33	2.52	3.41	3.77	4.52	4.93	–	5.26
	Sept.	1.26	2.26	3.36	3.77	4.56	4.91	–	5.31

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 Greece: domestic MFI loans[1] to domestic firms (by branch of economic activity) and households

(balances in million euro)

End of period		Grand total	Firms						Households			
			Total	Agriculture	Industry[2]	Trade	Tourism	Other	Total	Housing	Consumer credit	Other
2004		123,993.8	71,433.0	3,248.0	15,675.6	18,821.6	4,040.0	29,647.8	52,560.8	34,052.2	17,053.8	1,454.8
2005		149,903.2	81,009.5	2,975.9	17,933.0	21,321.0	4,348.7	34,430.9	68,893.7	45,419.8	21,825.1	1,648.8
2006		179,452.3	93,575.8	3,185.2	19,514.6	23,711.9	4,799.7	42,364.4	85,876.5	57,145.0	26,596.6	2,134.9
2007		215,405.2	111,288.8	3,304.1	21,487.7	27,671.7	5,883.4	52,941.9	104,116.4	69,363.3	31,942.4	2,810.7
2008		249,661.1	132,458.0	3,855.7	24,872.7	32,985.0	7,031.6	63,713.0	117,203.1	77,699.9	36,435.0	3,068.2
2007	Jan.	179,422.1	92,476.7	3,068.1	19,276.7	23,260.6	4,877.8	41,993.5	86,945.4	57,943.7	26,871.9	2,129.8
	Feb.	181,890.6	93,752.2	3,085.0	19,327.6	23,688.6	5,019.6	42,631.4	88,138.4	58,862.9	27,102.3	2,173.2
	March	186,317.2	96,295.3	3,103.4	19,636.8	24,466.8	5,107.7	43,980.6	90,021.9	60,254.6	27,544.9	2,222.4
	Apr.	187,655.4	96,341.2	3,059.6	19,630.1	24,394.5	5,210.1	44,046.9	91,314.2	61,092.5	28,041.1	2,180.6
	May	190,564.2	97,674.8	3,087.7	20,090.5	24,671.2	5,287.7	44,537.7	92,889.4	62,004.3	28,688.9	2,196.2
	June	197,784.1	102,988.6	3,272.4	20,567.5	25,615.5	5,404.2	48,129.0	94,795.5	63,273.7	29,077.6	2,444.2
	July	199,855.6	103,304.8	3,286.4	20,540.3	25,665.1	5,428.6	48,384.4	96,550.8	64,380.3	29,568.6	2,601.9
	Aug.	202,346.7	104,528.9	3,349.0	20,726.7	25,789.2	5,423.6	49,240.4	97,817.8	65,153.9	30,031.5	2,632.4
	Sept.	205,778.7	106,262.2	3,359.5	21,077.1	26,488.2	5,493.2	49,844.2	99,516.5	66,115.5	30,440.6	2,960.4
	Oct.	207,246.5	106,274.5	3,382.6	21,084.3	26,495.4	5,607.0	49,705.2	100,972.0	67,002.5	31,072.7	2,896.8
	Nov.	210,926.0	108,543.8	3,395.7	21,418.7	26,856.6	5,670.4	51,202.4	102,382.2	68,022.9	31,603.6	2,755.7
	Dec.	215,405.2	111,288.8	3,304.1	21,487.7	27,671.7	5,883.4	52,941.9	104,116.4	69,363.3	31,942.4	2,810.7
2008	Jan.	217,681.5	112,572.1	3,395.9	21,628.1	27,826.1	5,949.5	53,772.5	105,109.4	70,031.5	32,311.0	2,766.9
	Feb.	221,160.9	114,445.3	3,551.6	22,122.4	28,100.8	6,208.4	54,462.1	106,715.6	70,833.7	33,069.7	2,812.2
	March	225,312.1	117,396.4	3,585.0	22,454.7	28,954.8	6,308.3	56,093.6	107,915.7	71,660.6	33,367.2	2,887.9
	Apr.	226,983.0	118,260.9	3,708.2	22,484.7	29,279.8	6,498.5	56,289.7	108,722.1	72,270.5	33,677.9	2,773.7
	May	230,680.4	120,638.9	3,775.9	23,263.1	30,045.2	6,595.4	56,959.3	110,041.5	73,006.6	34,195.7	2,839.2
	June	235,808.2	124,189.4	3,842.1	23,777.8	30,938.0	6,770.9	58,860.6	111,618.8	74,064.3	34,606.4	2,948.1
	July	238,348.9	125,439.9	3,858.3	24,133.5	31,227.2	6,817.4	59,403.5	112,909.0	74,829.6	35,132.8	2,946.6
	Aug.	240,859.5	127,250.3	3,901.1	24,320.3	31,558.0	6,888.1	60,582.8	113,609.2	75,203.6	35,483.3	2,922.3
	Sept.	244,061.5	128,963.4	3,915.0	24,490.4	32,045.4	7,036.7	61,475.9	115,098.1	76,055.4	36,037.0	3,005.7
	Oct.	247,989.9	131,808.1	3,967.3	24,774.4	32,314.2	7,023.5	63,728.7	116,181.8	76,853.9	36,281.9	3,046.0
	Nov.	248,676.0	132,136.3	4,019.4	25,167.9	32,952.8	6,948.0	63,048.2	116,539.7	77,003.3	36,492.2	3,044.2
	Dec.	249,661.1	132,458.0	3,855.7	24,872.7	32,985.0	7,031.6	63,713.0	117,203.1	77,699.9	36,435.0	3,068.2
2009	Jan.	250,265.9	132,994.0	3,879.2	24,943.5	33,244.5	7,081.3	63,845.5	117,271.9	77,812.6	36,449.3	3,010.0
	Feb.	250,437.8	132,950.9	3,932.8	25,001.1	33,454.1	7,147.8	63,415.1	117,486.9	78,002.9	36,512.8	2,971.2
	March	249,959.8	132,575.4	3,826.7	24,491.4	33,708.3	7,154.2	63,394.8	117,384.4	78,066.3	36,369.2	2,948.9
	Apr.	250,464.0	133,055.7	3,939.7	24,529.9	34,056.7	7,197.4	63,332.0	117,408.3	78,235.2	36,244.7	2,928.4
	May	250,865.1	133,181.8	3,973.5	24,639.9	34,176.4	7,312.3	63,079.7	117,683.3	78,395.5	36,317.7	2,970.1
	June	249,675.6	131,689.8	3,988.6	24,379.8	33,745.1	7,405.9	62,170.4	117,985.8	78,734.2	36,280.8	2,970.8
	July	250,473.4	132,139.5	4,011.1	24,363.4	33,772.5	7,380.1	62,612.4	118,333.9	79,041.9	36,383.9	2,908.1
	Aug.	250,706.5	132,234.2	3,913.2	24,231.8	33,321.5	7,195.7	63,572.0	118,472.3	79,144.6	36,445.0	2,882.7

