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2005
PRESENTED TO THE 73rd GENERAL MEETING
OF SHAREHOLDERS ON 27 APRIL 2006
BY GOVERNOR NICHOLAS C. GARGANAS

ATHENS 2006
GENERAL COUNCIL

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E. FOUKAS  Government Commissioner

* The term of office of Mr. Vassilis Droukopoulos, who was appointed member of the Monetary Policy Council by a Presidential Decree dated 24 April 2000 (Government Gazette –Legal Persons in Public Law– No 105/24 April 2000) for a six-year term, according to Article 35A of the Bank’s Statute, expired on 24 April 2006 (Initial appointment by a Presidential Decree dated 25 February 1998, Government Gazette –Legal persons in Public Law– No 39/26 February 1998, for a two-year term, according to a transitional provision of the said article of the Bank’s Statute.)

** The term of office of Mr C. Polyzogopoulos, who was elected member of the General Council at the Annual General Meeting of 22 April 2003, according to Article 21 of the Bank’s Statute, expired at the Annual General Meeting of 2006.
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I. FINANCIAL RESULTS FOR 2005

The Bank’s Profit and Loss Account for 2005 shows total revenue of €610.8 million and total operating expenses, including depreciation and provisions, of €382.3 million. Net profit thus reached €228.5 million, compared with €205.6 million in 2004.

Regarding the appropriation of profit under Article 71 of the Bank’s Statute, the General Council, following its decision of 22 March 2006, proposes to the General Meeting of Shareholders that an amount of €10.6 million or 12% of the Bank’s capital be distributed as first dividend and that an additional €22.2 million be allocated to the ordinary reserve, raising it to the same level as the Bank’s capital. It should be reminded that a capital increase of €22.2 million took place in 2005, with the issuance of 3,972,977 new shares, each of a nominal value of €5.60, reflecting fixed asset valuation gains. These shares were made available to shareholders in a proportion of one new share for every three old ones acquired prior to 11 July 2005. Moreover, pursuant to the same decision (22 March 2006), the General Council also proposes the distribution of €27.5 million as additional dividend for fiscal year 2005, which brings the total dividend proposed for distribution to €38.1 million, up from €34.0 million in 2004. The total dividend per share thus comes to €2.40, i.e. 12.15% more than in 2004 (€2.14). From the balance of net profits after the deduction of income tax on distributed profits, an amount of €150.1 million shall be paid to the Government in accordance with Article 71 of the Bank’s Statute, compared with €153.3 million in 2004.

Total net income from interest, commission fees and other receipts from domestic and foreign transactions, including transactions with the European Central Bank (ECB) and the other members of the European System of Central Banks (ESCB), increased by €12.2 million or 2.0% relative to 2004 and, as mentioned above, rose to €610.8 million.

Net interest income from claims on the Greek State and domestic or foreign credit institutions increased by €10.4 million or 3.4% relative to 2004. This development is mainly attributed to the increase in interest income from lending to credit institutions, but also to the decrease, relative to the previous year, in interest paid on the balance of the Bank’s liabilities arising from transactions with the ESCB.

Net interest income from transactions with the Greek State fell by €7.9 million, relative to 2004. This decline mainly stems from a €4.2 million decrease in interest income from long-term loans extended by the Bank of Greece to the Greek State, owing to partial repayment of these loans, in conjunction with a €6.0 million increase in interest paid to the Greek State. This increase was the result of the higher average balance of government deposits in 2005 than in 2004. In contrast, interest income from the Bank’s holdings of government securities grew by €2.3 million, due to a small increase in the average bond rate, while interest income from deposits in euro and foreign currencies with foreign credit institutions fell by €10.0 million (reflecting partial substitution of euro positions for US dollar positions).

The Bank’s interest income from lending to credit institutions increased by €21.2 million, after falling by €20.1 million in 2004. This increase is attributable to the comparatively larger than in 2004 supply of liquidity to domestic credit institutions, chiefly...
through main refinancing operations. However, the interest paid by the Bank on credit institutions’ required reserves also grew, as a result of the higher, relative to 2004, average reserve holdings with the Bank of Greece.

Interest paid on liabilities arising from intra-ESCB transactions also fell in 2005, dropping by €21.3 million to €252.1 million, from €273.4 million in 2004. This development reflects a further decrease in the Bank’s average net liability position vis-à-vis the rest of the ESCB.

The Bank’s financial operations in 2005 once again resulted in a net credit balance, which, at €133.7 million, registered an increase of €105.4 million over 2004 (€28.3 million). This stemmed mainly from a decrease in unrealised losses from the valuation of the Bank’s foreign exchange portfolio, in conjunction with a €55.9 million increase, relative to 2004, of realised net profits from transactions in foreign currency and securities. It should be noted that, while unrealised losses from the valuation of the Bank’s foreign exchange portfolio had risen to €68.2 million in 2004, their impact on the Bank’s results was marginal in 2005 on account of the appreciation of major currencies, in particular of the US dollar, against the euro.

Commission fees, income from participations and other income decreased by €103.6 million, partly on account of lower commissions, mainly on transactions with the State, and also because the estimated value of the drachma banknotes which will not be presented for exchange for euro banknotes by the deadline of 1 March 2012 was recognised as income for the last time in 2004.

The Bank’s total operating expenses —excluding provisions— rose by €12.6 million to €323.1 million in 2005, relative to 2004. More specifically, personnel outlays, excluding employer contributions, increased by €5.9 million or 4.7% relative to 2004. This increase was due to the pay rises given under the wage agreements at a sectoral and enterprise level and to the grade and pay advancement of the personnel. Administrative and other management expenses increased by €2.0 million in 2005, after decreasing by €5.7 million in 2004. This rise was due to higher outlays for maintenance and repair work on buildings, equipment and computer systems and mainly to higher printing costs entailed by increased banknote production in 2005. In contrast, depreciation decreased by a slight €0.8 million, compared with an increase of €14.9 million in 2004, following the revision of depreciation rates on the basis of the estimated useful life of the Bank’s buildings.

Finally, provisions for bad loans in 2005 came to €59.2 million, an amount €23.3 million lower than in 2004. This decrease can be explained by the fact that the exceptional provision of €36.1 million made in 2004 to meet the Bank’s participation in the possible losses of the ECB was not needed again last year. On the other hand, provisions for future obligations to personnel insurance funds and for asset valuation loss were increased respectively to €45.0 and €14.2 million.

In the course of 2005, the Bank of Greece recruited 17 employees (10 with postgraduate degrees in economics and finance and 7 in compliance with legislation for the protection of disabled individuals). Meanwhile, 95 employees retired. The Bank’s staff,
which has been decreasing over the past few years, therefore decreased further by 78 members to 2,902 at the end of 2005 from 2,980 at the end of 2004.

The year 2005 saw the Bank of Greece adopt further measures regarding its internal organisation and administration, with the restructuring of certain units and the streamlining of operations, thus enabling the Bank to meet its increased responsibilities and adjust better to the new conditions and requirements set by the Eurosystem. More specifically, changes were made to the organisational structure of the Bank’s Administration, Internal Audit and Accounts Departments, while the restructuring of the Cash Department will soon be completed. To ensure greater safety in the handling of money and securities, a Code of Physical Security Standards was established, while the Special Regulation on Keys to Vaults and Access Control was updated. The bylaws of the Legal Department were also amended and codified to ensure a more efficient allocation of tasks.

In the field of Information Technology, the Bank’s systems were further upgraded in 2005, while new systems are in the process of being developed. Specifically, the IT system that supports the assets management tasks conducted by the Financial Operations Department has been upgraded and the infrastructure needed for the Bank to join the Interbank Electronic Cheque Clearing System is currently being developed, while the necessary IT infrastructure has been set up to enable the exchange of information with the ECB and other international institutions.

In December 2005, the General Council decided that the Bank of Greece would undertake the settlement of the cash leg of transactions conducted by the Athens Exchange (Athex) and the Athens Derivatives Exchange Clearing House (ADECH), in response to the relevant request of both exchanges. Settlement in central bank money should improve the reliability of both exchanges and their attractiveness, especially to foreign institutional investors.

The Bank’s personnel training programmes continued in 2005, with particular emphasis on supervisory issues including market risk, solvency and International Accounting Standards. A large number of employees also attended IT, management skill, as well as foreign language courses. Finally, in response to widespread demand, the Bank of Greece organised a series of seminars — intended both for its personnel and for the personnel of other banks — on counterfeit detection.

The Printing Works Department was equipped in 2005 with state-of-the-art machinery that now provides the Bank with a fully integrated and automated banknote production line and will ensure the capacity required for printing the new type of Greek passports.

Maintenance, renovation and conversion works continued on a number of the Bank’s premises, with a view to increasing the security of transactions and improving working conditions. More specifically, the remodelling of the Head Office’s first floor, which will accommodate the Strategic Planning and Organisation Department and the Payment Systems Department, is nearly complete, while the renovation of the Thessaloniki branch is in progress. Furthermore, the additional works that were considered necessary to increase
security in the new Athens building that houses the Money Handling and Sorting Centre were completed. This centre, which is already operating, will take over much of the work previously carried out at the Head Office and ensure greater cash-in-transit security.

Seeking to enrich the debate and provide a useful insight into European economic policies and developments, the Bank of Greece hosted the annual roundtable of the “Euro 50 Group” in Athens in June 2005. The focus of this roundtable, which brought together distinguished economists, academics, bankers and politicians from Europe, North America and Japan, was “An Assessment of the ECB Monetary Policy”. Also, in line with the practice of the Governing Council of the European Central Bank convening twice a year outside Frankfurt, the Bank of Greece hosted the 6 October 2005 Governing Council meeting in Athens. Later that day, the ECB Governing Council members were welcomed to the Presidential Mansion by the President of the Republic, Mr. Karolos Papoulias. Bank of Greece Governor, Mr. Nicholas C. Garganas, then held a dinner in honour of the Governing Council members present in Athens, which Prime Minister Kostas Karamanlis also attended and addressed.

As in previous years, the Bank remained fully committed to its goals and fulfilled its mandate effectively, thereby increasing its prestige and credibility both within Greece and abroad. The Bank played an active and important role in the implementation of the single monetary policy and has fully met the obligations arising from Eurosystem membership. It has also successfully carried out its serious mission as the authority responsible for the supervision of credit institutions and other enterprises of the financial sector. Its contribution towards ensuring the stability of the credit system and bank transaction transparency has been decisive. The outstanding performance would not have been possible without the efficiency and dedication of the Bank’s staff. I would therefore invite the General Meeting to join me in expressing our commendation to the entire staff.

In accordance with Article 35A of the Bank’s Statute, the term of office of Monetary Policy Council member Professor Vassilis Droukopoulos came to an end on 24 April 2006 (after having been renewed on 24 April 2000) and Professor George D. Dimopoulos was appointed by Presidential Decree to replace him for a six-year term. Mr. Dimopoulos is a distinguished economist, with knowledge and expertise in a vast array of economic and monetary issues.

I wish to seize this opportunity to thank the departing Professor Vassilis Droukopoulos for his valuable contribution to the successful work of the Monetary Policy Council and the Bank of Greece in general, which he served, in his capacity as General Council member, with dedication and commitment.

At today’s Annual General Meeting and in accordance with Article 21 of the Bank’s Statute, the term of office of General Council member Mr. Christos Polyzogopoulos expires. The General Meeting will therefore be called upon to elect a new General Council member for a three-year term, i.e. until the Annual General Meeting of 2009.

The outgoing General Council member is eligible for re-election.
II. THE GREEK ECONOMY: DEVELOPMENTS, PROSPECTS AND POLICIES FOR SUSTAINING STRONG GROWTH

1. INTRODUCTION

The growth rate of the Greek economy remained satisfactory in 2005; its slowdown was relatively small (compared with the high growth rates of previous years), in spite of the absence of the expenditure boost in the preceding period associated with the 2004 Athens Olympic Games, the negative effects of the sharp rise in oil prices and the substantial cutback in public investment in the context of necessary fiscal consolidation. More specifically, annual GDP growth in 2005 remained above the EU-15 average for the tenth year running and, according to provisional estimates from the National Statistical Service of Greece (NSSG), was 3.7%, down from 4.7% in 2004 and an annual average of 4.4% over the period 2000-2003.

As in previous years, GDP growth was driven by a number of factors that supported domestic demand: accommodative monetary and financing conditions, in conjunction with the continued improvement in private disposable income, bolstered private consumption. In addition, the change in the external balance on goods and services made a positive contribution to growth for the first time in several years. Although the rise in exports of goods and services was relatively small, despite the robust growth in global economic activity and world trade volume, imports of goods and services declined slightly, after their large increase in 2004, related to the preparations and hosting of the Athens Olympic Games.

However, in spite of its strong performance, the Greek economy still faces serious macroeconomic and structural imbalances, evidenced by relatively high inflation and unemployment and the sizeable current account deficit.

Inflation, as measured by the Harmonised Index of Consumer Prices (HICP), rose to 3.5% in 2005 (in average annual terms), from 3.0% in 2004, mainly on account of exogenous factors (such as rising crude oil prices and increases in indirect taxation). Thus, the headline inflation differential between Greece and the euro area widened. In contrast, average annual core inflation (as measured by the HICP excluding energy and unprocessed food) dropped to 3.2% in 2005 from 3.4% in 2004, but nevertheless remained high and the core inflation differential with the euro area also widened.

The fact that inflation has persistently remained higher in Greece than in most other euro area countries implies an accumulated erosion in competitiveness, as reflected in the unsatisfactory developments in the labour market and the balance of payments.

The rate of unemployment decreased slightly to 9.9% in 2005 (from 10.5% in 2004), though it remains one of the highest in the European Union (EU). Apart from the cumulative loss of external competitiveness, the persistently high rates of youth and female unemployment (25.9% and 15.3%, respectively) also reflect structural weaknesses and rigidities of the labour market, which hinder employment growth.
The current account deficit increased substantially to 7.9% of GDP in 2005, from 6.4% in 2004 and an average of 7.7% over the period 2000-2003. In addition, the deficit of the combined current account and capital transfers balances —which represents Greece’s net external borrowing— reached 6.8% of GDP in 2005, up from 4.9% in 2004 and an average of 6.3% over the period 2000-2003. The high current account deficit-to-GDP ratios in recent years can be attributed in part to the relatively high level of investment, combined with the shortfall in savings —a result of the fiscal deficits and of household consumption behaviour— and to the Greek economy’s low level of structural competitiveness as well as losses in cost and price competitiveness.

The effects of structural factors on the balance of payments are particularly evident when domestic demand growth is rapid. Low productivity, the unsatisfactory quality of many domestically produced goods and services, the inadequate administrative structures (evidenced by a multitude of restrictive regulatory practices and red tape-related barriers) and, more generally, structural rigidities hinder entrepreneurship and prevent the flexible adjustment of markets and productive capacity to changing economic conditions, thus causing the current account deficit to widen.

This uneven performance of the Greek economy reflects, on the one hand, the loose monetary conditions that currently prevail across the euro area and, on the other hand, the large budgetary deficits, the relatively high rate of unit labour cost growth in recent years (3.7% on average over the period 2001-2005, against 1.7% in the euro area) and the serious structural weaknesses of the Greek economy.

In the last few years, monetary conditions have been lax in the euro area and even more so in Greece (where higher inflation entails lower real interest rates), thus underpinning household consumption and private investment. Since the conduct of an independent monetary policy at the national level is no longer possible, the reduction of inflationary pressures will necessarily depend on fiscal policy, the social partners’ commitment to wage moderation and structural reforms geared to strengthening competition and improving supply conditions.

Turning to fiscal developments, the general government deficit-to-GDP ratio (on a national accounts basis) fell by 2.4 percentage points in 2005, but at 4.5% was the second highest in the euro area. This adjustment was an important first step in the process of fiscal consolidation, in line with the government’s commitment to reduce the deficit to less than 3% of GDP by 2006 and with the ECOFIN Council recommendation of 17 February 2005 calling upon Greece to take the measures necessary to correct its excessive deficit situation by the end of 2006. It should be noted, however, that the reduction in the deficit was achieved mainly by cutting back on public investment and, to a lesser degree, by curbing current expenditure growth. Revenue, on the other hand, did not contribute to fiscal adjustment, chiefly because of a shortfall in revenue from indirect taxes, which is largely attributable to higher tax evasion. Moreover, because of various financial transactions —which affect public debt but are not taken into account directly in the calculation of the deficit— the decrease in the debt-to-GDP ratio was limited in 2005. It was
only reduced by one percentage point and, at 107.5% of GDP in 2005, was the highest in the euro area.

Unit labour cost growth in the whole economy remained higher in Greece than in the euro area (2.2% in 2005 according to Bank of Greece estimates, compared with roughly 1% in the euro area), despite the continued improvement in labour productivity. According to the Bank of Greece, unit labour costs are projected to grow by 3.7% in 2006, while in the euro area they are expected to increase by less than 1%; as a result, there will be a further loss in competitiveness.

Finally, in spite of important progress with structural reforms over the past 15 years, the labour, goods and services markets are still hampered by rigidities that reduce the productive capacity and the international competitiveness of the Greek economy, as confirmed by international comparisons of structural competitiveness.

For the current year, it is projected that GDP will grow by around 3.5%, i.e. slightly less than in 2005. Nevertheless, the growth rate will remain well above the euro area average. Domestic demand will again be mainly driven by private consumption, although investment is expected to make a substantial contribution, as a result of the anticipated rebound in public investment (after the drastic cutbacks of 2005) and the faster rise in private investment compared to 2005. Inflation in 2006 is expected to edge down slightly from last year’s level to 3.3%, as the adverse impact of exogenous factors fades out, thus offsetting the effect of the significant acceleration in unit labour cost growth. Inflation will nonetheless remain above the euro area average. It should be stressed, however, that these projections are surrounded by a number of uncertainties throughout the course of 2006 related to developments in crude oil prices, the exchange rate of the euro and the prices of fresh fruit and vegetables.

The conclusion that can be drawn from this brief overview of last year’s economic developments and the outlook for 2006 is that, in spite of the important progress achieved in recent years, the problems of the Greek economy remain serious.

Sustaining strong growth over the medium and long term will require securing macroeconomic stability and improving the Greek economy’s structural competitiveness. Macroeconomic stability encourages private investment and — in today’s conditions of increased international capital mobility — helps attract foreign investment. The improvement in structural competitiveness is necessary if the Greek economy, whose growth has relied excessively on domestic demand in recent years, is to be transformed into a more dynamic and export-oriented economy.

Securing macroeconomic stability will mainly require the achievement of fiscal consolidation and price stability, while the improvement in structural competitiveness calls for reforms in a wide range of sectors.

The need to address the Greek economy’s macroeconomic imbalances and structural weaknesses becomes all the more pressing in view of the impact of population ageing on growth and budgetary prospects as well as of the implications of globalisation for Greece’s international competitiveness.
Obviously, the impact of population ageing on public expenditure for pensions and healthcare cannot be addressed solely through fiscal policy. It is therefore essential that the problem be dealt with in a comprehensive manner, through: (i) fiscal adjustment aimed at achieving significant primary surpluses and reducing the public debt to 60% of GDP by 2015; (ii) a timely and effective reform of the pension system; and (iii) structural measures designed to raise the employment rate and to improve productivity.

Thus, fiscal consolidation requires a successful implementation of the Updated Stability and Growth Programme 2005-2008 (see Section 4.4 below). Other policies geared towards price stability are also necessary. Finally, efforts have to be intensified to remedy the long-standing structural weakness of the public administration, the education and training systems, the institutional framework for research and development and innovation, the labour and product markets, the business environment and infrastructures in general, so as to create the necessary conditions for boosting employment and speeding up productivity growth.

In order to achieve effective fiscal consolidation and the necessary reforms over a vast range of economic issues and sectors, it is necessary to secure wide social consensus. As shown by the experience of other European countries, such a consensus requires informing the social partners and the general public about the challenges posed by globalisation. An open debate on how to find an equitable and efficient solution to the economic and fiscal implications of population ageing and globalisation has to be encouraged and economic policy measures be adopted which take account of citizens’ concerns about their future standard of living and their employment prospects.

2. THE INTERNATIONAL ECONOMIC ENVIRONMENT, ECONOMIC DEVELOPMENTS IN THE EURO AREA AND THE GLOBALISATION PROCESS

2.1 The international economic environment

World economic developments remained favourable in 2005, although the growth rate of world GDP decelerated in comparison with the very high rate recorded in 2004 – chiefly as a result of the large increase in international fuel prices. World inflation recorded only a limited increase, despite the rise in the price of oil.

In greater detail, the rate of increase in world GDP is estimated to have reached 4.8% in 2005, compared with 5.3% in 2004, remaining higher than the long-term trend of the last 35 years (4.2%). The factors which made a positive contribution to world economic activity in 2005 and largely offset the negative effect of rising fuel prices were:

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1 Account has been taken of the latest estimates and forecasts of the International Monetary Fund (IMF), World Economic Outlook, April 2006.
the exceptionally low nominal and real long-term interest rates and, more generally, the favourable financing conditions;

- the improvement in the profitability and the financial position of businesses;

- the rise in the value of households’ assets due to price increases in real estate, bond and stock markets in several major economies; and

- the dynamism of the economies of China and, to a lesser extent, India.

The performance of the larger economies and economic regions was not uniform in 2005. In the advanced economies, GDP growth slowed to 2.7% last year, from 3.3% in 2004. Among these economies, the fastest increase was recorded in the USA, where GDP grew by 3.5%, while the continued recovery of the Japanese economy, with GDP growth accelerating to 2.7%, from 2.3% in 2004, is noteworthy. In the euro area, GDP growth slowed down to 1.3%, from 2.1% in 2004. In the emerging markets and developing economies, which produce approximately 48% of the global output, GDP growth remained high, though slightly lower than in the previous year (7.2% in 2005, from 7.6% in 2004). Among these economies, those of China and India continued to record the best performances, with growth rates of around 10% and 8%, respectively. Both these economies are becoming ever stronger driving forces of both regional and global economic growth.

Despite the large increase in the price of oil and the rise in the prices of other commodities, inflation in general rose only slightly, due to moderate wage increases and the downward pressure on prices resulting from the globalisation of product and service markets and the ever increasing participation in world trade of countries with low production costs. Consumer prices (on the basis of the CPI) rose by 2.3% in 2005 in the advanced economies, compared with 2% in 2004, while it is estimated that they rose by 5.4% in other economies, compared with 5.7% in 2004. International crude oil prices continued to move upwards in 2005 for the fourth consecutive year. At average annual levels, the average international price of various types of crude oil was $53.4 per barrel in 2005, i.e. up 41.3% in comparison with 2004 and 114% in comparison with 2002.\(^1\) Non-fuel commodity prices (in US dollars) continued to increase in 2005 due to strong international demand, but the rate of increase dropped to 10.3%, from 18.5% in 2004.

The gradual removal of the expansionary stance of monetary policy in many major economies and the increased credibility of central banks in these countries concerning their commitment to maintaining low inflation rates both contributed to the dampening of inflationary trends and expectations. Indeed, the monetary policy stance became less relaxed in 2005 in the USA, where the targeted interest rate was raised eight times during the year and again in January and March 2006 to reach 4.75% (from 2.25% at the end of 2004), while in the euro area the key ECB rate was raised in

\(^1\) In euro terms, the average annual price of Brent crude oil rose by 46.2% in 2005 in comparison with 2004 and by 68% in comparison with 2002 (ECB, *Monthly Bulletin*, January 2006).
December 2005 and again on 2 March 2006, thus increasing by 50 basis points in total to 2.5%. Central bank rates were raised in Canada and Switzerland, while the Bank of Japan announced at the beginning of March 2006 that it would gradually move away from its particularly relaxed monetary policy. In the foreign exchange markets, in December 2004 the US dollar reached its lowest levels since 1995 in nominal effective exchange rate terms and then began to appreciate. This increase was maintained, though with some fluctuations, for the whole of 2005. However, at average annual levels, the dollar exchange rate remained virtually unchanged in comparison with 2004. The Japanese yen, which had been appreciating against the dollar for two years, remained virtually stable against the American currency in 2005.

The fiscal policy stance in 2005 was restrictive in the seven largest advanced economies as a whole (G-7), as the structural deficit of general government as a percentage of potential output declined to 3.6% compared with 4.0% in 2004.

Prospects for the global economy are positive for 2006. According to recent IMF forecasts, the growth rate of global GDP will remain about the same as in 2005, reaching 4.9%, while the performance of the various regions will display convergence. The rate of GDP increase is forecast to accelerate slightly to 3.0% in the advanced economies, while it will slow down slightly to 6.9% in the other economies. As for individual countries, prospects for 2006 remain favourable for the US and Japan, where GDP increases of 3.4% and 2.8% respectively are forecast, while prospects for the euro area have improved too. High rates of GDP growth are expected in China, India and Russia. The above forecasts for 2006 are based on the assumption that the effect of those factors that contributed to world growth in 2004-2005 will be maintained. However, the following continue to be important factors of risk and uncertainty as regards keeping global economic growth rates high and inflation low: (i) the volatility and the increase in the international price of crude oil1 and commodity prices, (ii) the eventuality of an abrupt correction of the international macroeconomic imbalances (which are reflected in the large and widening US current account deficit and the corresponding surpluses in the main emerging market economies as well as in the low rates of saving on the part of households in certain advanced industrial countries) and (iii) the excessive increase in liquidity in recent years and the underestimation of credit and market risks, particularly in the event of a return of nominal and real interest rates to higher levels.

2.2 Economic developments in the euro area

In the euro area, the economic growth rate slowed in 2005, reaching an annual average of 1.3%. The main causes behind this development are estimated to have been the

1 The price of Brent crude oil exceeded $70/barrel in the third week of April this year.
large increase in crude oil prices, the lagged impact of the appreciation of the euro in 2004 and the temporary slowdown in global demand in the first half of 2005.

The deceleration in the quarterly GDP growth rate in the fourth quarter of 2005 to 0.3%, from 0.7% in the third quarter, is estimated to have been temporary, as recent indications and survey results point to a speed-up in economic growth in the quarters to come.

HICP inflation in the euro area remained higher than 2% for most of 2005, standing at 2.2% at average annual levels. The main factor behind the persistence of inflation above 2% was the sharp increase in oil prices, but increases in indirect taxes and administered prices in certain euro area countries also contributed to this development. It should be noted that core inflation, i.e. inflation as measured on the basis of the HICP excluding energy and unprocessed food prices, stood at 1.5% in 2005.

In 2005, a small improvement was noted in the fiscal position of the euro area as a whole, as the general government deficit is estimated to have narrowed to 2.4% of GDP, compared with 2.8% of GDP in 2004. As for developments in individual countries, France, Germany, Greece and the Netherlands all reduced their deficit, whereas a considerable increase in the deficit was reported by Italy and Portugal. At an institutional level, account should be taken of the reform of the Stability and Growth Pact, which regards the EU as a whole and the euro area countries in particular.

The euro depreciated on foreign exchange markets in 2005 following four successive years of appreciation. At average annual levels, the broad nominal effective exchange rate of the euro, which had appreciated by 12.4% in 2003 and 4.1% in 2004, depreciated by 1.4% in 2005. The course of the real effective exchange rate ran parallel to that of the nominal exchange rate.

It is expected that the depreciation of the euro will, with some time lag, strengthen the recovery of economic activity in the euro area, whose export performance is a major factor underpinning its growth rate. More generally, prospects for the euro area economy in 2006 are better than in the previous year as, apart from external demand, business investment has already strengthened and an increase is forecast in private consumption, reflecting the increase in real disposable income and employment. According to the ECB staff, the increase in GDP in the euro area is projected to be between 1.7% and 2.5% in 2006, while HICP inflation is projected to be between 1.9% and 2.5%. Inflation projections are based on the assumption that the tendency for moderate wage increases, which have been characteristic of the euro area generally in recent years, will continue. The European Commission forecasts an increase of 1.9% in GDP and inflation of 2.2%. Finally, according to the IMF (April 2006), the rate of GDP growth is expected to reach 2.0% in the current year, while inflation should drop slightly to 2.1%.

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1 For the major changes to the Pact and for the opinions of the European Central Bank concerning these changes, see Bank of Greece, *Monetary Policy – Interim Report 2005*, October 2005, Box VI.1, pp 127-132.
2 Indicator of bilateral exchange rate developments on the basis of the external trade of the euro area with its 42 major trading partners.
Globalisation — opportunities and challenges

Public opinion as regards the way in which the ever faster process of global economic integration affects individual economies is dominated, especially in Europe, by concerns over job losses, a reduction in salaries and, in general, a drop in the level of social welfare. These concerns are not new, but they have been reinforced by the following factors:

- The rate of global economic integration has been accelerating since the second half of the 1990s following China’s and India’s dynamic appearance on the international economic stage. These economies have a huge supply of labour characterised by low cost and a relatively high level of technical expertise. Their annual growth rates — around 10% for China and 8% for India in recent years — give an indication of the dynamism of these economies. Note that China is already the second largest economy in the world after the US based on purchasing power parities and the fourth largest based on market exchange rates.

- Productive activities in manufacturing and services have become increasingly fragmented into different production units in accordance with the principle of comparative advantage. In addition, technological developments which have taken place in the Information Technology and Communications sectors have transformed services which were previously not marketable internationally — and as a result were sheltered from international competition — into internationally marketable services. Indeed, many activities and, correspondingly, many jobs can now be seen to be facing international competition and the possible transfer of production to countries with low costs (see also Box III.2).

- Immigration (or free mobility of workers in the case of new member countries of the EU) is another mechanism by which economic activities which previously involved non-marketable goods and services are now exposed to intense competition, as the domestic labour force faces competition in sectors such as construction, hotel and restaurant services and social and personal services.

- The above developments have taken place against a background of relatively low rates of economic growth and persistently high unemployment rates in much of the EU. They have led to intense debate concerning the competitiveness of the European economy and the consequences of globalisation for jobs and salaries.

In contrast to the distrust shown by a large segment of public opinion, most economic analysts claim that globalisation — a key element of which is further deregulation and the expansion of international trade — is a major springboard for rising levels of prosperity for the global economy as a whole, because it leads to greater competition and innovation and to a larger role for new sectors in which individual countries enjoy a comparative advantage. Indeed, historical experience clearly shows that progress towards economic unification has never resulted in a net reduction in employment, except only temporarily or for very short periods.

As major markets grow further, globalisation offers enormous opportunities for European businesses to increase their exports and transfer part of their activities to countries where production costs are low, so as to remain competitive. To take advantage of
the benefits which may accrue from this process, productive structures must change so that
they become more specialised and expand into new sectors of economic activity in which
each country has a comparative advantage.

Protective policies for domestic markets and sectors (following the logic of protec-
tionism) not only reduce economic efficiency, revenue and job opportunities in the long
run, but also weaken governments’ negotiating power in discussions concerning the
removal of barriers to international trade put in place by other countries. This undermines
efforts to create jobs in sectors which would benefit from economic unification. Moreover,
the practice of protecting existing enterprises and sectors or specific jobs from new sources
of competition has historically been proven to be ineffective and costly.

According to conclusions drawn by the ECOFIN Council last December concern-
ing the response to the challenges of globalisation, Europe will derive full benefit from,
and minimise the risks of, globalisation only by further reforming its labour and product
markets in order to ensure that funds are rapidly made available for alternative uses based
on the principle of comparative advantage. In addition, long-term policies orientated
towards growth and stability encourage entrepreneurial initiatives and contribute thereby
to attracting businesses, stimulating private investment, improving conditions for struc-
tural adjustment and, more generally, strengthening economies’ ability to adapt success-
fully to global economic changes.

3. MACROECONOMIC DEVELOPMENTS IN GREECE IN 2005

3.1 Economic activity

In 2005 the growth rate of GDP (at constant prices) slowed down to 3.7% (accord-
ing to the latest NSSG estimates), from 4.7% in 2004 and an annual average of 4.4% over
the period 2000-2003. Despite the slowdown, the performance of the Greek economy in
2005 is considered satisfactory, given that growth was achieved against a backdrop of fis-
cal consolidation and a significant rise in international energy prices, which put a burden
on household incomes and weighed unfavourably on business confidence. Factors that
helped sustain a satisfactory level of GDP growth in 2005 include the favourable monetary
and credit conditions (see Chart IV.12), which enabled the further financing of household
expenditure, as well as the favourable international environment.

The Greek economy remains one of the fastest growing economies of the EU-15
along with Ireland and Luxembourg, outperforming the euro area average by a consider-
able margin (see Chart II.1). However, its growth rate falls short of that of several new EU
Member States, while its per capita GDP (in Purchasing Power Standards-PPS) continues
to lag behind and was 22.6% below the EU-15 average in 2005.

Although the growth of private consumption slowed down markedly to 3.7% in 2005,
from 4.7% in 2004, households’ consumption expenditure was once again the main factor
driving domestic demand, making a 2.6 percentage point contribution to GDP growth.\footnote{Public consumption and total investment made a zero cumulative contribution.} Lower private consumption growth was due to a slowdown in the growth rate of employment and the real average take-home earnings of employees in the economy as a whole, as well as in the growth of other income. A further increase, during 2005, in the value of the stock of dwellings, which are the main asset of households in Greece, contributed to some extent to keeping the slowdown in private consumption growth small. More generally, the reduced dependence of consumption on short-term income fluctuations is chiefly due to the easier access of many households to consumer credit following the liberalisation of the financial system. The growth rate of public consumption stood at 3.1\% in 2005 (2004: 2.8\%), partly because of the continued rise in general government employment.

Total fixed capital formation dropped by 1.4\% in 2005, having risen by 5.7\% in 2004. Specifically, public investment was cut drastically in 2005 (it dropped by 13.6\% at constant prices, following a 7.7\% increase in 2004) in the context of fiscal consolidation. The growth rate of business investment (including public enterprises’ investment) slowed markedly to 1.5\%, from 7.0\% in 2004. It seems that a stealthy rise in uncertainty about the outlook of demand, reflected in a decline in business confidence indicators, especially in the first half of
2005, prevented the taking of new investment initiatives. In addition, lower levels of labour costs and taxation in neighbouring countries have enticed certain Greek companies to invest in and — in some cases — relocate to these countries (see Box III.2). However, the outlook for business investment in Greece is positive, taking into account the satisfactory profitability and financial position of many firms as well as the easy access to financing through the banking system and the capital market. A boost to business investment can be expected from the provisions of the development law and the tax law, as well as the law establishing a framework for public-private partnerships. The evidence so far (the number of investment plans submitted on the basis of the provisions of the development law) is encouraging.

Investment in dwellings dropped slightly (by 1.4%) in 2005 for the second year in a row. However, the growth rate of the outstanding balance of housing loans (including securitised loans) rose to 33.4% in December 2005, from 27.2% in December 2004, indicating that demand for dwellings is met, to a large extent, by the existing stock of dwellings.

The change in the real external balance of goods and services on a national accounts basis made a significant contribution of 1.1 percentage points to GDP growth in 2005. This can be attributed to an increase in exports of goods, in conjunction with a slight decrease (of 1.2%, according to NSSG estimates) in imports of goods and services. Specifically, imports of goods remained unchanged, mainly owing to the exceptionally large volume of imports in the previous years in the context of the Olympic Games. The growth rate of imports of goods and services on a national accounts basis slowed down considerably to 3.0% in 2005, from 11.5% in 2004, reflecting a drastic deceleration in the growth rate of exports of services, especially shipping receipts, in 2005. However, the growth rate of exports of goods accelerated to 8.2% in 2005 (according to NSSG estimates), from −2.5% in 2004. Nevertheless, in the last five years, the rise in exports of goods has fallen short of the increase in external demand, reflecting a cumulative loss of competitiveness over the same period.

### 3.2 Employment and unemployment

Developments in the labour market in 2005 were marked by an increase in employment (up 1.3% relative to 2004, according to Labour Force Survey — LFS — data), a slightly larger (1.8%) rise in total hours worked¹ and a 0.6 percentage point decrease in the unemployment rate, which fell to 9.9%.

The rise in employment mainly stemmed from salaried employment² and was concentrated in parts of the services sector (such as trade, hotels and restaurants) and, in terms of geographical breakdown, in the south of the country and the islands. Excluding Central Macedonia, where employment rose more than in the country as a whole, the

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¹ Total hours worked are calculated by multiplying the average weekly working hours per worker by the number of workers.
² According to LFS data, the number of salaried employees rose by 1.8% in 2005.
other regions of Northern Greece (Western and Eastern Macedonia and Thrace) and the regions of Epirus and Thessaly recorded a fall in employment. This reflects the decline of specific sectors of economic activity (e.g. textiles – see Box IX.1), which were important in the particular area.

The increase in salaried employment in 2005 represents a continuation of a long-term upward trend explained by the gradual contraction of the agricultural sector, where the share of self-employment is higher than in the economy as a whole, and by the growing size of enterprises in all sectors.

In recent years, both the overall change in salaried employment and sectoral developments have exhibited a stronger correlation with economic activity than in the period between 1995 and early 2000. This may have occurred because, particularly since 2003, the contribution of consumption to growth has been much larger than that of investment. It is believed that investment expenditure possibly creates fewer jobs in the short-term than consumption expenditure does. This stronger link between growth and employ-

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1 For detailed data, see Chapter III.4.
2 This view in no way refutes the contribution of investment to growth and job creation in the long term, which is also confirmed by historical data.
ment can also be explained by the need of enterprises to restructure and rationalise their operation in the late 1990s, which, according to IOBE surveys, led to extensive staff reductions; this phenomenon does not seem so strong now.

It should be noted that in the past few years there has been no change in the share of employees working under indefinite-term contracts or in the share of full-time employment (see also Chapter III.4). Still, it seems that the use of fixed-term or part-time contracts is more extensive among the newly-hired. Moreover, the upward trend in employment in recent years has been accompanied by a decline in the number of persons with two jobs. This decline is not due to the contraction of the primary sector, as it is also observed both in the economy as a whole and in the non-agricultural sector.

Turning to developments in unemployment, the rate of unemployment declined in 2005 as shown by LFS data and by Manpower Employment Organisation (OAED) data on the number of registered unemployed. According to the LFS definition and data, the average number of unemployed in 2005 was 477,000, i.e. it fell by 28,000 persons relative to 2004. As mentioned above, the average unemployment rate decreased from 10.5% in 2004 to 9.9% in 2005 (see Chart II.2). Despite the fall in the rate of total unemployment, the rates of youth unemployment (people aged 15-24) and of female unemployment are still very high, 25.9% and 15.3% respectively.

The reduction in the number of unemployed was the net result of the abovementioned increase in employment in the services sector and the decrease in employment in other sectors (e.g. the primary sector and manufacturing), as well as the increase in the number of economically inactive persons, especially young people aged 20-24.

The long-term prospects of employment will certainly depend on raising the economy’s production potential. According to the baseline scenario of the Updated Stability and Growth Programme of December 2005, the Ministry of Economy and Finance projects an average annual increase of 1.6% in employment for the three years 2006-2008 (or 1.4% according to the pessimistic scenario). While the rise in employment would reduce to some extent the number of the unemployed, this development may be hampered by (i) the fact that a large share of the unemployed (54.2%) are long-term unemployed, making it increasingly unlikely that they (or at least the older of them) will find a job and (ii) the mismatch between the qualifications required by enterprises and those provided by the education system.

The low rate of employment (workers aged 15-64 as a percentage of the population aged 15-64), the annual average level of which came to just 60.1% in 2005 (see also

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2 Fixed-term contracts are of course to be expected as far as new recruits are concerned. Furthermore, the increase in employment in certain sectors (e.g. trade, hotels and restaurants) favours to some extent recourse to part-time employment.
3 The Federation of Greek Industries has pointed this out recently in its Competitiveness Bulletin No. 37 (February 2006), based on a 2004 survey on skills most demanded by enterprises.
Chart II.3) against a target of 70% for 2010 as set by the Lisbon strategy, and the high rate of unemployment are the long-term challenges facing economic policy in respect of the labour market. Policies in this direction are certainly not independent of those aimed at strengthening competitiveness (see Section 9.3).

3.3 Inflation

Inflation increased in 2005 in Greece, chiefly due to exogenous factors, such as the sharper rise in the price of crude oil and the increase in indirect taxation. In particular, the average annual inflation based on the Harmonised Index of Consumer Prices (HICP) accelerated to 3.5% in 2005, from 3.0% in 2004. By contrast, the average annual level of core inflation, as measured by the HICP excluding energy and unprocessed food, fell to 3.2% in 2005 from 3.4% in 2004. By either measure, however, inflation remained high.

Given that in the euro area the average annual rate of inflation was almost unchanged and core inflation fell appreciably, the headline inflation differential between Greece and the euro area increased to 1.3 percentage points (from 0.9 percentage point
in 2004) and the core inflation differential increased to 1.7 percentage points (from 1.3 percentage points in 2004 – see Charts II.4 and II.5).

The fact that the increase in headline inflation was relatively limited (despite the rise in indirect taxation and the oil price hike) and smaller than anticipated in last year’s Annual Report, as well as the slight drop in core inflation were due to a number of factors.

First, the increase in indirect taxation was not fully passed on to consumer prices, either because firms absorbed part of this increase in the face of weaker demand or because of tax evasion, as evidenced by government revenue from VAT increasing only slightly.

Second, the rate of increase in the prices of non-fuel imports, despite some acceleration, remained very low – a development associated with the growth of low-cost imports (chiefly clothing-footwear and consumer durables) from Asian countries.

Third, although public utility rates (and certain fees determined by government) increased more — on average — than in 2004, the increase was relatively limited in comparison with what some public enterprises had asked for in order to compensate for rises in certain costs.

Fourth, the Ministry of Development and the Competition Commission intensified market surveillance.
Fifth, demand-induced inflationary pressures were weaker in 2005 than in 2004 and the profit margins of non-financial corporations narrowed. Indeed, the growth rate of private consumption remained high, but decelerated. Moreover, according to available estimates, the output gap of the Greek economy declined in 2005, though remaining positive for a number of years (i.e. the current output exceeds potential output). Nevertheless, excess demand continued to contribute to the persistence of inflation at high levels, albeit less than in 2004.

Finally, the growth rate of unit labour costs in the business sector fell slightly, still remaining higher than that of the euro area.

The above factors more than offset the inflationary impact of the faster increase — compared with 2004 — in the prices of oil and other imports as well as the rise in indirect tax rates. The fall in core inflation probably also reflects the fact that certain firms — due to competitiveness considerations — refrain from fully passing increased costs on to prices. However, as long as such firms fail to increase their productivity, to cut down on their production costs and to satisfactorily enhance their competitiveness, they will operate at a loss and eventually run a higher risk of going out of business.

The positive differential between Greek inflation and inflation of the euro area as a whole can partly be attributed to the convergence of price and income levels — in particular to the faster increase in the prices of certain non-tradable goods and services — which is associ-
ated with the economy’s catching up process (the so-called “Balassa-Samuelson effect”). Moreover, it should be recalled that the persistence of core inflation at relatively high levels and its positive differential vis-à-vis the euro area are due to macroeconomic factors connected both to demand and production costs (as well as the interaction between the two) and inadequately competitive conditions in certain markets which do not operate efficiently. Depending on the case, price developments are negatively affected by, in addition to cost factors, excess demand, the price inelasticity of demand (for certain goods), exploitation of dominant market position by some enterprises, as well as concerted practices or collusion between firms.

3.4 Balance of payments

In 2005 the current account deficit increased considerably to €14.3 billion or 7.9% of GDP, compared with 6.4% of GDP in 2004 and 7.7% on average during 2000-2003. Moreover, the combined current account and capital transfers balances—which correspond to Greece’s net borrowing position—showed a deficit of 6.8% of GDP in 2005, compared with 4.9% in 2004 and 6.3% during 2000-2003.

The fact that the current account deficit as a percentage of GDP has been high over the last few years is a result of (i) the relatively high level of investment, (ii) the shortfall of savings due mainly to fiscal deficits, but also to households’ consumption behaviour and (iii) the decline in Greece’s global price competitiveness and the low level of its structural competitiveness.

More specifically, gross fixed capital formation rose to 23.7% of GDP in 2005 (see Chart II.6), compared with around 20% in the euro area, and it has been on an upward trend over the last decade (from an average of 19.6% during 1996-1997, when the current account balance showed a small deficit). Obviously, a current account deficit is an expected development for an economy in the process of real convergence, to the extent that this deficit corresponds to expenditure for productive investment.

At the same time, total savings reached only 14.6% of GDP in 2005, adversely affected by (i) the high fiscal deficit, which implies negative saving for the general government sector (estimated at –1.2% of GDP in 2005), and (ii) the rapid increase in household borrowing, which has a negative impact on household saving.

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1 According to the new international methodology, the current account no longer includes the capital transfers balance.
3 National accounts data on households’ disposable income and saving are not yet available for 2005. Data are available only on the disposable income and saving of the private sector, which includes the whole economy except general government. According to these data, private saving as a percentage of disposable income in the private sector displayed an upward trend during 2002-2004 (but declined in 2005). The upward trend during 2002-2004 has two possible explanations: first, the increase in private saving probably reflects an increase in saving of the business sector. Second, it should be noted that the decline in public saving —e.g. through a reduction in taxes or a rise in transfer payments—tends to be partly offset by a rise in private saving, as a percentage of GDP, as households’ disposable income also increases.
The low level of competitiveness is mainly a result of the structural weaknesses of the economy, the impact of which becomes stronger in the current period due to the large structural changes underway in the world economy, such as the entry into international markets of certain emerging economies of Asia and central and eastern Europe which have a huge pool of low-cost labour. So far, the Greek economy has not been able to effectively meet this challenge by transforming itself into an economy that exports products of specialised labour and high technology, as its structural competitiveness — determined by the human capital, the regulatory framework for product and labour markets, the legal and institutional framework and the tax system — is very low.¹

Furthermore, price competitiveness has deteriorated considerably over the last five years, to a large extent due to persistently high inflation. Price competitiveness is calculated using real effective exchange rate indices vis-à-vis 27 major trading partners of Greece. It is worth noting that over the last five years the real effective exchange rate index based on

¹ According to the latest report of the World Economic Forum (Global Competitiveness Report 2005-2006, September 2005), in 2005 Greece ranked 46th out of 117 countries on the basis of the Growth Competitiveness Index (in 2004 it had ranked 37th out of 104 countries), with a weaker economic performance than the entire EU-25 except Italy and Poland. Furthermore, based on the Business Competitiveness Index, Greece’s position improved only marginally, as it ranked 40th out of 116 countries (in 2004 it had ranked 41st out of 103 countries).
relative consumer prices recorded a cumulative increase of 12.5% (0.4% in 2005), while the corresponding index based on relative unit labour costs in manufacturing increased cumulatively by 29.4% (2.6% in 2005). It should be pointed out that this development took place in a period of rapidly increasing exports of low-technology products—a field in which the Greek economy specialises—by certain emerging economies at very low prices.

The widening of the current account deficit by 1.5 percentage points of GDP in 2005 (see Chart II.7) is due to the rise in the price of crude oil on the world markets, the increase in purchases of new sea-going vessels, the higher interest payments on external debt and the narrowing of the current transfers surplus (mainly vis-à-vis the EU). The negative impact of the aforementioned factors—2.9 percentage points of GDP in total—was partly offset by the significant improvement of the trade balance excluding oil and ships (the deficit of which contracted by 1.4 percentage points of GDP).

The overall trade balance recorded a slight deterioration in 2005 (the deficit widened by 0.1 percentage point of GDP), reflecting significantly diverging developments in its main components. On the one hand, a favourable development was the narrowing of the trade deficit excluding fuel and ships, as exports (excluding fuel and ships) increased,
though less than global demand, while the corresponding imports decreased compared with the particularly high levels in 2004. On the other hand, the net fuel import bill increased considerably due to the rise in the price of crude oil on world markets, while the ships’ balance recorded a substantial deficit, compared with a small surplus in 2004, due to increased payments for the purchase of new sea-going vessels.