Source: Bank of Greece.
1 Including MFI loans and holdings of corporate bonds, as well as securitised loans and securitised corporate bonds.
2 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)
2004		0.91	0.90	2.29	0.55	2.17	1.98
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
2007	Jan.	1.16	1.10	3.50	0.91	3.49	3.32
	Feb.	1.16	1.10	3.51	0.87	3.54	3.35
	March	1.18	1.11	3.64	0.99	3.73	3.53
	Apr.	1.20	1.13	3.74	0.98	3.81	3.60
	May	1.20	1.13	3.74	1.05	3.81	3.63
	June	1.24	1.15	3.95	1.05	4.01	3.80
	July	1.24	1.16	4.00	1.15	4.03	3.86
	Aug.	1.24	1.16	4.09	1.12	4.10	3.87
	Sept.	1.25	1.17	4.24	1.08	4.20	3.93
	Oct.	1.25	1.17	4.26	1.01	4.04	3.88
	Nov.	1.25	1.17	4.25	1.07	4.20	3.91
	Dec.	1.23	1.16	4.52	1.05	4.33	3.76
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	0.90
	May	0.58	0.50	2.58	0.48	1.67	0.97
	June	0.53	0.45	2.55	0.44	1.45	0.60
	July	0.52	0.46	2.34	0.46	1.25	0.36
	Aug.	0.50	0.45	2.24	0.40	1.12	0.28

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 households[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]: 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
2004		13.81	9.55	9.86	4.30	4.51	7.01	4.98	3.67
2005		13.36	8.47	9.06	4.06	4.15	6.90	5.08	3.62
2006		13.45	7.89	8.58	4.24	4.30	7.18	5.76	4.37
2007		14.09	7.70	8.47	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
2007	Jan.	13.87	7.35	8.30	3.92	4.29	7.32	6.27	5.22
	Feb.	13.86	7.53	8.40	3.80	4.24	7.34	6.36	5.01
	March	13.88	7.60	8.23	4.00	4.28	7.45	6.38	5.08
	Apr.	13.97	7.72	8.36	4.45	4.37	7.50	6.45	5.12
	May	13.92	8.18	8.74	4.46	4.41	7.47	6.51	5.06
	June	14.09	7.82	8.61	4.90	4.52	7.56	6.48	5.32
	July	14.12	8.00	8.70	5.01	4.53	7.56	6.44	5.12
	Aug.	14.15	8.38	8.78	5.00	4.58	7.74	6.76	5.48
	Sept.	14.14	7.50	8.54	4.93	4.64	7.68	6.78	5.68
	Oct.	14.13	7.22	8.08	4.96	4.63	7.62	6.75	5.50
	Nov.	14.50	7.54	8.47	4.68	4.53	7.65	6.81	5.50
	Dec.	14.47	7.61	8.37	4.76	4.45	7.56	6.83	5.79
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

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.

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