The other main components of the current account balance also deteriorated. Specifically, the services surplus narrowed as a percentage of GDP (by 0.5 percentage point of GDP). This is due to the fact that, while net travel receipts in euro terms increased considerably and remained stable as a percentage of GDP, net receipts from transport and other services, which had risen rapidly in 2004, increased only marginally, in euro terms, in 2005, largely on account of the decline in freight charges. Furthermore, the income account deficit widened as a result of the increase in net interest payments, which was mainly due to the large increase in non-residents’ holdings of Greek government paper. Finally, the current transfers surplus decreased as a result of both the rise in gross payments of general government to the EU and the fall in net receipts of “other” sectors (mainly emigrants’ remittances).

In 2005, financial investment, i.e. the sum of direct, portfolio and “other” investment, showed a net inflow of €12.6 billion or 6.9% of GDP. Direct investment—which had recorded a small surplus in the previous years—recorded a net outflow in 2005, reflecting the increase in residents’ investment abroad (mainly Greek banks investing in neighbouring countries) and the relatively limited inflow of non-residents’ investment in Greece. Portfolio investment showed a significant net inflow of €7.3 billion, mainly on account of purchases of Greek government bonds by foreign investors (€20.7 billion) and, to a lesser extent, shares (€5 billion). Moreover, residents placed considerable funds in foreign bonds (€14.3 billion), while smaller amounts were placed in Treasury bills and shares. “Other” investment showed a net inflow of €5.9 billion. In particular, about half of the substantial rise in non-residents’ investment in deposits and repos in Greece (€14.2 billion) was offset by the increase in residents’ similar investment abroad. Finally, Greece’s reserve assets declined only marginally.

4. FISCAL DEVELOPMENTS AND PROSPECTS

4.1 Deficit reduction

Since May 2004, Greece has been subject to the Excessive Deficit Procedure (EDP). In the context of the EDP, the ECOFIN Council initially (in July 2004) submitted recommendations to Greece to bring its deficit to below 3% of GDP by 2005. Later, however (in February 2005), it extended this deadline to 2006. In order to reduce the deficit so that Greece could comply with the recommendations of EU bodies, strong efforts were made in 2005 to achieve a significant narrowing of the deficit and restrictive fiscal policies were introduced (see Chart II.8). Specifically, according to data submitted to Eurostat at
the end of March this year in the context of the EDP, the general government deficit was reduced from 6.9% of GDP in 2004 to 4.5% in 2005. At the same time, a primary surplus of 0.5% of GDP was generated, compared with a primary deficit of 1.5% in 2004 (see Table II.1 and Chart II.9). This significant narrowing of the deficit was achieved despite the deceleration in economic growth and the shortfall in revenue. However, despite the reduction, Greece’s public deficit as a percentage of GDP was the second highest in the euro area and the third highest in the EU-25.¹

The narrowing of the general government deficit by 2.4 percentage points of GDP in 2005 compared with 2004 is broadly equivalent to the reduction envisaged in the 2005 Budget submitted in November 2004 and in the “Revised Updated Stability and Growth Programme 2004-2007” of March 2005. The above budget forecast a reduction of 2.5 percentage points of GDP (from 5.3% in 2004 to 2.8% in 2005), while the Programme forecast a reduction of 2.6 percentage points of GDP (from 6.1% in 2004, according to its then revised estimates, to 3.5% in 2005).

According to final estimates, however, the deficit reached 4.5% of GDP, i.e. it exceeded the November 2004 forecast by 1.7% of GDP and the March 2005 forecast, i.e.

¹ Higher deficits were reported by Portugal (6.0% of GDP) and Hungary (6.1% of GDP).
### Table II.1

**Fiscal Deficits**

(Million euro)

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>Budget 2005</th>
<th>Outcome 2005*</th>
<th>Budget 2006</th>
<th>Percentage changes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Central government (administrative basis)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Revenue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7.8</td>
</tr>
<tr>
<td>% of GDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>26.8</td>
</tr>
<tr>
<td>1. Ordinary budget</td>
<td>39,881</td>
<td>42,055</td>
<td>46,310</td>
<td>44,760</td>
<td>48,750</td>
<td>5.5</td>
</tr>
<tr>
<td>2. Public investment budget</td>
<td>1,823</td>
<td>2,894</td>
<td>3,400</td>
<td>2,765</td>
<td>3,490</td>
<td>58.7</td>
</tr>
<tr>
<td><strong>Expenditure</strong></td>
<td>51,551</td>
<td>57,810</td>
<td>58,227</td>
<td>58,800</td>
<td>60,790</td>
<td>12.1</td>
</tr>
<tr>
<td>% of GDP</td>
<td>33.2</td>
<td>34.3</td>
<td>32.8</td>
<td>32.5</td>
<td>37.2</td>
<td></td>
</tr>
<tr>
<td>1.1 Ordinary budget</td>
<td>43,116</td>
<td>48,288</td>
<td>50,177</td>
<td>51,282</td>
<td>52,390</td>
<td>12.0</td>
</tr>
<tr>
<td>- Interest payments</td>
<td>9,416</td>
<td>9,464</td>
<td>9,800</td>
<td>9,774</td>
<td>9,600</td>
<td>0.5</td>
</tr>
<tr>
<td>1.2 Ordinary budget primary expenditure</td>
<td>33,700</td>
<td>38,824</td>
<td>40,377</td>
<td>41,508</td>
<td>42,790</td>
<td>15.2</td>
</tr>
<tr>
<td>% of GDP</td>
<td>21.7</td>
<td>23.1</td>
<td>22.8</td>
<td>22.9</td>
<td>22.0</td>
<td></td>
</tr>
<tr>
<td>2. Public investment budget</td>
<td>8,435</td>
<td>9,522</td>
<td>8,050</td>
<td>7,518</td>
<td>8,400</td>
<td>12.9</td>
</tr>
<tr>
<td><strong>Net deficit</strong></td>
<td>-9,847</td>
<td>-12,861</td>
<td>-8,517</td>
<td>-11,275</td>
<td>-8,450</td>
<td></td>
</tr>
<tr>
<td>% of GDP</td>
<td>-6.3</td>
<td>-7.6</td>
<td>-4.8</td>
<td>-6.2</td>
<td>-4.4</td>
<td></td>
</tr>
<tr>
<td><strong>General government (national accounts basis)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Deficit (% of GDP)</strong></td>
<td>-5.8</td>
<td>-6.9</td>
<td>-2.8</td>
<td>-4.5</td>
<td>-2.6</td>
<td></td>
</tr>
<tr>
<td><strong>Primary deficit(-)/surplus (+)</strong></td>
<td>-0.3</td>
<td>-1.5</td>
<td>2.6</td>
<td>0.5</td>
<td>2.1</td>
<td></td>
</tr>
</tbody>
</table>

1. It should be noted that by the "fiscal audit" the general government deficit on a national accounts basis was revised, whereas the central government deficit on an administrative basis was not revised.
2. For comparability purposes, tax refunds have been recorded in expenditure and have not been deducted from revenue.
3. Including expenditure of €0.75 million that was not included in estimates for 2005 published in the Introductory Report on the Budget for 2006.
4. Excluding amortisation payments.
5. Including the subsidisation of OTE's personnel insurance fund (TAP-OTE).
6. Including extraordinary revenue of €1,100 million from dividends, the sale of concession rights and the clearance of revenue from fines and licences.

* Provisional data.

Sources: Ministry of Economy and Finance (State General Accounting Office) and NSSG.
that made before the latest revision of estimates concerning the deficit in 2004 and 2005, by 1.0% of GDP (see Table II.1 and Chart II.10). The overrun of budget forecasts is chiefly due to the shortfall of 0.9% and 0.3% of GDP, respectively, in ordinary budget and public investment budget revenue and to the excess of ordinary budget expenditure by 0.6% of GDP. It also reflects, to a lesser extent, the downward revision of the general government (excluding central government) surplus for the years 2004 and 2005 (by 0.2% of GDP). The increase resulting from these factors was partly offset (by 0.3% of GDP) by the lower than forecast public investment budget spending.

The reduction in the general government deficit stemmed mainly from the state budget, whose deficit narrowed by 1.4 percentage points of GDP (data on an administrative basis – see Table II.1). This development is to a large degree due to the reduction of €2,004 million or 21% in spending on investment compared with 2004, as well as to the containment of current budget expenditure, the growth rate of which was reduced to 6.2% in 2005, from 12.0% in 2004. By contrast, revenue did not contribute to fiscal adjustment, as it fell short of budget forecasts by €1,550 million, rising by just 6.4%.

1 This includes spending of €675 million which was not included in estimates for 2005, published in the Introductory Report on the 2006 Budget.
In more detail, looking at individual categories of expenditure under the ordinary budget, primary expenditure rose by 6.9%, while interest payments increased by 3.3%. Regarding primary expenditure, there was a significant upturn in payments for grants (17.4%), restitution of third-party revenue (8.1%), contributions to the European Union (9.4%) and “other expenses” (9.9%). By contrast, tax refunds fell by 8.8%.

Ordinary budget revenue yields were low until autumn but rose in the final two months of the year, thus rising for the whole of 2005 by 6.4% to €44,760 million. Despite this recovery, revenue in 2005 fell short of budget forecasts (€46,310 million) by €1,550 million. This shortfall exclusively regards receipts of indirect taxes. By contrast, direct tax revenue exceeded budget forecasts. Note that revenue in 2005 benefited from the increases, as of 1 April 2005, in VAT rates and in tax rates on tobacco and alcoholic beverages. In addition, revenue was also boosted by the rise in international oil prices (VAT revenue) and by the expedition of real estate transfers in anticipation of an increase in “objective” (i.e. set for tax purposes) real estate prices and the imposition of VAT on newly built property as of 1 January 2006.

1 See previous footnote.
In particular, there was a significant increase in revenue from tax arrears (41.6%), real estate transfer tax (56.2%) and the withholding of personal income tax (8.4%). By contrast, limited increases (and a shortfall against budget forecasts) were observed in receipts from VAT on domestic and imported products (2.8%), from the special consumption tax on liquid fuels (0.7%)\(^1\) and from tobacco tax (0.7%). All other categories of indirect taxation yielded reduced revenue compared with 2004. Finally, public investment budget revenue fell by 4.5% compared with 2004.

4.2 The evolution of public debt

According to revised data, the consolidated debt of general government declined to 107.5% of GDP in 2005, from 108.5% in 2004 (see Chart II.11 and Table II.2). Based on the provisional data available for 2005, public debt in Greece is the highest among the 25 countries of the European Union,\(^2\) at almost twice the Maastricht Treaty reference value (60% of GDP).

\(^1\) It should be recalled that the Special Consumption Tax on Fuels is set per unit of volume and not on the basis of value.

\(^2\) Public debt in Italy reached 106.4% of GDP.
# Table II.2

**Decomposition of Changes in the General Government Debt-to-GDP Ratio**

(In percentage points of GDP)

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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>General government debt ratio</td>
<td>79.6</td>
<td>82.2</td>
<td>87.8</td>
<td>110.1</td>
<td>107.9</td>
<td>108.7</td>
<td>111.3</td>
<td>114.0</td>
<td>112.4</td>
<td>112.3</td>
<td>113.3</td>
<td>114.1</td>
<td>110.7</td>
<td>107.8</td>
<td>108.5</td>
<td>107.5</td>
</tr>
<tr>
<td>Changes in the debt ratio</td>
<td>10.6</td>
<td>2.6</td>
<td>5.6</td>
<td>22.3</td>
<td>-2.2</td>
<td>0.8</td>
<td>2.6</td>
<td>2.7</td>
<td>-1.6</td>
<td>-0.1</td>
<td>1.0</td>
<td>0.8</td>
<td>-3.4</td>
<td>-2.9</td>
<td>0.7</td>
<td>-1.0</td>
</tr>
<tr>
<td>Effect of primary balance</td>
<td>6.5</td>
<td>3.0</td>
<td>2.1</td>
<td>2.2</td>
<td>-2.7</td>
<td>-2.6</td>
<td>-4.6</td>
<td>-4.0</td>
<td>-5.0</td>
<td>-4.9</td>
<td>...</td>
<td>-2.2</td>
<td>-1.1</td>
<td>0.3</td>
<td>1.5</td>
<td>-0.5</td>
</tr>
<tr>
<td>Effect of GDP changes and interest rate changes</td>
<td>-4.0</td>
<td>-7.8</td>
<td>-1.7</td>
<td>-0.4</td>
<td>-1.1</td>
<td>0.3</td>
<td>-0.8</td>
<td>1.2</td>
<td>...</td>
<td>-0.6</td>
<td>-2.4</td>
<td>-3.3</td>
<td>-3.0</td>
<td>-2.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock-flow adjustment</td>
<td>8.1</td>
<td>7.4</td>
<td>5.2</td>
<td>20.5</td>
<td>1.6</td>
<td>3.1</td>
<td>5.7</td>
<td>7.5</td>
<td>3.7</td>
<td>3.6</td>
<td>...</td>
<td>3.6</td>
<td>0.1</td>
<td>0.1</td>
<td>2.2</td>
<td>2.2</td>
</tr>
</tbody>
</table>

1. The formula used for the decomposition of changes in the debt-to-GDP ratio is the following:

\[
\frac{D_t - D_{t-1}}{Y_t} = \frac{PB_t}{Y_t} + \left( \frac{D_{t-1}}{Y_{t-1}} \cdot \frac{i_t - g_t}{1 + g_t} \right) + \frac{SF_t}{Y_t}
\]

where

- \(D_t\) = general government debt
- \(PB_t\) = primary balance
- \(Y_t\) = GDP at current prices
- \(g_t\) = nominal GDP growth rate
- \(i_t\) = average nominal interest rate on government debt
- \(SF_t\) = stock-flow adjustment

2. Debt figures are Eurostat estimates.

3. Owing to the revision of GDP data at current prices from 2000 onwards, year 2000 GDP is not comparable with 1999 GDP at current prices.

4. According to data submitted to Eurostat in March 2006 in the context of the Excessive Deficit Procedure.

5. Provisional data.

6. The stock-flow adjustment includes expenditure or assumption of liabilities which do not affect the deficit but increase debt, as well as revenue (e.g. privatisation proceeds) which does not affect the deficit but reduces debt.

Sources: Ministry of Economy and Finance, Eurostat and estimates by the Bank of Greece.
In the period 2001-2005 the debt-to-GDP ratio fell by approximately 1.5 percentage points of GDP per annum, thanks to a combination of high economic growth and low interest rates on public borrowing. The ratio remains, however, at very high levels, thus potentially jeopardising the success of fiscal consolidation, particularly if interest rates continue to climb or if there is a marked slowdown in economic growth. Moreover, this rate of reduction in the debt ratio is not sufficient to secure a reduction of debt to below 60% by 2015, the year in which a substantial burden is expected to be placed on the budget as a result of increased spending associated with population ageing (see also Section 9.2 below).

Following the revision of data concerning the deficit and the debt, the size of the “deficit-debt adjustment” has shrunk significantly for the years following 2000 and was, in effect, eliminated in 2002 and 2003 (see Table II.2). In 2004 and 2005, however, the “deficit-debt adjustment” stood at 2.2% of GDP per annum. This increase reflects transactions such as the repayment of public hospital debts or participation in the share capital increase of the Agricultural Bank of Greece, which had no effect on the deficit in 2005 but increased borrowing in that year.

4.3 The Excessive Deficit Procedure

In the context of the Excessive Deficit Procedure, Greece submitted on 31 October 2005 the first biannual report on progress to date and on the measures to be taken in 2006 to reduce the deficit to 3% of GDP by the end of the year. On 24 November 2005 the European Commission assessed the progress made and presented estimates according to which the reduction in the cyclically adjusted deficit in 2005 would be about 2% of GDP. The Commission reported that this reduction was consistent with Greece’s obligation to adhere strictly to the 2005 budget, in compliance with the notice sent by the ECOFIN Council on 17 February 2005. The Commission also noted that most of the adjustment was due to lower investment spending, while current spending had been constrained to an only limited degree.

As for 2006, the European Commission assessed that the forecast reduction of 0.6% of GDP in the cyclically adjusted deficit (without taking into account the additional dampening effect of extraordinary measures on the deficit) was satisfactory. It noted, how-

1 The “deficit-debt adjustment” is an estimate of the difference between the impact of factors which increase or reduce debt without, however, affecting the general government deficit. Thus, as part of the deficit-debt adjustment, revenue from privatisations contributes to reducing debt, while, in accordance with fiscal practice, it is not used to reduce deficits. In addition, the deficit-debt adjustment includes the impact of exchange rate fluctuations on the value, in euro terms, of the debt concluded in foreign currencies.

2 The biannual period is calculated from the submission of the revised Updated Stability and Growth Programme 2004-2007 in March 2005 and the relevant Decision of the ECOFIN Council on 12 April of the same year.

ever, that this adjustment was chiefly due to a reduction in interest payments rather than to a cut in primary expenditure.

### 4.4 The Updated Stability and Growth Programme (USGP) 2005-2008

In December 2005 Greece submitted to the European Commission its Updated Stability and Growth Programme (USGP) covering the period 2005-2008. The “baseline scenario” forecasts a further reduction of the public deficit to 1.7% of GDP in 2008. This continued fiscal consolidation (further to that already achieved in 2005) is expected to occur mainly in 2006, a year in which the general government deficit had initially been forecast to fall by 1.7 percentage points of GDP. However, following the upward revision of the deficit in 2005 to 4.5% of GDP, the reduction forecast for 2006 is 1.9%, instead of 1.7% of GDP (see Table II.1). By contrast, in 2007 the reduction of the deficit is to be limited to 0.3 percentage point, while for 2008 a reduction of 0.6 percentage point is projected. The consolidated debt of general government is forecast to fall from 107.5% of GDP in 2005 to 96.8% in 2008.

The forecast fiscal consolidation for the three-year period 2006-2008 is based chiefly on a curtailment of public spending by approximately 1.7% of GDP and on an increase of 0.8% of GDP in revenue. Factors which will contribute to this reduction of spending in the period 2006-2008 include the drastic cutback in public consumption (by 1.2% of GDP), as well as the reduction in interest payments and “other current expenditure” of general government. By contrast, in the same period social transfers are expected to rise by 0.9% of GDP, while investment expenditure is forecast to remain stable at 3.1% of GDP. Finally, the primary surplus is expected to grow gradually from 0.5% of GDP in 2005 to 2.8% in 2008.

The USGP 2005-2008 forecasts extraordinary one-off revenue of €1,100 million for 2006. At the same time, following the submission of the USGP, additional measures were announced (January 2006), which are expected to provide additional extraordinary revenue of approximately €900 million in 2006.

The credibility of the fiscal consolidation effort largely depends on whether the target for the 2006 deficit is achieved. However, the forecast deficit reduction in 2007 and 2008 implies a primary surplus of 2.8% of GDP in 2008; should the primary surplus remain at this level, as a percentage of GDP, after 2008, a reduction of the debt to 60% of GDP will not be achievable by 2015 — the year in which substantial increases in pension payments and healthcare costs are expected to commence (see also Section 9.2 below) — unless the necessary structural reforms are undertaken. More generally, by the end of the Programme (2008), Greece will not have met the requirements of the Stability and Growth Pact for a “budget close to balance or in surplus”. Therefore, in the period following 2008, it is advisable to seek to achieve this target at a steady pace, while ensuring that the debt-to-GDP ratio follows a downward course.
Overall, the Updated Stability Programme 2005-2008 has been favourably assessed by the European Commission\(^1\) and the ECOFIN Council,\(^2\) albeit with some significant remarks concerning, e.g., the extraordinary revenue forecast in the 2006 Budget. The major concern, however, is that the long-term sustainability of Greece’s fiscal position is “seriously threatened” by the large public debt combined with the expected burdening of public finances as a result of population ageing.

5. MONETARY AND FINANCIAL DEVELOPMENTS IN THE EURO AREA

During most of 2005, the Governing Council of the European Central Bank (ECB) kept its key interest rates unchanged at the historically low levels prevailing since their last cut in June 2003 (see Chart II.12). In the first months of 2005, the accommodative monetary policy of the ECB was based on the assessment that, despite the short-term impact of rising oil prices, there was no evidence of inflationary pressures building up and that economic conditions in the euro area remained consistent with price stability over the medium term. However, the Governing Council repeatedly stressed the need for vigilance, with respect to upside risks to price stability, mainly relating to the possibility of a further rise in oil prices and the emergence of second-round effects on prices, as well as to the fact that liquidity remained at significantly high levels. However, in the course of 2005 inflationary pressures intensified due to the further rise in oil prices and increases in administered prices and indirect taxes in some countries. Furthermore, there were expectations of a strengthening of economic activity, both in the short and the long run, while liquidity was particularly high. The Governing Council, after considering the above developments and inflation forecasts for 2006 and 2007, took the view that an adjustment of the accommodative stance of monetary policy was warranted. Thus, on 1 December, it decided to raise the ECB key rates by 25 basis points, in order to keep medium- and long-term inflation expectations anchored at levels consistent with price stability.

On 2 March 2006, the Governing Council decided to raise the ECB key rates by another 25 basis points, as upside risks to price stability had increased and the annual rate of inflation for 2006 and 2007 was projected to remain at levels higher than those compatible with price stability (ECB staff macroeconomic projections, March 2006). Thus, the minimum bid rate for the main refinancing operations came to 2.5%, the marginal lending facility rate to 3.5% and the deposit facility rate to 1.5%. According to the Governing Council, the increase in the key rates would contribute to keeping inflation expectations solidly anchored to levels consistent with price stability, which constitutes a prerequisite for monetary policy to offer ongoing support to economic growth and job creation in the euro area. Both nominal and real interest rates remain at very low levels

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1 Assessment published on 22 February 2006.
2 It published its views on 14 March 2006.
and the ECB monetary policy continues to lend support to economic activity. As regards the future, the ECB Governing Council noted that it will continue to monitor closely all developments with respect to risks to price stability and decide whether there is a need to change interest rates.

The annual rate of increase in M3 accelerated considerably in the course of 2005 and in the first months of 2006, despite some moderation in the fourth quarter of the year. The strengthening of M3 growth is mainly attributable to low interest rates, which supported demand for its most liquid components like M1, and contributed to faster credit expansion to the private sector. On the M3 counterparts side, the rate of increase in MFI longer-term financial liabilities remained robust. This, combined with the subdued growth of money market fund shares/units (which are included in M3), reflected portfolio shifts to longer-term assets, though at a slower pace than in 2004.

Money market interest rates at the shorter end of the maturity spectrum closely mirrored the evolution of key ECB rates (see Chart II.12), i.e. they remained unchanged during most of 2005 and started rising in November, amid market expectations of an increase in ECB rates. At the longer end of the maturity spectrum, interest rates remained broadly stable in the first quarter of 2005; they declined in the second quarter and started rising again at end-July, a development which continued up to the first months of 2006.
Ten-year bond yields in the euro area were volatile in the course of the year, but overall remained at low levels. MFI deposit rates remained low in 2005, while lending rates declined further in most categories of loans. In the last quarter of 2005, an upward trend was apparent in certain categories of deposit and lending rates.

Stock prices in the euro area rose in the course of 2005. The Dow Jones EURO STOXX broad index increased by 23% during 2005 and rose further in the first three months of 2006, while stock market uncertainty remained low.

6. MONETARY AND FINANCIAL DEVELOPMENTS IN GREECE

6.1 Monetary developments and interest rates

The annual growth rate of the Greek contribution to the euro area M3 (excluding currency in circulation) slowed considerably in 2005 (fourth quarter of 2005: 6.4%, fourth quarter of 2004: 9.2%), and from midyear onwards it fell below the corresponding euro area figure (for the first time in the 2004-2005 period). This trend continued in the first two months of this year. The deceleration in the Greek M3 growth rate was largely attributable to shifts out of M3 (mainly into foreign bond-type mutual funds) and, to a lesser degree, to a moderation in the growth rate of GDP at current prices, compared with 2004 (which is a determinant of demand for transaction balances).

Developments in individual Greek M3 components (excluding currency in circulation) have been affected by the introduction (in January 2005) of a single tax rate for deposit interest, repo yields and interest on government securities. A considerable acceleration was observed in the annual rate of increase in time deposits (owing to their relatively higher net —after tax— remuneration as well as to shifts from repos, which decreased significantly faster, and savings deposits, which grew at a noticeably lower rate). As a whole, the growth rate of deposits included in M3 (as defined by the ECB) rose to 19.2% in the fourth quarter of 2005, from 12.6% in the fourth quarter of 2004. During the January-February 2006 period, this rate fell (February 2006: 14.0%), as the rate of increase in savings deposits slowed further and the high growth rate of time deposits dropped slightly. Moreover, holdings of money market fund shares/units continued to decline rather steeply and their contribution to total assets held by mutual funds was noticeably reduced.

Interest rates on deposits showed small changes in Greece in 2005. In particular, interest rates on households’ new overnight deposits (which, however, were still 20 basis points higher than the corresponding euro area interest rates in December 2005) fell by 5 basis points. In contrast, interest rates on households’ new deposits with an agreed maturity of up to one year rose by 9 basis points, while their differential vis-à-vis the euro area average decreased during the year to 24 basis points. In the January-February 2006 period, interest rates on households’ new deposits with an agreed maturity of up to one
year showed an upward trend, while interest rates on overnight deposits remained effectively unchanged.

Interest rates on new consumer and housing loans to households fell during 2005, while interest rates on new corporate loans increased in some categories or remained almost unchanged in others. Competition among banks operating in Greece became stronger last year, particularly in the area of consumer credit, thereby causing a further drop in interest rates on consumer loans in December, although the ECB raised its key interest rates by 25 basis points at the beginning of that month. In particular, the largest decrease (110 basis points) was recorded in consumer loans with a defined maturity, while the fall in interest rates on total housing loans was smaller (46 basis points). In contrast, interest rates on corporate loans without a defined maturity remained almost unchanged, while interest rates on corporate loans of a specific amount and maturity rose. The most significant increase (of 37 basis points) occurred in interest rates on corporate loans of up to €1 million with a floating rate or an initial rate fixation of up to one year. During the January-February 2006 period, interest rates on consumer loans with a defined maturity and on housing loans moved upwards, interest rates on corporate loans without a defined maturity remained at the same levels, while the trends in interest rates on corporate loans of a specific amount and maturity were mixed.

Differentials between Greek and euro area interest rates on loans to households narrowed in 2005, while they widened in some categories of corporate loans and remained almost unchanged in others. Concerning loans to households, the highest differential was observed in consumer loans without a defined maturity (340 basis points) and the lowest (37 basis points) in housing loans with a floating rate or an initial rate fixation of up to one year. As regards corporate loans, the highest differential (between Greek interest rates and the corresponding euro area rates) concerns loans without a defined maturity (188 basis points). In the first two months of this year, the rate differential in the above loan categories narrowed, with the exception of consumer loans, where the differential widened. It should be noted that Greek interest rates, though higher than the corresponding average euro area rates, are not the highest among the euro area countries in certain loan categories, for example the most significant categories of corporate and housing loans.

6.2 Credit developments

The annual growth rate of total credit extended to the economy by Monetary Financial Institutions (MFIs, i.e. banks and money market funds)\(^1\) accelerated considerably during 2005 and stood at 16.8% in the last quarter of the year, compared with 10.8% in the

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\(^1\) Total financing of the economy by MFIs comprises MFI loans (after extraordinary write-offs and securitised loans are taken into account, see Chapter VI), as well as government securities and corporate bonds held by MFIs.
fourth quarter of 2004. This development is mostly attributed to a significant acceleration in the rate of increase in credit to general government, while credit expansion to enterprises and households also accelerated, though at a lower rate. In particular, MFI claims vis-à-vis the Greek government, after a period of constant decreases, rose during 2005. Thus, the financing of general government by MFIs rose at an annual rate of 9.4% in the fourth quarter of 2005, after falling at an annual rate of 5.6% in the last quarter of 2004. At the same time, the annual rate of increase in corporate and household financing accelerated slightly compared with the last quarter of 2004 (19.3%) and stood at 19.9% in the fourth quarter of 2005. The upward trend in the growth rate of credit both to enterprises and households and to general government continued during the first two months of this year, causing the growth rate of total credit to the economy to rise to 18.6% in February.

The annual growth rate of total MFI credit to enterprises\(^1\) remained practically unchanged in 2005 at the relatively high 2004 level (fourth quarter of 2005: 12.5%, fourth quarter of 2004: 12.6%) and accelerated marginally in the first two months of 2006 (February: 12.8%), suggesting that enterprises still have ample access to bank credit. Corporate bond issuance as a financing instrument gained further importance, as in December 2005 the amount of such instruments held by MFIs represented 12.0% of the total bank credit to enterprises (December 2004: 8.2%). This is attributed to the substitution of bank lending with the issuance of bonds — still held by MFIs — mainly due to tax advantages they offer.\(^2\) As regards specific sectors of economic activity, the growth rate of credit to shipping rose appreciably to 34.4% in the fourth quarter of 2005, from 3.0% in the corresponding quarter of 2004, owing to developments in the euro/US dollar exchange rate\(^3\) and to increased investment by shipping companies for fleet renewal.

The growth rate of credit to households\(^4\) remained high during 2005, standing at 30.3% in the last quarter of the year (fourth quarter 2004: 30.0%) and accelerating to 31.4% at the end of the first two months of 2006. In particular, the growth rate of housing loans accelerated, more notably towards the end of the year, and rose to 31.3% in the last quarter (fourth quarter 2004: 26.9%), while the acceleration continued into the first two months of this year (February: 33.6%). This development is attributed to increased transactions in the housing market, which was largely affected by the announcement that as of January 2006 the objective values of real property would be raised and VAT would be applied to new residential buildings. At the same time, the growth rate of consumer loans, though decelerating, remained at a high level during 2005 (fourth quarter 2005: 29.9%, fourth quarter 2004: 37.9%), while the falling trend continued into this year (February 2006: 28.4%).

\(^1\) Which comprises bank loans to enterprises (also taking into consideration extraordinary write-offs, see Chapter VI), as well as corporate bonds held by MFIs.

\(^2\) Corporate bonds are exempt from contributions under Law 128/1975, which are levied on bank loans.

\(^3\) The bulk of loans to shipping companies are granted in US dollars.

\(^4\) Including balances of securitised loans.
Households are the most dynamic segment of the credit market. In 2005, they accounted for 61.6% (2004: 60.3%) of the increase in total MFI credit to enterprises and households. Thus, the share of households in total credit to enterprises and households rose to 45.7% in December 2005 (December 2004: 42.3%). Moreover, because of the high rate of change in credit to households, total household indebtedness (MFI credit including securitised loans) reached 38.0% of GDP in December 2005 (December 2004: 31.2%). The outstanding balance of bank loans to households (excluding securitised loans) stood at 36.3% of GDP in December 2005 (December 2004: 30.7%), thereby gradually reducing the difference from the corresponding euro area figure (December 2005: 52.6%, December 2004: 49.2%).

6.3 Capital markets

In 2005, capital markets were marked by a significant slowdown in government bond yields, a noticeable improvement in stock market performance and a decline in the mutual funds market.

Developments in the Greek government bond market were generally in line with the corresponding euro area bond markets. In particular, Greek government bond yields, mostly long-term, followed a steep downward course from the beginning of 2005 until the end of September, when they reached historically low levels. During this period, yields were affected by the less optimistic expectations concerning the euro area economy, mainly owing to the sharp rise in oil prices, and by the ample liquidity still available in capital markets worldwide. In the last quarter of the year, however, investors’ concerns that high oil prices could cause inflationary pressures led to expectations of a rise in euro area interest rates. As a result, there was significant increase in bond yields, which continued this upward course into the first quarter of 2006, mainly as regards short- and medium-term instruments. As a whole, short-term and medium-term yields rose at end-2005, compared with end-2004, while long-term yields dropped, thus flattening the slope of the yield curve of Greek government paper.

The 10-year Greek government bond yield fell to 3.51% at end-2005, from 3.80% at end-2004, while the yield differential between the Greek 10-year reference bond and the corresponding German one rose to 25 basis points by the end of 2005, from 21 basis points at the end of 2004 (if adjusted for different maturity dates).

The average daily value of transactions in HDAT, though lower than in 2004, remained at high levels in 2005 (2005: €2.9 billion, 2004: €3.8 billion). It should be noted that transactions concerned mostly long-term instruments – in particular 10-year bonds, which accounted for almost 59% of the total value of transactions.

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1 As mentioned above, on 1 December the ECB decided to raise (by 25 basis points) its key interest rates, which had been kept unchanged since June 2003.
In the primary market for Greek government securities the amount of capital raised decreased, while the term structure of the 2005 issues points to the preference of the government for long-term securities, in order to take advantage of the historically low levels of long-term interest rates, as well as to lengthen the average maturity of public debt.¹ Fund raising was based on new issues and re-opened past issues, chiefly through syndicated loans and, to a lesser extent, through auctioned issues. High demand for Greek government issues was sustained in 2005, stemming mainly from foreign institutional investors.

The upward course of share prices in the Athens Exchange (Athex), which started in 2003, continued at a robust pace in 2005, as well as the first quarter of 2006. Between end-2004 and end-2005 the composite share price index of the Athex rose by 31.5%, an increase stronger than that of the Dow Jones EURO STOXX index for the euro area (23%) and the second strongest (after the Austrian Stock Exchange) among the euro area stock markets. Transactions in shares also grew appreciably: the average daily value of transactions rose by 48.6% in 2005 relative to 2004, while the bulk of transactions was associated with shares included in the large capitalisation index. Moreover, total funds raised through the stock market in 2005 also increased, which is attributed mostly to funds raised by financial corporations.

Favourable stock market developments largely related to low returns on alternative forms of investment, the announcements made by companies listed on the Athex concerning positive results and business initiatives, the particularly high participation of foreign investors, the further enhancement of the institutional framework for the stock market, and the strict supervision exercised by the Capital Market Commission. Moreover, note that at end-November 2005 the new legislation regarding the operating rules of the Athex was introduced.

The mutual funds market weakened in 2005, as shown by the 14.4% drop in their total assets, since the decrease in the number of mutual fund units in circulation more than offset the rise in their prices. This weakening reflects the steep fall in the assets of money market fund shares/units, owing, inter alia, to low returns in the money market and the fall in bond yields over most of 2005. Assets of balanced mutual funds also fell, though to a lesser extent. In contrast, the value of bond funds rose noticeably, thus accounting for almost half of the assets of all mutual funds at the end of 2005. In addition, assets of equity funds increased, though by less than the composite share price index of the Athex, since capital outflows from this category continued despite the positive course of the stock market. Lastly, a new category of mutual funds, investing in shares/units of other mutual funds (funds of funds),² was created in 2005. The assets of this new category accounted for 3% of the total assets of mutual funds at the end of 2005.

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¹ Within the scope of the policy pursued by the government, the first Greek 32-year bond was launched in early March 2005. Demand was almost double the amount of the issue, most of which was absorbed by foreign institutional investors.

² The creation of this special new category of mutual funds was made possible by Law 3283/2004.
7. THE STABILITY OF THE BANKING SYSTEM

A sound and well-functioning banking system is essential to sustainable growth and to the efficient allocation of resources within the economy. The stability of the banking system hinges on effective risk management by banks as well as on their capital adequacy, which help them absorb unexpected shocks without disruptions. High profitability is crucial in this respect, as it allows banks to boost their own funds through retained profits and to increase provisioning for credit risk and facilitates their access to market-based financing under favourable conditions.

7.1 Bank profitability

The profitability of the financial system in the euro area improved considerably in 2005, despite moderate GDP growth. In Greece, bank profitability was higher than in the rest of the euro area, benefitting also from comparatively stronger economic growth. The operating profitability of Greek commercial banks, both at bank and group level, showed a considerable improvement in 2005 for the third consecutive year, primarily as a result of continued strong credit expansion and, to a lesser extent, of the containment of operating costs. Specifically, at bank level, pre-tax profits of commercial banks as a whole rose by 91.9% in 2005 (73.7% at group level). This considerable increase in pre-tax profits is partly accounted for by the fact that in 2004 the results of certain banks had been burdened by extraordinary expenses, such as the costs of employee voluntary retirement plans and increased provisioning, while the 2005 results were boosted by extraordinary income, such as certain banks’ profits from sales of treasury shares, and by staff cost savings associated with the full implementation of the aforementioned voluntary retirement plans. Banks performed even better in terms of after-tax profits in 2005 (which rose by 197.9% and 150.3% at bank and at group level respectively). Underlying this was an across-the-board cut in corporate tax in 2005, as well as the reduced tax rates, applicable under Law 2992/2002 to banks absorbing subsidiaries. It should be noted that, for those banks that shifted to the International Financial Reporting Standards (IFRS) in 2005, an adjustment has been made to 2004 profit figures to ensure comparability. This implied lower profits for 2004 at bank and group level (34% and 24% down respectively) compared with profits for that year reported under the Greek Accounting Standards in early 2005.

Banks’ total income rose by 15.5% at bank level and 16.6% at group level in 2005. Net interest income grew considerably (by 13.9% for banks and 17.9% for banking groups), mainly owing to strong credit expansion, while it remained unchanged as a percentage of average assets. Net income from commissions also rose appreciably (by 12.9% for banks and 13.3% for banking groups), income from financial operations and the banking book increased even faster (by 96.3% for banks and 34.2% for banking groups), while other operating income grew by 13.6% for banks and 6.7% for banking groups. Finally,
the share of net interest income in total income declined at the bank level (2005: 75.3%, 2004: 76.4%), but grew at the group level (2005: 67.7%, 2004: 67.0%). The share of net interest income in total income of banks was lower for banking groups than for banks, reflecting the comparatively larger share at group level of income from commissions and other sources, including insurance business. 

As a result of the substantial containment in banks' operating costs in 2005 (by 3.2% for banks and 0.4% for banking groups) and a considerable rise in assets, operating costs as a percentage of assets dropped to 2.1% (from 2.4% in 2004) for banks and to 2.5% (from 2.9%) for banking groups. However, these percentages are still higher than the average for euro area banks of comparable size as a whole (1.5% in 2004). Greek banks' operating efficiency (measured by the cost-to-income ratio) also improved, from 65.4% in 2004 to 54.8% in 2005 for banks and from 65.5% in 2004 to 55.9% in 2005 for banking groups, still falling short of the average for euro area banks of comparable size (58.5% in 2004). The containment of operating costs was helped, inter alia, by the continued rationalisation of branch networks that resulted from mergers, as well as by the downward effect on staff costs of certain banks from the implementation of voluntary retirement plans. Banks' efforts to contain their operating costs should be kept up, since intensifying competition might erode banks' profit margins. 

These developments in banks' income in 2005, in conjunction with the containment of operating costs, helped increase both return on equity and return on assets. Specifically, at the bank level, after-tax return on equity (ROE) and return on assets (ROA) rose to 16.3% and 0.9% respectively in 2005 (from 5.7% and 0.4% in 2004). At the banking group level, after-tax ROE and ROA increased to 17% and 1.1% respectively in 2005 (from 8.7% and 0.5% in 2004). The 2004 averages for euro area banking groups of comparable size as a whole were 9.5% for ROE (which, however, grew considerably in 2005, to around 15%) and 0.5% for ROA. 

Generally, the continued reliance of Greek banks’ operating profitability on income from their lending activities, notably from retail banking, is a positive characteristic, as it enhances the sustainability and quality of bank earnings. Moreover, as was indeed the case in 2005, high profitability enables banks to use retained profits for increasing their capital buffers, thereby improving their shock-absorbing capacity.

7.2 Capital adequacy, credit risk and market risks

The capital adequacy ratio (CAR) for Greek commercial banks as a whole dropped marginally from 13.5% in 2004 to 13.3% in 2005 at the bank level, but remains satisfactory and is well above the regulatory minimum of 8%. The decline was more pronounced for the Tier I ratio (from 9.6% in 2004 to 8.7% in 2005), which comprises the higher-quality elements of own funds and, as a percentage of own funds, fell to 64.4% in 2005, from 71% in 2004. Taking into account the shortfall of accounting provisions against
regulatory provisions, the decrease in the CAR is limited to 0.2 percentage point in 2005,\(^1\) (2004: 0.5 percentage point), reflecting banks’ increased loan-loss provisioning in 2005. At group level, the CAR rose to 13.2% in 2005, from 12.8% in 2004, exceeding the euro area average (11.5% in 2004). The Tier I capital adequacy ratio for banking groups also showed a 10.9% rise in 2005 (2004: 10.0%), compared with a corresponding average of 8.4% in 2004 for euro area banks as a whole. Finally, the CAR for cooperative banks as a whole dropped to 20.4% in 2005, from 21.1% in 2004, but remains considerably higher than the regulatory minimum for such banks (10%).

As with most banks worldwide, credit risk is the major risk facing Greek banks. However, market risks and their potential impact on specific banks should not be underestimated, especially if such banks do not have effective market risk management mechanisms in place. The magnitude of credit risk is affected on the one hand by the asset structure and credit policy of banks and, on the other hand, by borrowers’ financial condition, which depends, \textit{inter alia}, on developments in the overall economic environment. Strong credit expansion to the private sector, notably households, boosts banks’ profitability, but is also a potential source of additional credit risk, especially in the event of an economic downturn or a further rise in euro area interest rates. Since in Greece floating-rate loans make up the bulk of loans to households, an interest rate increase would directly push up loan servicing costs for many borrowers and therefore affect banks’ credit risk.

With respect to the financing of households, continued strong credit expansion caused households’ total borrowing (excluding securitised loans) to rise from 30.7% of nominal GDP in December 2004 to 36.3% in December 2005, as already mentioned. However, this percentage is still lower than the corresponding euro area average (52.6% in 2005 and 49.2% in 2004). (Including securitised loans, households’ borrowing grew to 38.0% of GDP in December 2005, from 31.2% in December 2004.) The above ratios should be seen only as tentative measures of banks’ credit risk and household indebtedness. In order to obtain detailed data at household level, especially regarding indebtedness in relation to income and wealth, the Bank of Greece commissioned the company TNS-ICAP to repeat its household indebtedness survey first conducted in 2002. The new survey was conducted in the fourth quarter of 2005 with the random, geographically stratified sampling method and covered 6,000 households of urban and semi-urban areas, 3,120 of which responded fully.\(^2\) About 47% of households reported that they had obtained a loan, while the average outstanding debt per household was 26.4% higher than in the 2002 survey, partly reflecting strong credit expansion in the meantime. As in the previous survey, the debt-to-income ratio and the debt-to-wealth ratio fall significantly as income and wealth rise. For households as a whole, between 2002 and 2005 an increase can be seen in the median debt-to-income ratio and the

\footnotesize{\textsuperscript{1} The decrease would be 0.4 percentage point excluding the reduction of the shortfall in actual provisioning by an amount equal to 30% of doubtful loan write-offs in 2005, provided for by Bank of Greece Governor’s Act 2565/11 October 2005 as an incentive for such write-offs.}
\footnotesize{\textsuperscript{2} The survey and its results are detailed in the Appendix to Chapter VI.}
median debt-to-wealth ratio (from 22.8% to 33.5% and from 5.1% to 10.7% respectively). Both ratios are particularly high for households at the lower income and wealth brackets, but these households’ share in the total debt of the sample was below 5% in 2005 in either case. Overall, for the sample as a whole, households’ debt-to-income and debt-to-wealth ratios seem to remain at reasonable levels, despite their rise. Besides, 2005 saw an increase to 88% (from 85% in 2002) in the percentage of sample households for which monthly debt service payments did not exceed 40% of respective monthly incomes. However, the remaining 12% of households had a rather high share (30%) in the total debt of the sample in 2005. Apparently, the historically low level of interest rates has been a factor that contributed to keeping the ratio of monthly instalment to disposable income below 40% for the overwhelming majority of households, while a tightening of banks’ credit standards may have also played a role. In any case, banks should further adjust their credit policies with a view to ensuring that the debt servicing capacity of any given customer is within the limits set by the Bank of Greece guidelines (30% to 40%, depending on income size).

Developments in residential property prices are another factor that can affect banks’ credit risk, through changes in the value of real estate collaterals backing loans to households. Although a future fall in residential property prices in certain segments of the market cannot be ruled out, a considerable across-the-board correction would seem unlikely. In any case, credit risk considerations would imply that the market value of the real estate used as collateral should exceed total lending to each borrower by a sufficient margin. However, under the pressure of competition, banks tend to grant loans with loan-to-value ratios well above a reasonable percentage of 75%. The Bank of Greece has therefore decided that the reduced capital requirement for credit risk (4%) will henceforth apply only to the part of the loan up to the said percentage, the remaining part being subject to the standard 8% capital requirement.

The rate of credit expansion to enterprises, despite marked differences across sectors, overall did not show any significant change between 2004 and 2005 and continues to be considerably lower than that to households. Thus, for the business sector as a whole, the pace of credit expansion does not seem to be in itself a potential source of additional credit risk for banks. However, there are cases of considerable exposures to certain corporate borrowers that face difficulties. Aggregated data on the evolution of firms’ financial condition during 2005 are not currently available. Provisional Bank of Greece data (see Chapter IV.3) for a sample of 435 firms (other than public enterprises and financial corporations) suggest an increase of 5.3% in total pre-tax profits in 2005 and a slight improvement in ROE (2005: 14.6%, 2004: 14.3%). On the other hand, the equity-to-debt ratio worsened slightly (2005: 1.02, 2004: 1.10), while the ratio of financial costs to gross profits, which is a measure of firms’ financial vulnerability, remained at last year’s low level (7.5%). However, there are considerable differences in the evolution of these indicators across sectors (industry, trade, services). Specifically, profitability and ROE rose in 2005 in the industrial sector and declined in the retail trade and services sectors. Nevertheless, both in trade and in services ROE remained higher than in the industrial sector.
Given that the sample for the most part includes large (by Greek standards) firms, these findings do not necessarily hold true for the entire business sector, in particular for small and medium-sized enterprises (SMEs). Some indications about the financial condition of SMEs in 2005 are provided by credit registry data, which cover a large number of such enterprises and show a large increase in the value of unpaid cheques (41.6%) and payment orders issued by courts (24.5%), while bankruptcy petitions declined in value terms (–36.7%), but rose in volume terms.

On the basis of *ex post* data, the 18.3% rise in banks’ credit-risk-weighted assets between 2004 and 2005 and the path of non-performing loans (NPLs) point to increased credit risk. As a result of strong credit expansion, in conjunction with a 173.3% rise in bad loan write-offs in 2005, the non-performing loans ratio of Greek commercial banks as a whole (excluding restructured loans) dropped to 6.3%, from 7%. Across the main categories of loans, this ratio fell for housing and business loans and rose for consumer loans. NPLs net of provisions declined both as a percentage of total loans and as a percentage of own funds in 2005 (to 2.4% and 19.6%, from 3.4% and 26.5% in 2004 respectively). Notwithstanding data comparability problems, these two ratios for Greek banks have now converged considerably with the corresponding averages for euro area banks of comparable size (1.3% and 17.5% in 2004). Besides, the coverage ratio of NPLs by provisions rose from 51.4% in 2004 to 61.9% in 2005, compared with an average of 64.7% for euro area banks of comparable size in 2004. The favourable evolution of all the above ratios in 2005 is partly attributable, as already mentioned, to an impressive increase in bad loan write-offs. Banks took advantage of a decision of the Bank of Greece allowing them to set off a part of these write-offs against the provisioning shortfall which in turn is deducted from own funds for the calculation of the CAR. Write-offs contributed to the improvement of the quality of the loan book, but also had a dampening effect on the growth of NPLs. Net of this effect, total NPLs (excluding restructured loans) would have risen by 22.7% year-on-year, which points to increased credit risk. Therefore, banks should apply conservative credit approval policies in order to keep NPLs under control, as recommended by the Bank of Greece, rather than resort to *ex post* provisioning, which is not the best practice, as it does not take sufficiently into account the possibility of reduced profitability in the future.

Greek banks continued their efforts to improve their credit risk measurement and management systems ahead of the implementation of the new supervisory framework (“Basel II”) in 2007. However, the Bank of Greece considers that banks should take further measures to upgrade their credit and other risk management systems. Obviously, the extent of adaptation needed varies across banks. The Bank of Greece, in addition to providing clarifications and guidance on the implementation of the new framework, has been evaluating the individual banks’ progress in this respect and expects, especially from large, internationally active banks, faster progress with the adoption of the more advanced capital requirement calculation methods available in the new framework. With particular regard to the financing of households, the Risk Consolidation System (RCS) of Tiresias S.A. (see Box VI.1), a “white list” credit registry service, helps banks manage more effec-
tively the relevant credit risk, as it provides each borrower’s full credit history. Starting from 2003, when the system was introduced, the RCS has been collecting data on new credit extended to individuals, subject to the borrower’s prior consent. As the database gradually grows, the RCS should contribute to preventing household overindebtedness and limiting banks’ credit risk.

Market risks, which are associated with interest rate and equity price changes (affecting items included in Greek banks’ trading portfolios) and changes in the euro exchange rates (affecting all assets and liabilities denominated in foreign currency), are relatively limited. Specifically, at group level, capital requirements against market risks for Greek commercial banks as a whole corresponded to just 3.8% of capital requirements against credit risk in 2005 (compared with 5.6% in 2004) and 2.2% of banks’ own funds (compared with 3.3% in 2004). The use of internal Value-at-Risk (VAR) models by banks leads to more effective market risk measurement and management and, typically, to lower capital requirements than under the simpler, standardised approach. The Bank of Greece has already recognised VAR models of banks that (on the basis of assets) represent around 40% of the banking system and favours the use of such models (after their recognition by the Bank of Greece) by other banks, especially large institutions with international activities.

On the basis of the two liquidity ratios established by Bank of Greece Governor’s Act 2560/1 April 2005, the liquidity of the Greek banking system is satisfactory. Specifically, as at 31 December 2005, the liquid asset ratio and the asset/liability mismatch ratio stood at 23.3% and -2.2% respectively, compared with regulatory minimums of 20% and -20%. Besides, the loan-to-deposit ratio, despite increasing to 94.5% on 31 December 2005 from 86.1% on 31 December 2004, is still considerably lower than the corresponding average for euro area banks as a whole (119% in 2004). Underlying the rise in this ratio was banks’ strong credit expansion without a proportional increase in customers’ deposits. As a result, financing of banks’ credit expansion relied more than in the past on the interbank money market, as well as on the issuance of bank bonds and other debt securities.

7.3 Stress testing and supervision

The Bank of Greece considers it essential that banks carry out regular stress tests of both credit and market risks to verify on the one hand the resilience of their profits and, on the other hand, whether their regulatory capital, in addition to meeting the minimum supervisory capital requirements, provides adequate buffers for smoothly absorbing unexpected shocks (see Box X.2). To this end, during the second half of 2005, the Bank of Greece requested banks to simulate worst-case scenarios of credit and market risk factors (e.g. credit quality deterioration, interest rate hikes, equity price decline and exchange rate depreciation) and calculate the impact on their own funds. The aggregated results for the banks that participated in the exercise, covering about 74% of the total assets of com-
mercial banks, showed that credit risk and equity-price risk had the largest impact on banks’ CAR, which dropped by around one percentage point for each one of these factors. Nevertheless, the CAR remained well above the regulatory minimum (8%), which testifies to the resilience of the Greek banking system.

The stability of the Greek financial system was recently assessed by the IMF. The assessment report, which was released in January 2006, was prepared by an IMF staff team following an on-site examination of the relevant institutional framework and financial aggregates, as well as of the supervision methodologies and practices in place. With particular regard to the banking sector, the IMF staff found that Greek banks are well-capitalised and profitable, with adequate liquidity, but face certain medium-term challenges associated mainly with risks from strong credit expansion, the relatively high non-performing loans ratio and the adverse impact on banks’ competitiveness from their relatively small size, labour market rigidities and certain aspects of tax regulations. With respect to banking supervision, the IMF found that the Bank of Greece supervises banks effectively and generally responds to new challenges by strengthening the supervisory framework, although there is scope for improvement in certain areas. The IMF’s assessment of the adequacy of banking supervision was based on both the essential and the additional criteria used to determine compliance with the Basel Core Principles (BCP) and, therefore, the assessment was made according to internationally acceptable best practices. It was found that Greece is fully compliant with 22 criteria, largely compliant with eight criteria and materially non-compliant with only one criterion, for which legislation is soon to be passed (according to this criterion, the Bank of Greece staff should, in exercising the public authority delegated to the Bank, enjoy the same legal protection as civil servants and the staff of the Capital Market Committee).

In conclusion, the CAR of Greek commercial banks as a whole provides, in the present circumstances, adequate buffers for ensuring the stability of the banking system and exceeds the corresponding average for euro area banks as a whole. Besides, the implementation of the International Financial Reporting Standards does not seem to have affected materially the overall capital adequacy of the Greek banking sector. Two banks whose capital base was affected considerably by the implementation of the said Standards, notably of Standard 19, which requires the recognition of banks’ liabilities arising from employee defined benefit plans on their balance sheets, responded by increasing their own funds to restore their capital adequacy. The implementation of the new capital adequacy framework (“Basel II”) within 2007 will have repercussions on banks’ CAR, the overall magnitude of which will depend on the alternative capital requirement calculation methods to be adopted by banks, as well as on the composition and quality of their loan portfolios, in conjunction with the evolution of the business cycle. Given the uncertainty surrounding these factors, as well as the general uncertainty about economic developments, the Bank of Greece, with a view to ensuring the capital adequacy of Greek banks over time, has recommended that they continue to increase their own funds, notably by retaining profits in periods of increased profitability, such as the year 2005. At the same time,
identifying and accurately pricing risks in a timely manner is a key condition for limiting the impact of the risks assumed on banks' results and capital base.

The efficiency and robustness of the banking system also hinges on the adequacy of banks' organisational structure and internal control, risk management and compliance systems. Taking into account the principles of corporate governance and the need for ongoing adaptation to best international practices, as well as the increase in the risks assumed by banks, the Bank of Greece, by Governor's Act 2577/2006, amended and supplemented the existing regulatory framework regarding the principles of operation and the criteria for assessing banks' organisational structure and internal systems. The principles and procedures laid down in this Act should be adopted and implemented by banks on both an individual and a group basis. By striking a balance between general principles, to be specified by banks according to their size and complexity of operations, and specific regulations, the said Act seeks to ensure a level playing field for banks and to avoid laying a disproportional burden on them and, indirectly, on their customers by excessive regulation. The implementation of the above Bank of Greece Governor's Act, to the extent that it contributes to the improvement of banks' organisational structure and internal control, risk management and compliance systems, will also limit operational risk, which has gained importance worldwide, as bank operations have become more complex and banks' reliance on their IT systems has increased. With respect to operational risk, it should be pointed out that the new supervisory framework (“Basel II”) introduces capital requirements for covering it.

7.4 The structure of the banking system and provision of banking services

Over 2005, the structure of the Greek banking system did not change materially. Specifically, the market share of commercial banks, branches of foreign banks and cooperative banks in terms of assets grew to 81.2%, 10.1% and 0.8% respectively in 2005, from 81.0%, 10.0% and 0.7% in 2004. By contrast, the share of specialised credit institutions (the Postal Savings Bank and the Deposits and Loans Fund) narrowed to 7.9%, from 8.3%. Measured by the market share of the five largest banks, the degree of concentration of the Greek credit system increased slightly in 2005 on the basis of assets (to 65.6%, from 65.0% in 2004), but declined marginally in terms of loans (to 66.1%, from 66.3%) and even more in terms of deposits (to 65.5%, from 66.5%). Although the degree of concentration remains relatively high, on the one hand it does not necessarily hamper competition between banks and, on the other hand, it is well below the corresponding figures recorded in three other euro area countries (Belgium, Netherlands, Finland), where, in terms of assets, the market share of the five largest banks exceeds 80%.

The number of bank branches in Greece continues to rise (2005: 3,543, 2004: 3,403), contrary to the EU, where a declining trend prevails. However, the density of the branch network in Greece (32 branches per 100,000 inhabitants) is still lower than in the euro area (54 branches per 100,000 inhabitants), while GDP per branch does not differ
considerably from the euro area average. The continued increase in the number of bank branches in Greece, which are now typically small and have few employees, is associated with the fast growth of retail banking and Greek customers’ continued preference for transactions through branches. In any case, banks continue their efforts to further develop alternative distribution channels, such as automatic teller machines (ATMs), phone banking and e-banking, which are increasingly being used by customers. In particular, the number of ATMs rose from 5,787 in 2004 to 6,230 in 2005 and, at the same time, their operations expanded to include fund transfers to third-party accounts and credit card and utility bill payments. An extensive branch network also supports the expansion of Greek banks into bankassurance products through their subsidiaries or cooperating insurance companies. The full activation and operational independence of the new supervisory authority for the insurance sector established by Law 3229/2004 is expected to strengthen public trust in the institution of private insurance and foster further growth in insurance services, demand for which is forecast to increase, notably in the area of supplementary pension coverage. Moreover, the establishment of formal cooperation arrangements between this authority and the Bank of Greece would contribute to more effective supervision of bankassurance products and better coordination between supervisory authorities with a view to ensuring the stability of the financial sector.

Greek banks’ continued cross-border expansion enhances their growth potential and contributes to the geographical diversification of their revenue. Specifically, Greek banks’ rapid expansion into Southeastern European countries is encouraged by the favourable growth prospects of these economies, notably of their financial sectors. The improved macroeconomic fundamentals of Southeastern European countries, the prospect of eventual EU membership and the ongoing restructuring of their banking systems have reduced Greek banks’ country risk. However, as a result of this expansion, Greek commercial banks’ total exposures to these countries have increased considerably, to 58.4% of their own funds and 4.8% of their assets at end-2005, making up 25% of their total cross-border exposures.1 Actually, the total financial exposures of the three largest commercial banks to Southeastern Europe are between 69% and 96% of their own funds. The risks from Greek banks’ cross-border financial exposures should in principle be addressed by banks themselves through their risk management and provisioning systems. The Bank of Greece considers it essential that banks specify and measure country risks, taking into account possible risks of contagion between countries or regions, and encourages adequate provisioning for these risks, especially by banks with financial exposures to a particular country or region that exceed a reasonable percentage of their own funds.

Finally, in the context of its mandate, the Bank of Greece continues to actively promote customer information and strengthen competition in the banking sector. To this end,

1 It should be noted, however, that as from 2005 banks’ total cross-border exposures include the total local exposures of their subsidiaries and branches in local currency, instead of the net position (i.e. local exposures minus local liabilities in local currency). As local liabilities in local currency cover around 85% of local exposures in local currency, the fact that they are no longer subtracted has increased total financial exposures.
it has recently started to publish (on its website) comparative data on the interest rates and
the commissions and fees applied to certain key banking products, as well as a list of nat-
ural and legal persons authorised by banks to promote banking products and services.
Moreover, the Bank of Greece cooperates on the one hand with the Ministry of
Development in order to clarify issues that arise out of the implementation of provisions
on consumer protection and to promote the transposition of EU Directives to Greek law
and, on the other hand, with consumer unions in order to investigate and resolve, within
the scope of its authority, consumers’ requests concerning transactions with institutions
supervised by it. Besides, the Bank of Greece devotes considerable resources to examine
customers’ complaints and to conduct relevant inspections and imposes sanctions on
credit institutions when it finds violations of the provisions in force.

8. THE ECONOMIC OUTLOOK FOR 2006

Greece’s growth rate for 2006 is projected to stand at a level somewhat lower than
in 2005, though still exceeding the euro area average. Inflation is expected to decline
slightly compared with 2005, as the negative impact of exogenous factors will weaken.
However, with inflation remaining higher than in the euro area, a further decline in price
competitiveness is to be expected.

More specifically, GDP is forecast to grow by about 3.5% in 2006, against 3.7% in
2005. Private consumption, which is expected to rise at a slightly lower rate than in 2005,
will remain the main driving force of domestic demand and will be supported by the pro-
jected increase in incomes and employment, as well as by the cumulative increase in the
market value of households’ assets in recent years. Besides, the contribution of total fixed
capital formation will be considerably stronger in 2006, due to the expected recovery of
public investment (after a drastic cut in 2005) and residential investment (after a small
decrease in 2005). Business investment is expected to strengthen compared with 2005,
given that public enterprises are planning considerably higher investment, while private
enterprises are expected to take advantage of the incentives under the new development
law and of credit conditions, which remain favourable. By contrast, the rate of increase in
public consumption will decelerate, as a result of the ongoing fiscal consolidation process.

Higher economic activity is expected to be accompanied by further employment
growth. However, if the labour force also increases, the favourable effect on the rate of
unemployment (which would remain relatively high in this case) will be rather limited.

Turning to the short-term prospects of the labour market, firms in retail trade, ser-
ices (excluding retail trade and banks) and construction anticipate an increase in employ-
ment, while industrial firms expect a decrease.

The change in the real external balance of goods and services is expected to make
a negative contribution to GDP growth in 2006, while it made a positive contribution in
2005. The current account deficit, as a percentage of GDP, is expected to increase slightly
against 2005 (when it stood at 7.9%). However, it is estimated that the current account deficit excluding the ships’ balance, as a percentage of GDP, will remain at 2005 levels (7.5%) or decrease slightly. Furthermore, the combined current account and capital transfers deficit is expected to stand at 2005 levels, i.e. 6.8% of GDP.

More specifically, exports of goods will grow significantly, in line with the anticipated strengthening of world economic activity. However, reflecting further loss of international competitiveness, export growth may remain lower than the increase in import demand in Greece’s export markets, leading to a further decrease in market shares. At the same time, imports of goods, which remained unchanged at constant prices in 2005 (after having increased in 2004 due to the Olympic Games), are expected to recover visibly in 2006. The favourable external environment is expected to support demand for shipping services (though shipping receipts may decline due to lower freight rates), while travel receipts should increase further. Lastly, interest payments are expected to keep rising, while conditions are in place for higher surpluses in both current transfers and capital transfers.

HICP inflation is projected to decelerate to 3.3% in 2006 from 3.5% in 2005 (average annual levels), although in the fourth quarter of 2006 it may be slightly higher than in the corresponding quarter of 2005 (3.6% against 3.5%). Core inflation (based on HICP excluding energy and unprocessed food) is expected to decline to 2.9% in 2006 from 3.2% in 2005. These forecasts take into consideration (i) developments during the first three months of 2006, (ii) the gradual fading (from April 2006) of the impact of last year’s increase in indirect tax rates, (iii) the anticipated decline in imported inflation (as a result of the slower increase in crude oil prices) and (iv) an estimated further decrease in demand-induced inflationary pressures (given forecasts about a small drop in the rate of increase in private consumption and a decrease in the positive output gap, though output gap estimates are surrounded by a high degree of uncertainty). These factors should more than offset the impact of the much faster increase in unit labour costs, which, on the basis of certain data and assumptions, will reach 3.7% in the whole economy (from 2.2% in 2005) and 4.3% in the business sector (from 2.3% in 2005). Of course, inflation forecasts are subject to a number of uncertainties relating to the evolution of oil prices (which have been very volatile), developments in the exchange rate of the euro and in the prices of fresh fruit and vegetables in 2006, as well as to the final outturn of unit labour cost growth, which will depend on the overall outcome of collective bargaining in the private sector and in public enterprises and on productivity growth.

9. THE MEDIUM-TO LONG-TERM PROSPECTS FOR THE GREEK ECONOMY AND POLICIES FOR SUSTAINING STRONG GROWTH

9.1 The prospects for the Greek economy

Sustainable strong growth over the medium to long term will require a more intense economic policy effort, as well as social consensus, in order to correct the fiscal
imbalances and structural weaknesses of the Greek economy, which are reflected in persistently high inflation, low and continuously deteriorating international competitiveness and an alarmingly high current account deficit. Tackling the fiscal and structural problems of the Greek economy is becoming all the more pressing since the challenges posed by population ageing and globalisation are expected to have serious repercussions on Greece’s growth prospects.

The performance of the Greek economy improved markedly in the eleven-year period 1995-2005 and largely accounts for the country’s significant progress towards nominal and real convergence with the EU-15. However, Greece still lags considerably behind the EU-15 in terms of its levels of economic development and social welfare. In addition, the increasing macroeconomic imbalances mentioned previously undermine the economy’s growth prospects. More specifically:

— Inflation fell from an average of 18.3% in the period 1980-1994 to 5.5% in the 1995-2000 period and to 3.4% in the 2001-2005 period (3.5% in 2005), but is still well above the euro area average (see Chart II.13). Disinflation in the 1995-2000 period was essentially the result of increased policy credibility, which in turn can be attributed to a regime shift in 1995, when the Bank of Greece adopted an explicit exchange rate target which served as a nominal anchor. The credibility of the exchange rate policy was enhanced by substantial fiscal adjust-
ment, wage restraint, legislation providing independence to the Bank of Greece, and the entry of the drachma into the Exchange Rate Mechanism (ERM).\(^1\) Inflationary pressures, however, began to build up early this decade and inflation exceeded the euro area average throughout the period 2001-2005 (with the average annual differential coming to 1.3 percentage points).

— Growth picked up from a level of less than 1% per annum in the 15-year period 1980-1994 to an average of 3.8% in the 1995-2005 period (3.7% in 2005). On the demand side, growth was primarily driven by consumption and business investment, which were supported by the reduction in borrowing costs (as a result of the slowdown in inflation and of euro area entry) in conjunction with financial deregulation. Household indebtedness as a percentage of GDP has risen sharply, though remaining below the euro area average. Supply has largely responded to the increase in demand — mainly thanks to the high level of investment, increased labour supply, partly reflecting immigration, and structural reforms — but the emergence of significant inflationary pressures was not avoided.\(^2\)

— In spite of the significant progress towards real convergence, per capita GDP (in purchasing power parity terms) remains lower than the EU-15 average (by 22.6% in 2005). According to Eurostat estimates, per capita GDP (in purchasing power parity terms) stood at 77.4% of the EU-15 average in 2005, up from 63.8% in 1996. This gap reflects Greece’s lower labour productivity and employment rate, relative to the EU-15 average,\(^3\) while unemployment and poverty indicators are high.

— In the past few years, the current account deficit has reached very high and unsustainable levels. As mentioned earlier (Section 3.4), this is in part due to the relatively high level of investment along with the shortfall in saving — as a result of fiscal deficits and of household consumption behaviour — and to the Greek economy’s low international competitiveness.

Economic policies have been central to the performance of the Greek economy over the past decade. As mentioned previously, it was the increased credibility of economic policy during the period 1995-2000 and the consensus of the social partners on wage restraint that enabled Greece to curb its inflation rate, enter the euro area and radically improve its macroeconomic environment. Meanwhile, certain structural reforms, together with the high level of investment, fuelled a substantial acceleration of the economy’s potential growth. However, in recent years, the fiscal deficits have risen to high levels and unit labour cost growth remains faster in Greece than in the euro area, while — in spite of the progress recorded — the structural weaknesses of the economy have not been sufficiently reduced. Specifically:


\(^2\) On the supply side, almost half (48.5%) of the average annual rate of increase in potential GDP over the past eleven years is estimated to have been driven by the increase in labour and capital inputs (accounting for 16.3% and 32.2%, respectively), while the other half (51.5%) came from an improvement in total factor productivity (TFP).

\(^3\) This gap with the EU-15 average disappears when the employment rate is calculated on the basis of total hours worked instead of the number of persons employed. See also Bank of Greece, *Annual Report 2004*, pp. 71-72.
The anti-inflationary stance of monetary policy—which was gradually reinforced from the early 1990s onwards, together with efforts to progressively contain the depreciation of the drachma from 1995 until the beginning of 1998 and later the successful entry of the drachma into the Exchange Rate Mechanism in March 1998—were key to creating the conditions that allowed Greece to adopt the euro in 2001. In the past few years, monetary conditions have been lax in the euro area and even more so in Greece, where higher inflation entails lower real interest rates. Since the conduct of an independent monetary policy is no longer an option, the ability to reduce inflationary pressures will ultimately depend on fiscal policy, wage restraint and structural reforms geared to strengthening competition and improving supply conditions.

Reducing the fiscal deficit from an annual average of 10.3% of GDP during the period 1980-1995 to 5.4% during the 1996-1999 period played an important role in stabilising the economy. However, this fiscal adjustment was primarily achieved through an increase in tax revenue (as a percentage of GDP) and a decline in interest payments (as the drop in inflation and the adoption of the euro brought about lower interest rates), while primary expenditure (as a percentage of GDP) displayed an upward trend, in spite of strong GDP growth. In 2005 the general government deficit came to 4.5% and public debt (the highest in the EU-25) to 107.5% of GDP.

The slowdown in nominal wage increases helped to reduce inflation in the late 1990s. However, in spite of the continued improvement in labour productivity, unit labour cost growth has remained higher in Greece than in the euro area, given that average earnings in the whole economy increased at an average annual rate of 5.7% in the five years to 2005, compared with 2.2% in the euro area.

Structural reforms have mainly focused on opening up certain markets and largely account for the dynamic expansion recorded in the respective sectors (e.g. the financial and the telecommunications sectors). Progress has also been made in opening up the energy sector and strengthening competition in other product markets, as well as in improving the business environment and reducing labour market rigidity. However, serious problems—which explain why the employment rate is still low and why competitive conditions in several product markets remain insufficient—still exist.1

Sustaining strong growth over the medium and the long term will require securing macroeconomic stability and improving the Greek economy’s structural competitiveness.

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1 See also Bank of Greece, Monetary Policy 2005-2006, February 2006, Box IV.1, pp. 85-90. It should be noted that international organisations and researchers often attribute the Greek economy’s lag in development to barriers to entrepreneurship and publish indicators on the quality of the business environment. These indicators are more useful when they assess well-defined aspects of business activity. For instance, the OECD in its assessment of the administrative burden on start-ups (using specific figures concerning the time and cost involved in starting a new business) ranked Greece third to last among the EU-15, ahead of only Austria and Spain. The World Economic Forum, on the other hand, publishes an annual ranking of countries on the basis of their Business Competitiveness Index (BCI), which, capturing both executive opinion survey results and objective data, evaluates the existence of a business strategy and the quality of the business environment. Based on this index, Greece ranked 40th of 116 countries in 2005 and last among the EU-15. However, as this index is a broad measure, the exact ranking may not be all that important: Ireland, for instance, with its particularly robust growth in recent years and its business-friendly environment, ranked a mere 19th.
Macroeconomic stability would allow for a smooth functioning of financial markets, encourage private investment by keeping interest rates low and — in an environment of increased international capital mobility — enhance the economy’s ability to attract foreign investment. Improving competitiveness would help the Greek economy become more open and export-oriented, a transformation which is necessary as growth in recent years has relied excessively on domestic demand and — as mentioned previously — the economy’s structural rigidities have not been fully addressed.

The need to address the Greek economy’s macroeconomic imbalances and structural weaknesses becomes all the more pressing in view of (i) the impact that population ageing will have on growth and budgetary prospects, and (ii) the implications of globalisation for Greece’s international competitiveness.

— According to recent demographic projections, the low fertility rate, in conjunction with a further rise in life expectancy, will cause Greece’s population to age rapidly and decrease. Even assuming that the net inflow of migrants will remain steady at the levels observed in recent years, the working-age population, aged 15-64 years, is projected to decline from 2010 onwards (and the total population from 2025 onwards). As a result, the elderly dependency ratio (i.e. the number of persons aged 65 years and over for every 100 people aged 15-64 years) is projected to increase from 26.8% in 2005 to 39.5% in 2030 and 60.4% in 2050, with serious economic and fiscal repercussions. Based on present trends, employment should begin to decline soon after 2015, while the average worker age will increase, thus negatively affecting the potential growth rate of the economy. Therefore, economic growth in the long term will have to depend on a continuous improvement in labour productivity — through investment and a more efficient use of production resources — and on a further increase in the rate of employment, by attracting more youths, women and older people to the labour market.

— Moreover, as mentioned in Section 2.3, globalisation implies an unprecedented intensification of competition in world markets and a sharp increase in their size. In order to meet this challenge, seize the opportunities arising and minimise the costs of adjusting to changing economic and technological conditions, the Greek economy will have to improve its productivity and increase its flexibility. This will, inter alia, require a greater and faster transfer of productive resources from contracting sectors to expanding ones where the economy would be able to acquire a comparative advantage and therefore have every interest to specialise in. Such a transfer would, furthermore, need to be carried out at the lowest possible economic and social cost.

2 The fertility rate (number of live births per woman) is slightly below 1.3, while a minimum rate of 2.1 is necessary for a population to remain stable.
Securing macroeconomic stability will above all require the achievement of fiscal consolidation and price stability. With regard to fiscal consolidation, Greece’s fiscal imbalances remain large, as mentioned previously, with the general government deficit still standing at 4.5% of GDP and public debt at 107.5%, in spite of the progress made in 2005.\(^1\) In fact, the size of the fiscal consolidation effort needed to correct the imbalances is even greater than what the current deficit and debt levels imply. Given the demographic prospects outlined above, without a timely reform of the pension system, the age-related public expenditure (i.e. for pensions and healthcare, combined with the expenditure for education and unemployment benefits) would increase dramatically as a percentage of GDP after 2015. According to available projections,\(^2\) the aggregate expenditure increase —by 11.5 percentage points of GDP— from 2005 to 2050 reflects an increase in pension expenditure from 12.4% of GDP in 2005 to 22.6% in 2050 and in healthcare expenditure from 5.1% to 6.8%, while expenditure for education and unemployment benefits would drop only slightly, from 3.7% in 2005 to 3.3% in 2050 (owing to the change in the age structure of the population). Therefore, as analysed in greater detail in Section 9.2 below, there is an imperative need for (i) a fiscal adjustment effort geared towards achieving significant primary surpluses and a reduction of public debt to 60% of GDP by 2015 and (ii) a timely reform of the pension system. Obviously, the impact of population ageing on the public expenditure for pensions and healthcare cannot be addressed through fiscal policy measures alone, i.e. by increasing tax revenue and cutting back on public expenditure, since this would undermine economic growth and compromise the state’s ability to provide basic public services. A comprehensive approach is thus required, as explained later (see Section 9.2.3).

With regard to achieving price stability, as mentioned in Section 3.3, the persistence of Greece’s relatively high levels of inflation and the widening inflation differential with its euro area counterparts and other trading partners in general are, to some extent, due to a catching-up of price and income levels in the context of real convergence. However, they are also due to macroeconomic factors, both on the demand and on the production cost side, and to unsatisfactory competition in certain markets. Since the primary objective of the single monetary policy is price stability in the euro area as a whole and not in individual countries, the contribution of the national economic policy is required so that Greece can reduce inflation. As stressed on numerous occasions, attaining this goal will largely depend on wage increases remaining consistent with price stability so that the inflation differential can gradually be eliminated. As pointed out in an earlier report by the Bank of

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1 In 2005, the general government deficit and debt of the euro area as a whole came respectively to 2.4% and 70.8% of GDP.

2 See Bank of Greece, *Annual Report 2004*, April 2005, pp. 67-68, as well as the EU report referred to in footnote 1 on page 72). Pension projections are based on data for 2002. Both the Economic Policy Committee (EPC) of the EU and Greece’s National Actuarial Authority are currently revising their projections in order to take account of the latest population data and demographic trends.
Greece, wage increases that are compatible with price stability would not only serve to reduce inflation but, if pursued consistently, could foster stronger employment and GDP growth and help improve workers’ real earnings. Apart from wage moderation, structural reforms will of course also be needed to enhance product and labour market flexibility, as well as competitive conditions (see Section 9.3 later). Reforms in a wide range of sectors are also needed to improve the structural competitiveness of the economy, as detailed below (see Section 9.3). These reforms must be geared towards reducing labour and product market rigidities and improving the business environment, the tax system and the efficiency of the public sector. Human capital must also be upgraded, to compensate for the adverse effect that the huge supply of unskilled labour in Southeastern Asia (as well as the supply of low-cost labour in certain Balkan countries) may have on the employment and wage prospects of Greece’s unskilled labour force.

In order to be effective, fiscal consolidation and the implementation of the necessary wide-ranging reforms must secure broad social consensus. As shown by the experience of other European countries, such a consensus would require informing the social partners and the general public about the challenges posed by globalisation, and encouraging an open debate on an equitable and effective solution to the economic and fiscal implications of population ageing and globalisation, which would take account of the widespread public concern about future standards of living and employment prospects. More specifically, there is a need for targeted support of those persistently below the poverty line, such as small pensioners, and of those who have lost the jobs they once held in enterprises or sectors now in decline. Measures will need to be taken to ensure that these groups receive both income support (unemployment benefits etc.) and re-training opportunities until they are able to find new employment in other enterprises or sectors of the economy. This illustrates how vital fiscal consolidation is not only to sustaining macroeconomic stability but also to implementing the necessary structural reforms.

9.2 Correcting fiscal imbalances and reforming the pension system

9.2.1 Fiscal policy

The updated Stability and Growth Programme (SGP) of December 2005, which covers the 2005-2008 period and is examined in Section 4.4, constitutes a positive step on the long and challenging path of fiscal consolidation. The SGP envisages a decrease in general government deficit to 2.6% of GDP this year, in line with the government’s commitment to correcting the “excessive deficit” by 2006 and with the relevant decision of the

ECOFIN Council on 17 February 2005, and further to 1.7% of GDP by 2008. During the two years 2005 and 2006, the deficit is expected to decline by 4.3 percentage points, while in the next two years (2007-2008) the decline will be 0.9 percentage point only. This implies that, beyond 2008, primary surpluses well above the projected 2008 level (2.8% of GDP, compared with 0.5% in 2005) will be required in order to achieve a reduction of public debt to below 60% of GDP by 2015, when the ageing of the population will put additional pressure on public expenditure for pensions and healthcare. Therefore, a permanent further improvement in the fiscal position will be necessary for the achievement of higher primary surpluses. It is indicatively mentioned that — on the basis of certain assumptions about nominal GDP growth and the path of interest rates — a debt reduction to 60% of GDP by 2015 requires primary surpluses of over 5% of GDP between 2009 and 2015.2

Achieving primary surpluses requires interventions at the level of both general government revenue and expenditure. Given the intense tax competition within the EU and the low competitiveness of the Greek economy, there is little room for raising revenue through the imposition of new or higher tax rates. Besides, a decrease in rates on corporate income tax is underway, while gradual cuts in personal income tax rates as from financial year 2007 have already been announced. Instead, increased revenue could come from a further reduction of tax evasion. The most recent study on Greece3 estimated that tax evasion (taxes not paid) in 1997 reached 14.6% of GDP or 63.6% of that year’s budgeted tax revenue. The view shared by most researchers and the Bank of Greece is that tax evasion is actually larger. It is worth noting that an earlier report of the Centre of Planning and Economic Research (KEPE) had found that, for certain VAT categories, tax evasion was higher than 100% of respective VAT receipts.4 The effective curbing of this phenomenon and the collection of even a part of evaded tax would be enough to ensure sizeable primary surpluses and achieve a meaningful reduction of public debt. Recent efforts to curb tax evasion should continue and controls should be intensified. The electronic cross-checking of tax data, a recent initiative of the Ministry of Finance, constitutes another important move and should be expanded in all directions. The introduction of VAT on new buildings is expected to help limit tax evasion in the construction sector. Furthermore, the cuts in income tax rates will also contribute to creating the necessary conditions for

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1 On the basis of the revised deficit of 2004.
2 This calculation is based on the following assumptions for the 2009-2015 period: (i) nominal GDP growth of 6% per annum, (ii) average nominal lending rate 5.5% (2005: 5.2%) and (iii) zero “stock-flow adjustment” (see footnote 1 on page 33). These assumptions suggest that a reduction of the debt from 107.5% of GDP in 2005 to 60% in 2015 would require primary surpluses of 5.1% of GDP per annum between 2009 and 2015. For the period up to 2008, the calculation was based on the primary surplus projections of the updated Stability and Growth Programme (2006: 2.3%, 2007: 2.4%, 2008: 2.8%).
3 N. Tatsos, *Black Economy and Tax Evasion in Greece*, IOBE (Foundation of Economic and Industrial Research) and Papazisi Publications, 2001, p. 94 (in Greek).
4 K. Kanellopoulos, I. Kousoulakos, V. Rapanos in cooperation with K. Kotsis and A. Makropoulou, *Underground Economy and Tax Evasion: Measurement and Economic Consequences*, KEPE, Report No 15, 1995 (in Greek). This study estimated tax evasion in the transport, telecommunication and hotel sectors at 257.9% of respective revenue, in the construction sector at 224% and in “other activities” at 315.5%.
reducing tax evasion. These measures must be combined with a stable tax system. The numerous changes in tax law along with exceptional tax measures that have characterised the last 25 years have to be halted if a “taxpayer’s ethic” is to be nurtured, as such amnesties tend to be incorporated into expectations and, in the medium term, lead to more extensive understatement of income, and work to the detriment of honest taxpayers.

The expenditure side of the budget is equally (if not more) important for the achievement of sizeable primary surpluses. The *Annual Report 2003* analysed the successful methods employed by other countries\(^1\) to control primary expenditure on a constant basis.\(^2\) For Greece, it would be useful to consider establishing a comprehensive institutional framework with specific rules for restraining expenditure at central or general government level.\(^3\) It should be noted that the Fiscal Inspectors Body\(^4\) — the establishment of which was announced at the beginning of 2006 — is expected to have a wide scope of responsibilities for the control of expenditure at all levels of general government and public enterprises. However, it is by no means a substitute for a permanent institutional framework which would allow for fiscal targeting, multi-annual budgeting and expenditure control.

As already noted in previous Annual Reports, efforts to constrain expenditure should focus on certain categories of expenditure that are very high or increase at considerably faster rates than total expenditure. More specifically:

— Central government personnel outlays (the largest component of expenditure under the ordinary budget, with 37.8% of the total in 2005) reached 10.7% of GDP in 2005, a level much higher than in the euro area.\(^5\) A tight incomes policy in the general government sector constitutes only a temporary solution, as it creates expectations and pressures for “corrective” wage increases in the future. Rather, a policy of limited replacement

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1. N. Zealand, Canada, the United Kingdom and Australia have developed remarkable methods to control their fiscal expenditures and deficits. Twelve OECD member countries set ceilings on expenditure as a percentage of GDP, while another nine set ceilings on the amount of expenditure at current prices. See P. Atkinson and P. van den Noord, “Managing Public Expenditures: Some Emerging Policy Issues and a Framework for Analysis”, Banca d’Italia, *Fiscal Rules*, 2001, p. 112.

2. Such rules typically entail ceilings on the annual growth and/or the level of primary expenditure. In order to be effective, these rules have to meet certain conditions, most notably transparency. The target variables must be clearly defined and systematically monitored, and outcomes must be quantifiable. These rules must be permanent and encompass all general government sectors (e.g. public hospitals, local authorities, universities etc.), not only central government, with annual targets being linked to respective medium-term goals. Furthermore, it must be clear which entity or person is responsible for the achievement of each target, while the assessment of the final result must be carried out by independent auditors. Finally, an appropriate institutional framework (enabling the rules to operate) is of crucial importance. Measures in this direction include the preparation of multi-annual budgets, the establishment of a system to assess public expenditure in drawing up the budget (e.g. zero-based budget assessment), the timely preparation and submission of the budget to the Parliament together with all relevant documentation, as well as the restructuring of the budget and the compilation of additional budgets, in order to fully cover the general government sector.

3. The only exception was the effort to introduce a Zero-Based Budget system in the 1978-1980 period. Despite the exceptional results of certain pilot programmes, it did not become legally binding and was eventually abandoned.


5. In 2005, outlays for general government employees (for which comparable data are available) corresponded to 12.6% of GDP in Greece and 10.5% in the euro area.
of employees who leave, in combination with a more efficient utilisation of existing human resources through reassigments, could have a positive longer-term impact.

— Subsidies to cover deficits of public entities and, to a lesser degree, public enterprises (19.4% of total ordinary budget expenditure in 2005) came to 5.5% of GDP in 2005, having increased at an average annual rate of 15.5% between 2001 and 2005. It is expected that the newly enacted Law 3429/2005, which introduced a new operational framework for non-listed public enterprises, will help such companies to rationalise their operation and to limit their deficits, thus reducing their need for subsidies.¹

— Government guarantees for the debt of public enterprises should be scaled down. The outstanding amount of such guarantees rose from 6.3% of GDP in 1999 to about 9% in 2005. When guarantees are called in, both general government expenditure and deficit increase (on a national accounts basis) and the same applies to public debt.

— Restitution of revenue collected on behalf of third parties, mainly local authorities (7.9% of total outlays under the ordinary budget in 2005), rose rapidly in the past five years (at an average annual rate of 8.8%), amounting to 2.2% of GDP in 2005. If expenditure of this category is to be controlled effectively, financial relations between local authorities and central government need to be reviewed and redesigned.

9.2.2 Reform of the pension system

As noted in Section 9.1, pension outlays in Greece, as a percentage of GDP, are already among the highest in OECD countries and, due to the ageing of the population, are projected to show one of the strongest rises between 2005 and 2050, from 12.4% to 22.6% of GDP, i.e. by 10.2 percentage points of GDP. This compares with respective rises of 2.2 percentage points of GDP in the EU-25 and 2.6 percentage points of GDP in the euro area.²

The problem is particularly acute in Greece for a number of reasons. First, the projected deterioration of the “dependency ratio” in Greece (i.e. the population aged 65 and over as a percentage of working age population aged 15-64) by 2050 will be the second largest after Spain. Second, Greece has the highest debt-to-GDP ratio in the EU-25, which makes it very difficult for the government budget to deal with this problem, unless public debt drops to 60% of GDP by 2015. Third, certain characteristics of the social security system and the labour market aggravate the problem. Finally, compared with other countries, even those where the problem is less intense, Greece — despite the considerable steps that have been taken with the relevant laws enacted in 1990, 1992 and 2002,³ as well as the law

¹ The Ministry of Economy and Finance estimates that the deficit of non-listed public enterprises reached €1 billion or 0.5% of GDP in 2005. See Introductory Report on the 2006 Budget, Table 5.2.
² See footnote 1 on p. 72 and footnote 2 on p. 73.
of 2005 on the creation of the “occupational fund” for bank employees\(^1\) — has been tardy in proceeding with the required reform of the pension system.

The size of the necessary adjustment implies that in order to ensure the viability of the system, apart from a radical reform of the pension system, there is also need for improvements in the labour market. Besides, the “three-pronged strategy” agreed at the EU level\(^2\) to cope with the projected pressures of population ageing comprises three broad objectives: to raise employment rates, to reduce government debt rapidly and to reform pension systems, including moves towards a greater reliance on funding. To this end, comprehensive reforms are needed, characterised by a series of mutually complementing measures.

One of the main inequalities of the current system, which also places a huge burden on the finances of social security funds, is not so much the actual level of pensions paid but rather the rules surrounding early retirement. Early retirement not only increases the payments made by pension funds but also deprives social security funds of inflows which they could have continued to receive from those that retire early and their employers, thus leading to much higher costs than the amount of the pension itself. Furthermore, early retirement gives rise to huge inequalities across individual categories of workers, although these are not always readily visible.\(^3\) In this context, limiting the scope of early retirement and bringing the average (effective) retirement age closer to the statutory retirement age would contribute to an equitable solution to the problem and improve the finances of insurance funds.

It is widely held that contribution evasion is one of the major drawbacks of the current pension system.\(^4\) A stronger link between contributions made during a working life and entitlements to a pension, i.e. a system that would be more of the funded type, would automatically help to reduce contribution evasion, since those insured would have a strong incentive to pay their contributions. Besides, this would also improve the transparency of the pension system.

In addition to reviewing entitlements to early retirement and limiting contribution evasion, other issues should also be addressed, such as (i) further reducing the segmentation and high operating costs of the social security system, (ii) better utilising the funds’ wealth and surpluses (and controlling more effectively this utilisation), (iii) improving the organisation of the funds, (iv) rationalising the qualifications for pension benefits and (v) encouraging mobility across funds (transferable pension rights).

Needless to say, the consolidation of public finances and, most importantly, the reduction of the high public debt are crucial to successfully meeting the challenges linked with population ageing. At the same time, measures to increase labour force par-

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1 Articles 57-69 of Law 3371/2005.
3 For instance, for one pensioner, the pensions cumulated over a lifetime may be a multiple of the total of contributions paid during his/her working life (plus interest) while, for another they may be only a fraction of total contributions (even if the latter receives a higher monthly pension).
4 The significance of contribution evasion is stressed in the *Actuarial Study for IKA-ETAM: Basic conclusions and proposals*, carried out by INE GSEE-ADEDY – Labour Institute of the Greek Federation of Bank Employees Unions and the Confederation of Public Servants, April 2005 (in Greek).
ticipation, employment and productivity will also have a positive impact on the viability of the social security system.

9.3 Structural reform of the labour and product markets and business climate improvement

9.3.1 Labour market

Compared with the EU-15 as a whole, Greece has a lower rate of employment (60.1% in 2005, against 65.1%) and a higher rate of unemployment (9.9% in 2005, against 8.2%).\(^1\) Recent comparative studies on the labour market in the EU-15\(^2\) claim that the gap between Greece (but also Italy, Spain and Portugal) and certain other EU-15 countries is, to some extent, associated with differences in the structural characteristics of their respective labour markets. More specifically, according to these studies, employment protection legislation in the “Mediterranean” countries reinforces the bargaining power of those who are in employment, but can sometimes deter enterprises from hiring, boost the unofficial labour market and create a growing rift between those who are in employment, on the one hand, and the long-term unemployed and new market entrants on the other, ultimately resulting in a lower level of employment and higher unemployment. In contrast, other Western European countries have adopted more flexible employment protection laws, which have not led to an increase in unemployment. Furthermore, it is interesting to note that the relatively high unemployment benefits in some of these countries have, once again, not sparked an increase in unemployment, because of strict eligibility conditions. Meanwhile, “active labour market policies” (e.g. training and education programmes, effective matching procedures and information diffusion to job seekers and providers, programmes with a targeted subsidisation of hiring) help the unemployed find new employment. Obviously, the potential fiscal cost of such policies presupposes high tax revenues and a sound fiscal position. Nonetheless, the experience of other European economies suggests that there are ways to reduce unemployment through policies that combine increased labour market flexibility and job security for the employed. The findings of some of the recent studies referred to above could prove useful in the debate on employment and unemployment, so that Greece can choose from the best practices implemented elsewhere. In any event, it is essential (see Section 9.1 earlier) that those who have lost their jobs on account of increased competition and globalisation should be able to find new employment in other enterprises or sectors of the economy.

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1 The figures given for the EU-15 concern the period from January to September 2005.
From a general perspective, the ability to increase employment levels calls for policies aimed at (i) improving labour market flexibility, (ii) attracting more people to the labour market, and (iii) upgrading labour force skills on an ongoing basis, given the speed at which economic and technological developments take place. However, in order for these labour market reform measures to enjoy broad social support and be effective, they must be governed by the principle of fair and equal treatment. In other words, they must not entail an increase in unemployment or discriminate against a given section of the population. These measures will also have to adopt the approach that any support (through measures such as unemployment benefits, retraining programmes to develop new skills) designed to help individuals cope with the changes in their employment status is preferable to the costly alternative of maintaining non-viable enterprises or sectors, which merely postpones the inevitable adjustment.

New legislation passed last year includes Law 3385/2005, which will help contain labour costs and strengthen labour market flexibility by reducing the compensation for overtime work and facilitating the rearrangement of working time (averaging of working hours),\(^1\) as well as Law 3386/2005 on the “entry, residence and integration of third-country nationals in Greece” designed to facilitate the integration of immigrants into the Greek labour market. A new arrangement on shop opening hours also aims, _inter alia_, to increase employment (Articles 12-13 of Law 3377/2005).\(^2\)

Other measures which could further improve the functioning of the labour market would, as stressed in the past,\(^3\) consist in improving education and vocational training systems, especially by expanding on-the-job training and opportunities for lifelong learning, and more generally by modernising the education system, so that it provides the skills that will enable workers to keep up with fast technological change during their working life.

In addition, developing the childcare infrastructure, enhancing social benefits to the family and promoting equal employment opportunities for men and women can help increase women’s labour market participation. The relevant measures, which should aim to maintain and further increase the already high participation rates of young women, while also increasing the participation rates of older women, would be more effective if combined with education and training opportunities, rather than merely contributing to the creation of poorly-remunerated jobs. With this objective in mind, consideration should be given to providing incentives to students to take part-time jobs, as well as incentives to employers to hire students on a part-time basis. A recent study\(^4\) concluded that, when combined with training opportunities, part-time jobs usually lead to full-time employment. Female employment could also be promoted by reducing the bureaucratic barriers to part-time hiring, while the relatively high participation rates of women aged 25-29 years

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could be maintained in the future if benefits connected to childcare were to be improved by firms.\(^1\) Furthermore, it has been found that a general improvement in the business environment and a simplification of start-up procedures for new businesses, which for the most part belong to the service sector, ultimately help boost the female employment rate.\(^2\)

Finally, “new forms of work organisation and greater diversity of contractual arrangements for workers and businesses, better combining flexibility with security”\(^3\) can help to increase the adaptability of enterprises and workers, especially during times of economic change. Other measures in the same direction would consist in: (i) reducing the tax disincentives to increasing work duration, as well as re-examining employment protection legislation, and (ii) improving the effectiveness of active labour market policies, as well as the operation of public and private agencies that help match supply and demand. As stressed by the Brussels European Council of 23-24 March 2006, Member States must “direct special attention to the key challenge of “flexicurity” (balancing flexibility and security)”. According to the Council, “Europe has to exploit the positive interdependencies between competitiveness, employment and social security”. Therefore, “the Member States are invited to pursue, in accordance with their individual labour market situations, reforms in labour market and social policies under an integrated flexicurity approach, adequately adapted to specific institutional environments and taking into account labour market segmentation”. The Council decided that “in this context, the Commission, jointly with Member States and social partners, will explore the development of a set of common principles on “flexicurity”” and that “these principles could be a useful reference in achieving more open and responsive labour markets and more productive workplaces”.\(^4\)

9.3.2 Product markets, business environment and public administration

In the course of 2005, the government took new measures to reduce and rationalise its regulatory intervention in the economy, improve the business environment and encourage competition,\(^5\) increase the efficiency of public utilities (with the adoption of a new operational framework for public enterprises and organisations)\(^6\) and further modernise capital markets.\(^7\) At the same time, the opening-up of the energy market advanced and alternative energy sources are being promoted in an effort to diminish Greece’s oil

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dependency. Moreover, the New Digital Strategy 2006-2013, announced in October 2005, is expected to contribute to technological modernisation in Greece. The government's growth plan is outlined in the National Reform Programme for Growth and Jobs 2005-2008 (released in October 2005) and in the National Strategic Reference Framework 2007-2013. However, additional measures will be needed to further improve the functioning of product markets and the business environment.

Indeed, a key conclusion that can be drawn from available survey data and recent studies is that entrepreneurship in Greece is concentrated in activities that — in most cases — are not particularly employment-generating, dynamic, innovative or export-oriented. Furthermore, according to the World Bank's latest annual report on entrepreneurship, Greece ranks 80th among 155 countries, based on the “ease of doing business” indicator. Entrepreneurship must, therefore, be encouraged in specific sectors of activity that have dynamism and a strong export potential. Generally speaking, there is a need for the continued implementation of policies geared towards enhancing competition, simplifying the regulatory and tax environment and reducing red tape — especially eliminating obstacles to business start-ups and entrepreneurship. Meanwhile, efforts to modernise public administration and to facilitate the transition to a knowledge-based economy must be maintained and intensified. It is also essential, as stressed in the past, that the government carries out its intention to revise Greece’s bankruptcy law, so that businesses can be given a second chance. This is also confirmed by a survey on entrepreneurship conducted by the Foundation for Economic and Industrial Research (IOBE) according to which more than 50% of the respondents cite the fear of failure as a major deterrent to starting up a business activity. Finally, the factors that inhibit business expansion — and therefore keep enterprises from taking advantage of economies of scale — must be identified.

With regard to public administration, the modern state assumes a number of different roles, one of which involves the provision of information and wide-ranging, often high quality services, which it would be difficult for groups of citizens or commercial enterprises to provide. In fulfilling this role, the state thus comes into contact with the

2 See Box III.3.
3 Data on entrepreneurship can be drawn, inter alia, from the business registers of the General Secretariat for Information Systems of the Ministry of Economy and Finance and from surveys by the Foundation for Economic and Industrial Research (IOBE) and the Global Entrepreneurship Monitor (Entrepreneurship in Greece 2004-5 and Entrepreneurship in Greece 2003).
4 Two exceptions are the hotel and restaurant industry (whose activities also involve the export of tourist services) and the telecommunications industry where technological innovation plays an important role.
citizens, the social partners and members of the international community; this presupposes flexible structures and procedures, as well as a personnel that is sensitive to modern needs. Therefore, it is imperative to upgrade the human capital in public administration, to eliminate the outdated bureaucratic procedures that burden citizens and obstruct business activity and various other social activities, and to adopt measures capable of improving the quality and availability of a multitude of services provided by public administration, while reducing their costs. These measures must include changes in the structures and procedures of public administration, with a view to shortening the time required to complete administrative tasks and adjusting output to the concrete needs of citizen groups. It must be understood that the citizens of any given modern democratic state are also “customers” of the state. As they are tax payers too, they are demanding when it comes to the quality of the information and the services they receive, whether they pay extra for them or not.

The poor quality of the services provided by public administration in Greece does not only mean that the state is unable to provide services of an equal standard to those provided elsewhere in the European Union. It also means that Greece is a less attractive destination for foreign investment. Considering that at an international level—or at least in Europe—competition is gradually shifting to the fields of know-how and information and to the service sector, competitiveness can only be enhanced by increasing quality, reliability and the responsiveness to global market needs. In other countries, these changes have necessitated reforms in the public administration with a view to reducing red tape and increasing decentralisation, in a combined effort to find flexible, adjustable and accessible procedures and structures. Such reforms are also necessary in Greece. The most successful practices must be used for the utilisation of the human resources of public administration: these include life-long learning and career advancement that maximises the benefits from education and training. Training must, in other words, be combined in practice with proper placing and career development, so that work is always perceived as a challenge and a prompt in the right direction. This, of course, would require objective and regular staff performance evaluations, together with proper target setting and job description so that work results can be assessed. This is the way to transform today’s public administration, which is characterised by repetitive bureaucratic routines, into a rational and dynamic public administration built on goals that are feasible, measurable and attainable within a specific time frame. Therefore, the radical upgrading of the public administration’s human capital needed today presupposes the elimination of outdated bureaucratic standards and the implementation of modern know-how.

1 Actions in this direction include the recent ministerial circular (5 April 2006) on “Methodology for determining Indices for Measuring Administration’s Efficiency”, which concerns the implementation of Law 3230/February 2004 (“Establishment of a Management by Objectives system, efficiency measuring, and other provisions”) and the draft of the new Civil Servant Code (after 19 months of preparation and deliberations), presented by the Minister of the Interior, Public Administration and Decentralisation on 23 March 2006.
The growth rate of the Greek economy remained satisfactory in 2005. The rate of increase in GDP registered a relatively small slowdown compared with the high rates of previous years but continued to overshoot the euro area average. GDP growth was primarily underpinned by the growth of domestic demand. However, for the first time in several years, the external balance on goods and services also made a positive contribution to growth. These developments are attributable both to the relaxed monetary and financing conditions, which bolstered private consumption, and to the favourable international environment. However, headline inflation rose and core inflation remained high, while the differentials with the respective euro area averages widened, thus further eroding Greece’s price competitiveness. Meanwhile, unemployment declined but remained high, while the poverty and social inequality indicators also remained comparatively high. Finally, the current account deficit as a percentage of GDP increased. This uneven performance of the Greek economy reflects, on the one hand, the relaxed monetary conditions currently prevailing in the euro area and, on the other hand, the large fiscal deficits, the relatively strong growth of unit labour costs for a number of years and the economy’s serious structural weaknesses. With regard to budgetary developments, the fiscal adjustment achieved in 2005 was an important first step towards fiscal consolidation. However, the general government deficit-to-GDP ratio remained high and was the second highest in the euro area, while the public debt-to-GDP ratio, although it also fell, was the highest in the euro area and in the EU.

In terms of the outlook for 2006, GDP growth is projected to turn out slightly lower than in 2005, but will continue to exceed the euro area average. Private consumption will once again be the main driving force of growth, but investment is also expected to make a major contribution to growth this year. Inflation is expected to edge down slightly in 2006, relative to 2005, but will remain higher than in the euro area.

Looking further ahead, the medium- and long-term growth prospects will depend on the ability to secure macroeconomic stability and to improve structural competitiveness. The need to address Greece’s macroeconomic imbalances and structural weaknesses becomes all the more pressing in view of (i) the impact that population ageing will have on growth and budgetary prospects, and (ii) the implications of globalisation for Greece’s international competitiveness.

Securing macroeconomic stability — and one of its essential components: price stability— will above all require fiscal consolidation and wage increases that are compatible with price stability. At the same time, to ensure price stability, structural reforms will of course be required to enhance product and labour market flexibility, as well as competitive conditions. Macroeconomic stability, *inter alia*, encourages private investment and helps attract foreign investment. Achieving price stability is essential to improving international competitiveness.

With regard to fiscal consolidation, Greece’s fiscal imbalances remain large, in spite of the deficit reduction of 2005. The size of the fiscal consolidation effort needed to
correct these imbalances is in fact greater than what the current deficit and debt levels imply. In view of the adverse demographic prospects, failure to achieve a timely reform of the pension system would cause the public expenditure for pensions and healthcare to increase dramatically after 2015 —by a total of 11.5 percentage points of GDP from 2005 to 2050— according to available projections. Obviously, the budgetary impact of population ageing cannot be addressed through fiscal policy measures alone, but rather calls for a comprehensive approach, through: (i) fiscal adjustment aimed at achieving significant primary surpluses and reducing public debt to 60% of GDP by 2015; in this context, in the period following 2008, it would be advisable to seek to move steadily towards a budgetary position of close to balance or in surplus and at the same time ensure that the debt ratio shifts onto a declining path; (ii) a timely and effective reform of the pension system; and (iii) structural measures designed to raise the employment rate and improve productivity.

Improving the structural competitiveness of the economy will require reforms in a wide range of sectors and is necessary if the Greek economy is to become more dynamic and export-oriented.

As mentioned previously, one of the reasons why these reforms are imperative is the fact that Greece’s low fertility rate, in conjunction with a further rise in life expectancy, will cause Greece’s population to age rapidly and decrease in the coming decades, while the elderly dependency ratio (i.e. the number of persons aged 65 years and over for every 100 people aged 15-64 years) will increase and rank amongst the highest in the OECD countries. Therefore, economic growth in the long term will have to depend on a continuous improvement in labour productivity —through investment and a more efficient use of resources— and on a further increase in the rate of employment, mainly by attracting more youths, women and older people to the labour market.

It should be noted that the low fertility rate observed in Greece and other advanced economies reflects, apart from an increase in living standards, a lack of adequate infrastructure that would help workers (especially women) reconcile their work and family lives. This drawback is also one of the main reasons behind Greece’s relatively low total employment rate (largely stemming from a low female employment rate). There are, of course, other factors that account for the low employment rate, such as labour and product market rigidities, the segmentation of the labour market (into two basic sectors – a first, where jobs are secure and de facto permanent, and a second, where no such security exists), as well as shortcomings or insufficiencies in the education and training systems. However, other advanced economies have found ways to keep their fertility and employment rates high, by setting up infrastructures that help workers to reconcile their family and work responsibilities, by implementing reforms that improve labour and product market flexibility and by investing massively in education and the economy of knowledge.

Another reason why reforms are so important is that globalisation entails an unprecedented intensification of competition in the international markets and a sharp increase in the size of these markets. Generally speaking, rapid technological progress and major changes in the international division of labour have caused the knowledge-based
economy as well as the services sector to expand in all the advanced economies, including Greece, at the expense of the primary and secondary sectors. This restructuring of production obviously has implications for employment and incomes. In order to face these challenges effectively, take advantage of the opportunities ahead and ensure that the side-effects mentioned above are only temporary, there is a need for a comprehensive strategy geared towards improving productivity and increasing the flexibility of the Greek economy – with reforms aimed at eliminating labour and product market rigidities, simplifying the regulatory and tax environment, reducing red tape, removing barriers to entrepreneurship, modernising the public administration, upgrading human capital and facilitating the transition to a knowledge-based economy. This strategy must ensure that human and other resources are transferred, as soon and as less costly as possible, from the declining sectors and industries to the ones that present a new comparative advantage and would therefore prove profitable in the long term.

Finally, the problem of poverty and social inequality may also be partly attributable to labour market rigidities and segmentation, which can cause an increase in unemployment, as they hamper the labour market entry of first-time job seekers and prevent older workers who have lost their jobs from finding new ones. Poverty and social inequality may also reflect the weaknesses of the social security system and the insufficiency of public resources, i.e. factors which explain why a large percentage of the poor in Greece are small pensioners and elderly (and, vice versa, why an important share of pensioners and the elderly are poor). Meanwhile, to the extent that social benefits to the family are inadequate and that inequalities exist in the education system, these may largely predetermine a person’s occupational and financial chances and increase the risk of certain people falling below the poverty line or finding themselves at the lower end of the income distribution.

Greece must therefore rise to the challenge and — after securing the widest possible consensus, based on an open debate with the social partners and the public at large and using as a starting point the National Reform Programme for Growth and Employment 2005-2008 (released in October 2005) and the National Strategic Reference Framework 2007-2013 — formulate a strategy that will address macroeconomic imbalances and structural weaknesses more effectively, improve the international competitiveness of the economy and ensure medium- and long-term growth, while minimising the social costs of current and future restructuring, increasing living standards in the direction of real convergence with the EU average and substantially reducing poverty and social inequality. As the world changes radically, such a strategy will have to be implemented at a rapid pace.
1.1 Summary of developments in 2005 and the outlook for 2006

From mid-2004 onwards and after the completion of projects related to the Olympic Games, the rate of growth of economic activity showed signs of deceleration, which became clearer from early 2005 onwards, mainly owing to the surge in oil prices globally and the substantial containment of the increase in public expenditure (especially for investment). According to the latest NSSG estimates, the annual GDP growth rate was 3.7% in 2005, compared with 4.7% in 2004. This slowdown is also recorded by the coincident indicator of economic activity, which is compiled by the Bank of Greece and summarises information contained in a set of key short-term indicators (see Chart III.1). Another set of indicators, which the Bank of Greece has recently begun to compile on the
basis of different techniques, corroborates the deceleration of economic growth in 2005, though the growth rate seems to have stabilised towards the end of the year (see also Box III.1). It should be noted, however, that the economic sentiment indicator for Greece (compiled by the European Commission based on business survey results) slowed from May 2004 to July 2005, but recovered between August 2005 and March 2006.


**BOX III.1**

**Indicators of economic activity**

1. **Introduction**

With the purpose of providing a fuller analysis of the developments and prospects of inflation and contributing more effectively to shaping the single monetary policy of the Eurosystem, the Bank of Greece collects and evaluates a broad range of information on short- and medium-term developments in domestic economic activity in all sectors, global economy’s developments, as well as the progress of structural interventions. Indeed, accurate and timely information about current economic activity and its short-term outlook is a very significant element in evaluating the state of the economy and formulating effective policy interventions. Since statistical information is often available with a time lag, especially for the most comprehensive indicators of activity such as GDP, the Bank of Greece (as all other central banks and international economic organisations) compiles various indicators in an attempt to summarise information on economic activity which originates from various sources and is available with the least possible time lag. This box presents the indicators compiled by the Bank of Greece with the purpose of reflecting the business cycle (economic cycle) in the Greek economy and identifying the turning points.

2. **Definitions**

Economic literature often accepts two approaches to the economic cycle. According to the first one, which is based on the concept of the so-called “classical business cycle”, economic activity is measured in terms of the levels of some of its basic indicators. The economy is considered to be in recession when the level of GDP or some other basic activity indicator starts declining for a certain period of time, having first recorded — following an upward course — its peak value. The recession ends when the indicator records its trough; the period until the activity indicator records a peak again is characterised as expansion. In modern developed economies, absolute decreases in GDP (or other comprehensive activity indicators) are not very common and are often associated with non-economic factors (wars, natural disasters etc.). In the period after World War II, most developed economies have been — for relatively long
periods of time— in continuing growth and the level of activity is characterised by a long-term upward trend. In conditions of continuing growth, it is difficult to “identify”, on a short-term basis, the turning points (and, therefore, successive periods of recession and expansion).

The second approach, which is based on the concept of “deviation cycle” or “growth cycle”, seems —both from the theoretical and the economic policy viewpoint— to be more appropriate for economies whose growth has been continuous for longer periods of time. According to this approach, aggregate activity consists of two distinct components, the “trend” (which may be evaluated using various statistical techniques – also see Section 4 below) and the “cycle”. The “cycle” (or cyclical component) is defined as the difference of the level of GDP (or another activity indicator) from the level of its (smoothed) trend. Then, growth and recession phases are identified on the basis of whether deviations from the trend (i.e. the “cyclical component”) “expand” or “contract”. This means that growth and recession phases are more common than if changes in levels were simply used as a criterion. Moreover, the analysis based on whether deviations “increase” or “decrease” is important for the policy to be followed, since deviations in activity are accompanied by corresponding fluctuations in employment and unemployment.

3. Coincident indicators of economic activity

The view that the business cycle represents the common or simultaneous comovement in certain time series is old (it was first put forth by Burns and Mitchell in 1946). Analysts use various techniques to assess the state of the economy. The most common and simpler ones are various graphs and comparisons of activity indicators or compiling the so-called “diffusion indices”, which are properly weighted averages of the rates of change of indicators that describe the activity in economic sectors and industries. Since the mid-1980s, the problem of compiling activity indicators was resolved by constructing mathematical models and drawing up techniques to identify and assess the state of the economy. (These techniques are part of a broader set of mathematical techniques for an optimal “extraction” of concise indices from a broader set of information). The relevant assessments are made using two main categories of models: the “unobserved components” models and the “dynamic factor” models. These models are similar, but deal with the problem from a different viewpoint. In the “unobserved components” model, the compilation of activity indicators is based on the assumption that short-term indicators that describe the developments in sectors of the economy are mainly affected by the state of the economy (which is “diffused” in the sectors of the economy). However, the various indicators also incorporate the effect of special factors, relating to the specific sectors or branches of activity which they describe. Therefore, by applying certain

1 It should be mentioned that an expansion is recorded when a positive deviation increases, when a negative deviation decreases or when a negative deviation becomes positive. Similarly, a contraction is recorded when a positive deviation decreases, when a negative deviation increases or when a positive deviation becomes negative.

2 The identification of turning points on the basis of “expanding” or “contracting” deviations is a matter of convention, as analysts follow various practices, different in elaboration and development. Usually, a rather extended “contraction” in deviations is characterised as recession. On the basis of the “classical” cycle approach, a common criterion for characterising an economy as being in recession is to record a contraction (negative rate of change) in GDP for two successive periods (usually quarters).

statistical techniques, the coincident indicator is extracted as the “common component” of all indicators taken into account. This “one-dimensional” indicator is considered to offer a satisfactory concise assessment of the state of the economy and reflect the “comovement” of the different indicators.\(^1\)

With a “dynamic factor” model, the multivariable information, which is provided by a very large panel of time series, is summarised in a very limited number of factors. The state of the economy is subsequently established by “projecting” the main activity variable (e.g. GDP) on the common factors.\(^2\)

These techniques (especially the former) were widely accepted and applied by many central banks and economic organisations for the compilation of coincident indicators to monitor economic activity as well as for forecasts.

Since 2003, the Bank of Greece has been compiling a coincident activity index based on the unobserved components model.\(^3\) The novelty of the approach in the calculation of the indicator is that the model that describes the behaviour of the variables has not been estimated, but calibrated to the data. The index is then extracted as the common component of eight basic short-term indicators of the Greek economy. The coincident index of the Bank of Greece is used solely as a concise measure for monitoring current economic activity and not for forecasts. Besides, the Bank of Greece has a long tradition in forecasts using structural econometric models.\(^4\) The performance of the indicator to date is satisfactory, as it provides timely and reliable indications about changes in activity and constitutes one of the main tools for analysing conjuncture. Naturally, in its assessments, the Bank uses a much broader set of information and carries out in-depth analysis of the developments in sectors and branches of activity.

Moreover, the Bank of Greece has recently begun to compile “coincident” activity indicators based on the generalised dynamic factor model.\(^5\) One of the main advantages of this model, as was stated above, is that the estimation of the common factors that express the “comovement” of the activity indicators is based on a large set of variables in several sectors of the economy. This new Bank of Greece index is extracted from a panel of about 50 time series, which cover almost entirely all sectors of the economy.\(^6\) Emphasis is given to the services sector, which was less represented in the coincident activity index until now. Although the

\(^1\) The techniques that are based on the “unobserved component (variable)” model were mainly developed by Stock and Watson, who, in a series of papers (e.g. “A Probability Model of Coincident Economic Indicators” in K. Lahiri and G. H. Moore (eds.) Leading Economic Indicators: New Approaches and Forecasting Records, 1991) have invented the method to assess the state of the economy and identify it using only one indicator.

\(^2\) In this model, the consistent estimation of the space of dynamic factors is carried out using the method of principal components. Dynamic factors reflect the maximum possible variance of data fluctuation. Stock and Watson were again the leaders in this new direction of the literature, while Hali et al., Altissimo et al. have also made significant contributions in recent years, which made these techniques more elaborate in the framework of the generalised dynamic factor model. The forerunner of these models was the factor models of Sargent and Sims (1977).


\(^5\) Also see Monetary Policy 2005-2006, February 2006, pp. 96-97.

\(^6\) It should be noted that the number of variables entering into the dynamic factor model may be very large – it can even exceed the number of observations. By contrast, in the principal components model, insurmountable estimation problems are caused by any increase in the number of variables in order to cover more sectors of the economy.
experience to date is rather limited, indications are very encouraging and the new index is considered to record the activity accurately.

4. The “deviation cycle” or “growth cycle”

Since 1997, the Bank of Greece has been carrying out estimates and has been monitoring the evolution of the “growth cycle” of the Greek economy. It is more interesting to focus on the “growth cycle” because it is associated and usually identified with the concept of the “output gap”, which is the most comprehensive indicator of pressures exerted on prices by demand. The “output gap” is also a core concept taken into account in monetary policy-making and in calculating the cyclically adjusted fiscal deficit. To estimate the “deviation cycle” or “growth cycle”, an estimate must be first made of the “trend” of GDP, which also reflects the potential output of the economy. In other words, overall activity comprises two distinct components, the “cycle” (or “cyclical component”) and the “trend”.1 Many statistical techniques, with a different degree of sophistication, are available for the calculation (“extraction”) of the “trend” from a time series. In any event, the choice of percentages of the fluctuation of the initial series to be attributed to the “trend” and the “cycle”, respectively, is arbitrary and affects the identification of turning points and the distinction of upward and downward phases of the cycle. (This is the main criticism made against these approaches).

The Bank of Greece, in order to have the most reliable picture of the medium-term potential output capacity of the economy, as well as its current cyclical position, estimates the trend using statistical methods and a structural econometric production function approach. Specifically, it uses the methods of “linear trend”, “segmented linear trend” and “Hodrick-Prescott filter”, as well as models that require the application of “unobserved components” techniques, such as the variants of the “stochastic trend model”.$^2$ In general terms, an attempt is made to calculate the “trend” by using econometric models, so as to enable the incorporation of exogenous shocks or structural changes that occurred during the period under consideration. This realistic approach boosts the reliability of the results, compared with the mechanistic application of ready-to-use statistical methods. In addition, the potential growth rate of the economy and the “output gap” are also estimated by formulating structural models (production functions) that describe the output process. In these assessments, the concept of “total factor productivity” is decisive.

The indicators of the “deviation cycle” provide important and comprehensive information for analysing the trends prevailing in economic activity, identifying turning points, as well as the pressure exerted on prices by demand. However, as with coincident indices, it should be underlined that the Bank of Greece analysis is not limited to monitoring these indices only; it also takes into account a broad set of indicators that provide quantitative and qualitative information on all aspects of activity, in order to formulate the clearest possible view of the state and prospects of the economy. Naturally, the comprehensive indicators presented in this Box are useful tools in this process.

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1 The relevant models are either summative or multiplicative.

2 For the application of these techniques at the Bank of Greece, see N. Zonzilos and S.G. Hall, “The output gap and inflation in Greece”, Economic Bulletin, issue 9, March 1997.
On the demand side, the satisfactory GDP growth in 2005 was the result of the propitious international environment, the rather relaxed monetary conditions, as well as favourable financial conditions, which enabled the further financing of household and business expenditure. It should be noted that the contribution of domestic demand to GDP growth fell to 2.6 percentage points in 2005, from 5.2 percentage points in 2004, mainly because of public investment cuts and the slower growth of private consumption. By contrast, the external sector of the economy supported growth for the first time since 2001, as net exports of goods and services made a positive contribution of 1.1 percentage points to GDP growth (see Table III.1).

The growth rate of private consumption decelerated in 2005 (to 3.7%, from 4.7% in 2004), but continued to support domestic demand, reflecting the deregulation of the financial system, the continuing rise in consumer credit and the increase in households’ real disposable income. However, it is estimated that real disposable income increased less than in 2004 and was outpaced by the growth rate of private consumption; this resulted in a reduction of households’ average propensity to save. This decline can be attributed to the deceleration in the growth rate of employment, as well as the substantial slowdown in the growth of both the net average take-home pay of employees (see Table IV.4) and other forms of income. The increase in the total market value of the stock of dwellings and, to a lesser extent, the rise in the average price level of shares listed in the Athens Exchange contributed to increasing total household wealth and supported private consumption. It should be noted, however, that total consumer expenditure now depends much less on short-term fluctuations in real disposable income, mainly because of the deregulation of the banking system and the easier access to consumer credit.

The growth rate of government consumption, at current prices, fell to 6.2% in 2005, from 7.7% in 2004, partly because of the lower rate of growth of total government expenditure for salaries and pensions. At constant prices, however, it stood at 3.1% in 2005 (2004: 2.8%), partly because of the continuing rise in employment in the general government sector (see Section III.4).

Gross fixed capital formation dropped by 1.4% in 2005, having increased by 5.7% in 2004 and 13.7% in 2003. This reflects developments in investment in constructions (which fell by 4.4%) and investment in equipment (which rose by a mere 0.5%), which can be attributed to the decrease in public investment (owing to the completion of projects related to the Olympic Games and fiscal consolidation) and the further decline in housing investment. Private investment did not counterbalance the effects of drastic cuts in the Public Investment Programme. The reluctance to take up new investment incentives, also reflected in the decline of the Economic Sentiment Index from May 2004 to July 2005, indicates uncertainty about the outlook of demand. In addition, account should be taken of the (so far) limited phenomenon of (i) the relocation of a number of Greek companies to neighbouring countries characterised by lower labour costs and more favourable tax regimes (see also Box III.2) and (ii) the closing down of certain loss-making companies, especially in Northern Greece. Thus, the growth rate of business investment is estimated
## TABLE III.1
GROSS EXPENDITURE OF THE ECONOMY AND GROSS DOMESTIC PRODUCT
(Constant prices of 1995)

### Annual percentage changes

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Private consumption</td>
<td>3.6</td>
<td>4.5</td>
<td>4.7</td>
<td>3.7</td>
</tr>
<tr>
<td>2. Public consumption</td>
<td>7.5</td>
<td>−2.1</td>
<td>2.8</td>
<td>3.1</td>
</tr>
<tr>
<td>3. Gross fixed capital formation</td>
<td>5.7</td>
<td>13.7</td>
<td>5.7</td>
<td>−1.4</td>
</tr>
<tr>
<td>3.1.a By investor: general government</td>
<td>−1.1</td>
<td>16.4</td>
<td>7.7</td>
<td>−13.6</td>
</tr>
<tr>
<td>3.1.b other sectors</td>
<td>7.0</td>
<td>13.2</td>
<td>5.3</td>
<td>0.9</td>
</tr>
<tr>
<td>3.2.a By type: construction</td>
<td>3.7</td>
<td>10.9</td>
<td>3.6</td>
<td>−4.4</td>
</tr>
<tr>
<td>3.2.b equipment</td>
<td>6.9</td>
<td>18.3</td>
<td>8.0</td>
<td>0.5</td>
</tr>
<tr>
<td>3.2.c other investment</td>
<td>21.0</td>
<td>3.4</td>
<td>7.0</td>
<td>14.5</td>
</tr>
<tr>
<td>4. Change in stocks and statistical discrepancy (percentage of GDP)</td>
<td>0.5</td>
<td>0.4</td>
<td>0.4</td>
<td>0.3</td>
</tr>
<tr>
<td>5. Domestic final demand</td>
<td>5.0</td>
<td>5.5</td>
<td>4.7</td>
<td>2.3</td>
</tr>
<tr>
<td>6. Exports of goods and services</td>
<td>−7.7</td>
<td>1.0</td>
<td>11.5</td>
<td>3.0</td>
</tr>
<tr>
<td>6.1 Exports of goods</td>
<td>−7.1</td>
<td>4.2</td>
<td>−2.5</td>
<td>8.2</td>
</tr>
<tr>
<td>6.2 Exports of services</td>
<td>−8.1</td>
<td>−1.3</td>
<td>21.8</td>
<td>−0.1</td>
</tr>
<tr>
<td>7. Final demand</td>
<td>2.7</td>
<td>4.8</td>
<td>5.8</td>
<td>2.4</td>
</tr>
<tr>
<td>8. Imports of goods and services</td>
<td>−0.8</td>
<td>4.8</td>
<td>9.3</td>
<td>−1.2</td>
</tr>
<tr>
<td>8.1 Imports of goods</td>
<td>3.7</td>
<td>7.7</td>
<td>9.0</td>
<td>−0.1</td>
</tr>
<tr>
<td>8.2 Imports of services</td>
<td>−18.7</td>
<td>−10.0</td>
<td>11.0</td>
<td>−7.6</td>
</tr>
<tr>
<td>GDP at market prices</td>
<td>3.8</td>
<td>4.8</td>
<td>4.7</td>
<td>3.7</td>
</tr>
</tbody>
</table>

### Contribution to GDP growth (percentage points)

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Private consumption</td>
<td>2.5</td>
<td>3.1</td>
<td>3.3</td>
<td>2.6</td>
</tr>
<tr>
<td>2. Public consumption</td>
<td>1.1</td>
<td>−0.3</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>3. Gross fixed capital formation</td>
<td>1.4</td>
<td>3.4</td>
<td>1.5</td>
<td>−0.4</td>
</tr>
<tr>
<td>3.1.a By investor: general government</td>
<td>0.0</td>
<td>0.6</td>
<td>0.3</td>
<td>−0.6</td>
</tr>
<tr>
<td>3.1.b other sectors</td>
<td>1.4</td>
<td>2.8</td>
<td>1.2</td>
<td>0.2</td>
</tr>
<tr>
<td>3.2.a By type: construction</td>
<td>0.5</td>
<td>1.4</td>
<td>0.5</td>
<td>−0.6</td>
</tr>
<tr>
<td>3.2.b equipment</td>
<td>0.7</td>
<td>1.9</td>
<td>1.0</td>
<td>0.1</td>
</tr>
<tr>
<td>3.2.c other investment</td>
<td>0.2</td>
<td>0.0</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>4. Change in stocks and statistical discrepancy</td>
<td>0.4</td>
<td>−0.1</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>5. Domestic final demand (excluding the change in inventories)</td>
<td>5.0</td>
<td>6.2</td>
<td>5.2</td>
<td>2.6</td>
</tr>
<tr>
<td>6. Exports of goods and services</td>
<td>−1.9</td>
<td>0.2</td>
<td>2.4</td>
<td>0.7</td>
</tr>
<tr>
<td>6.1 Exports of goods</td>
<td>−0.7</td>
<td>0.4</td>
<td>−0.2</td>
<td>0.7</td>
</tr>
<tr>
<td>6.2 Exports of services</td>
<td>−1.2</td>
<td>−0.2</td>
<td>2.6</td>
<td>0.0</td>
</tr>
<tr>
<td>7. Final demand</td>
<td>3.6</td>
<td>6.3</td>
<td>7.7</td>
<td>3.3</td>
</tr>
<tr>
<td>8. Imports of goods and services</td>
<td>0.3</td>
<td>−1.5</td>
<td>−3.0</td>
<td>−0.4</td>
</tr>
<tr>
<td>8.1 Imports of goods</td>
<td>−1.0</td>
<td>−2.1</td>
<td>−2.5</td>
<td>0.0</td>
</tr>
<tr>
<td>8.2 Imports of services</td>
<td>1.3</td>
<td>0.5</td>
<td>−0.5</td>
<td>−0.4</td>
</tr>
<tr>
<td>9. Balance of goods and services</td>
<td>−1.6</td>
<td>−1.3</td>
<td>−0.6</td>
<td>1.1</td>
</tr>
<tr>
<td>GDP at market prices</td>
<td>3.8</td>
<td>4.8</td>
<td>4.7</td>
<td>3.7</td>
</tr>
</tbody>
</table>

to have dropped from 7.0% to 1.5%. However, there are favourable indications for the outlook of business investment (the number of projects included in the new development law, as well as the fact that the implementation of law on public-private partnerships is starting). It should be noted that the priorities of the regional and overall development policy defined in the National Strategic Reference Framework are very important for the investment outlook (see Box III.3).

**B O X  III.2**

*The internationalisation of production and the international investment position of Greek firms: developments, contributing factors, challenges and benefits*

1. Introduction

Since 1980, the accelerating deregulation of world trade, together with the increased capital flows between countries, the rapid technological progress and the resulting improvement in communications and reduced transport costs have led to an internationalisation of the production process and, *inter alia*, to the relocation of firms. Indeed, the economic impact of internationalisation on the economies of firms’ home countries, especially on their labour markets, has been a cause of concern in most developed countries.¹

The internationalisation of production takes various forms, depending, to a certain extent, on available technologies, the abundance of factors of production etc., while it is not necessarily synonymous with a relocation of subsidiaries from the parent company’s home country to another country. Specifically, a firm may either decide to import intermediate products or, alternatively, might outsource the production of its final products to a foreign company and import these. In the case of relocation of subsidiaries abroad, the products produced there, which may be different from those produced domestically, might be imported again into the home country of the parent company or might supply the local market and third markets. These differences in the method of internationalisation of production are important, not only because of their different impact on the economy of the home country, but also because they complicate the measurement of the extent of internationalisation of production and its effects. In general, estimates by international organisations corroborate the view that the short-term effects of the internationalisation of production depend on the extent to which this substitutes domestic production and on the specific sectors affected. In particular, it is maintained that the outflow of funds from the manufacturing sector has increased the elasticity of labour demand in the sector, especially in traditional manufacturing industries.² In addition, it should be underlined that, in order to assess the effects of internationalisation, the current situation should be compared with what would have...
occurred had the investment abroad not taken place. The policies proposed to deal with the effects of globalisation favour the enhancement of human capital, so that people adjust to the new skills in demand. The European Commission has recently proposed to the Council and the European Parliament the establishment of a “European Globalisation Adjustment Fund”. The purpose of the proposed fund is to finance actions (active employment policies and income support) to assist workers made redundant to find another job.

The most common source of data reflecting the degree of internationalisation of production are balance of payments statistics and, specifically, the trade balance and the financial account balance. For instance, increased imports (of final or intermediate goods) into Greece from Balkan countries may suggest that products until recently produced domestically are now imported. On the other hand, the financial account balance, mainly foreign direct investment (FDI) data, shows whether residents’ capital is directed to the establishment or acquisition of firms abroad. It should be noted, however, that, firstly, outward FDI does not necessarily imply the relocation of existing firms abroad and, secondly, that data on outward FDI do not include the transfer of production processes for which no capital outflow is required (e.g. orders for production from foreign firms). Therefore, balance of payments statistics are only indicative and cannot provide detailed information on the firms’ strategy to substitute the domestic production process. Such information may be drawn from firm-level surveys, such as the European Restructuring Monitor Survey (ERM), which collects data from press reports on European firms under restructuring and classifies firms according to the cause of restructuring. However, these data also have limitations, since it is not clear whether the sample is representative. For Greece in particular, the Bank of Greece also collects data on firms’ international investment activity from a sample of firms.

It is clear from the above that the data presented here on the extent of firm relocation should be treated with caution. In what follows, use is made of data both from the balance of payments statistics and from the Bank of Greece survey, which show that capital outflows from Greece mainly concern the services sector and, therefore, it is estimated that they do not considerably substitute domestic production.

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1 An innovative study attempting to approach the subject from this viewpoint was carried out by Barba Navaretti and Castellani (“Investments abroad and performance at home: evidence from Italian multinationals”, CEPR DP. No. 4284, March 2004). This study compares the growth, productivity and employment in Italian firms that invested abroad with others that did not; its results suggest that the former have increased their output and productivity more than the latter, while there were no significant effects on domestic employment.


3 This source is used, *inter alia*, in the aforementioned European Commission reports. One of the findings of these reports is that the percentage of jobs lost in Greek firms due to the relocation of firms under restructuring stands at around 30% of all jobs lost between 2002 and 2005 and is much higher than in other EU-25 countries.

4 The sample of the Bank of Greece for 2004 includes around 230 Greek firms with investment activity abroad. Moreover, the Hellenic Centre for Investment, based on a sample of firms, publishes data on direct and indirect investment by Greek firms abroad in all industries except shipping (see www.elke.gr). The Interbalkan and Black Sea Business Centre (DIPEK) also collects data on Greek firms active in the Balkans. These data show that Greece ranks first among foreign investors in Bulgaria and among the top three in Albania and Romania. DIPEK also estimates the number of jobs to the creation of which Greek firms made a (direct or indirect) contribution, but these figures are hard to confirm. Moreover, DIPEK data show a large deviation between the number of Greek firms that are simply shown to be active in these countries and the number of firms that are truly active.
2. International investment activity

The substantial increase in the stock of inward FDI globally is clearly shown in Chart A of this Box.

As it appears from the chart, the bulk of these stocks is found in advanced economies. However, the considerable increase in FDI flows to developing economies since 1990 is expected to heighten the FDI stock ratio in the latter.¹

FDI is driven by a desire to gain access to larger markets and exploit the availability and lower costs of certain factors of production in the destination countries. As already mentioned,

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¹ Specifically, according to the United Nations Conference on Trade and Development World Investment Report Database, the share of total foreign direct investment flows directed to developing economies increased from 15.3% in 1980 to 18.1% in 2000 and to 36% in 2004.

The internationalisation of production is a challenge involving benefits and potential negative effects. Benefits include decreased prices of goods and services, intensified competition, increased business profitability, better allocation of investment, transfer of know-how and increased demand. Potential negative effects concern the economy of both the home country and the destination country. For the home countries, if the production process does not adjust to the new reality created by globalisation, a decline may be recorded in economic activity and, therefore, in employment, initially in the relocated industries. Consequently, the most important challenge is to adjust the production process in the economy of origin, so as to minimise the effects on the local labour market. This means that a timely intervention should be made in the industries whose firms relocate abroad, so that their workers can move to other industries. As expected, these developments are more prejudicial for unskilled workers, who have more difficulty in changing industries. A recent study by the European Commission’s Economic Policy Committee\(^1\) shows that, in the European Union, people who lose their jobs take more time to find new ones than in the United States, where it appears that there is a trade-off between the speed of finding a job and the income lost from job reallocation.

\(^1\) Economic Policy Committee, _op.cit._
3. International investment activity of Greek firms

3.1 Greek direct investment abroad

Between 2000 and 2005, Greek direct primary investment abroad totalled €5 billion (approximately 0.6% of GDP per annum) and corresponded to approximately 3.5% of total domestic (Greek) business investment over the same period. The allocation of investment flows by country of destination is presented in Table IX.7 of Chapter IX, while the allocation of the stock of this investment (primary investment and reinvested profits) by country of destination is shown in Table A of this Box.

### Table A

| Regional Breakdown of the Stock of Greek Direct Investment Abroad (Percentages) |
|:------------------|:------------------|:------------------|
|                    | 2003              | 2004              | 20052 |
| Cyprus             | 31.4              | 31.6              | –     |
| Balkan countries1  | 24.8              | 27.1              | –     |
| EU-15              | 24.1              | 23.5              | –     |
| United States      | 9.0               | 8.1               | –     |
| Asia               | 3.0               | 3.3               | –     |
| Other regions      | 7.7               | 6.4               | –     |
| **Total**          | **100.0**         | **100.0**         | **100.0** |
| (million euro)     | (9,768)           | (10,125)          | (11,312) |

1 Albania, Bulgaria, Romania and former Yugoslavia countries (Bosnia-Herzegovina, Croatia, FYROM and Serbia-Montenegro).
2 Provisional data.

Source: Bank of Greece.

These data show that investment is directed both to countries with lower labour costs (e.g. the Balkans) and countries where labour costs are higher (e.g. EU-15). Moreover, Table B –
shows that the bulk of investment is directed to industries of the services sector (especially finance and telecommunications).

Specifically, regarding the stock of FDI by Greek residents in Balkan countries, 48.8% is directed to telecommunications, 24.8% to financial services, 17.6% to manufacturing (including oil refining), 5.9% to trade and 1.8% to construction.

It is difficult to assess the effects of direct investment by Greek firms abroad on the Greek economy as a whole and the labour market in particular, due to the lack of detailed data both on employment in Greek firms’ affiliates abroad, as well as on the parts of the production process that relocated abroad. Moreover, it is hard to estimate the developments in such firms had they not relocated.

Table C includes data on the number of persons employed in foreign companies, in which Greek firms hold more than 50% of the share capital. These data are indicative only, since certain firms have not yet declared the number of their employees.

In assessing these data, the following points should be made by sector of activity:

(1) Financial sector: Greek banks establish subsidiaries or branches and acquire foreign banks in order to take advantage of a large market. Access to these markets would not be feasible without the physical presence of the banks in these countries. Greek banks do not use the services in these countries to pursue their operations in Greece. Therefore, the expansion of Greek banks abroad is not considered to restrict the hiring of personnel in Greece.

(2) Telecommunications: The presence of Greek telecommunications companies in the Balkans (e.g. Romania, Bulgaria etc.) is significant. These companies take advantage of the expansion potential in these markets without substituting their presence in Greece.

(3) Manufacturing: In manufacturing, Greek firms are active in South-East European countries, especially in textiles and clothing, as well as in basic metals and food. Of the 16,000 persons shown to be employed in manufacturing investment, 6,000 are employed in textiles and clothing, 5,000 in metal products, 1,000 in the food industry and the remainder in other manufacturing industries. Therefore, these figures show that the decline in employment in

<table>
<thead>
<tr>
<th>Sector of Economic Activity</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>16,000</td>
</tr>
<tr>
<td>Construction</td>
<td>1,000</td>
</tr>
<tr>
<td>Trade, hotels and restaurants</td>
<td>5,000</td>
</tr>
<tr>
<td>Transport and communications</td>
<td>28,000</td>
</tr>
<tr>
<td>Financial institutions</td>
<td>15,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>65,000</strong></td>
</tr>
</tbody>
</table>

**Source:** Bank of Greece. Provisional data. See main text.

1 It should be noted, however, that the presence of Greek firms in other industries except banks and telecommunications may be underestimated here to a certain extent, since firms in these industries are in general of smaller size and thus are not included in the sample.
3.2 Intra-industry international trade in manufacturing

An indication of the growing internationalisation of production is provided by increased intra-industry trade flows. For Greece, however, the share of manufacturing intra-industry trade in total manufacturing trade is low compared with other European Union countries and has been decreasing over time.2

1 In September 2005 the Greek General Confederation of Labour (GSEE) published a list of “large firms that ceased their operations or reduced their personnel or relocated to neighbouring countries” since early 2004, which shows that the jobs lost due to the relocation of firms amounted to approximately 1,150 over this period.

2 According to OECD estimates (Economic Outlook No. 71, 2002), this percentage in Greece was approximately 43% in the period 1988-1991 and dropped to 37% in the period 1996-2000. In this latter period, Greece recorded the lowest share of manufacturing intra-industry trade in total manufacturing trade amongst all EU-15 Member States, followed by Finland with a substantially higher share (53.9%).

EU regional policy in the new programming period (2007-2013)

In the face of a growing gap, since the mid-1990s, between the EU-15 and the United States in terms of per capita GDP, the Lisbon European Council of March 2000 decided to adopt the “Lisbon Strategy”, aimed at making the European Union the most competitive and dynamic knowledge-based economy in the world. However, in spite of the adoption of this ambitious reform agenda, the divergence between the EU-15 and the United States became even wider in the period 2000-2004. Against this background, the European Council of Brussels (March 2005) called upon the European Commission, the Council and the Member States to relaunch the Lisbon Strategy and re-focus priorities on growth and employment.1

According to the new Lisbon strategy, EU cohesion policy after 2006 will place the main emphasis on knowledge, innovation and the optimisation of human capital and it will be shaped in line with the Commission’s key policy documents, namely: i) the Third Cohesion Report;2 (ii) the General Regulation3 and (iii) the Strategic Guidelines 2007-2013.4

1 See Bank of Greece, Annual Report 2004, Box IX.2.
In particular, the Third Cohesion Report identifies three Community priorities, also serving as headings under which the future generation of programmes will be grouped: convergence; regional competitiveness and employment; territorial cooperation.

The General Regulation refers to the legislative proposals of the Commission delineating: (i) the objectives and the role of the Structural Funds and the Cohesion Fund in their attainment; (ii) the criteria on the basis of which the Member States and the regions can have access to financial aid from these Funds (geographic eligibility); (iii) the available financial resources and the criteria for their allocation.

Specifically, according to the General Regulation, the “Convergence” objective refers to speeding up the convergence of the least developed Member States and regions. This will be achieved with the contribution of the ERDF (European Regional Development Fund), the ESF (the European Social Fund) and the Cohesion Fund. The objective “Regional Competitiveness and Employment” refers to enhancing the competitiveness and attractiveness of regions and will be financed by the ERDF and the ESF. Finally, the “European territorial cooperation” objective will seek to promote international, cross-border and inter-regional cooperation and will be financed by the ERDF. The allocation of financial resources among these three objectives of the revised Cohesion Policy will be as follows: 81.7% for “Convergence”, 15.8% for “Regional Competitiveness and Employment” and 2.4% for “European territorial cooperation”.

Regarding geographic eligibility, the Convergence objective will chiefly cover regions with a per capita GDP of less than 75% of the EU average; also, regions whose GDP per capita is above 75% of the EU average but less than 75% of the average of the 15 “old” Member States will be eligible for “phasing out” funding, i.e. transitional support to make up for ineligibility due to the statistical effect of EU enlargement. In addition to this financing, which will come from the Structural Funds, support will also be provided by the Cohesion Fund to Member States whose per capita Gross National Income is less than 90% of the EU average. The “Regional Competitiveness and Employment” objective identifies two groups of regions: the first group comprises regions not covered by programmes under the Convergence Objective and the second one the regions that are currently eligible for “Objective 1” and do not qualify for funding under the Convergence objective (“phase-in” countries). For the “European Territorial Cooperation” objective, eligible are border regions as well as greater regions of transnational cooperation.

The Strategic Guidelines for the new programming period 2007-2013 focus on: (i) making Europe and its regions a more attractive place to invest and work in; (ii) improving knowledge and encouraging innovation with a view to fostering growth; (iii) creating more and better jobs.

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2 In Greece, the regions of Eastern Macedonia-Thrace, Thessaly, Epirus, the Ionian Islands, Western Greece, the Peloponnese, North Aegean and Crete (per capita GDP lower than 75% of the Community average) are eligible for the “Convergence” objective. Moreover, the regions of Central Macedonia, Western Macedonia and Attica will continue to be supported by the “Convergence” objective but with reduced funds, owing to the statistical convergence (per capita GDP lower than 75% of the Community average, as estimated for the EU-15, but relatively higher in the EU-25). The regions of Sterea Ellada and South Aegean are eligible for the target of “Regional Competitiveness and Employment”. In the said regions per capita GDP is higher than 75% of the Community average (according to the Guidelines concerning state aids of regional character 2007-2013, 2006/C54/08).
The Commission’s Strategic Guidelines should be taken into account by the Member States when drawing up their National Strategy Plans or National Strategic Reference Frameworks (NSFRs) for the period 2007-2013. These plans, in turn, will provide a framework for the new Operational Programmes of Member States.

As mentioned in the Strategic Guidelines, the territorial dimension of cohesion policy can play an important role in support of the economic regeneration of rural and urban areas. Specifically, action in favour of rural areas should contribute to ensuring access to services of general economic interest and connectivity with the main national and European networks, in order to improve living conditions in such areas. Ensuring universal access to all services, particularly in very sparsely populated areas, may be achieved by creating development poles and economic clusters in rural areas. In addition, cohesion policy should support the endogenous capacity of rural areas. E.g., given that many rural areas depend heavily on tourism, actions should seek to preserve and develop the physical environment and the cultural heritage.

Cross-border cooperation should focus on strengthening the competitiveness of the border regions. Actions in this respect should include promoting knowledge and know-how transfer, the development of cross-border business activities, integrating the cross-border labour market, and joint management of the environment. Programmes coming under interregional cooperation should focus on growth and job creation, by fostering innovation, small and medium-sized enterprises (SMEs) and entrepreneurship in general.

In urban areas, emphasis should be placed on improving competitiveness, through the creation of development poles and networks, and on promoting a more balanced development including links between the economically stronger cities and other urban areas. Actions eligible for funding include measures to promote entrepreneurship, raise local employment and develop the local communities. Measures seeking to rehabilitate the physical environment are also important.

At the national level, the priorities of regional policy are specified in Greece’s National Strategic Reference Framework (NSRF) 2007-2013, which will be forwarded to the European Commission in June 2006, and in the Operational Programmes prepared in parallel with the NSFR and due to be submitted to the EU for approval by mid-2006. It should be noted that the Operational Programmes will be drawn up on the basis of Development Programmes prepared by the agencies responsible for sectoral policies (ministries) and those responsible for regional policies (Regional General Secretariats). The national planning for the period 2007-2013 was launched with two Circulars issued by the Ministry of Economy, followed up by Regional Development Conferences and two National Development Conferences.

1 Circular I (4 June 2004) identified the key orientations and challenges of development policy and its implementation, and specified the agencies and bodies responsible for planning. Circular II (25 October 2004) provided more detailed guidance concerning the documents to be prepared, the methodology and procedures for drawing up the National Development Strategy Guidelines 2007-2013 and for defining sectoral and regional development priorities, as well as for organising Regional Development Conferences.

2 The First National Development Conference (Thessaloniki, 26 July 2005) reviewed recent developments (Financial Perspective, proposed EU Regulations and EU Strategic Guidelines 2007-2013) and the outcome of Regional Conferences and proposals on the structure of the new programmes. The Second National Development Conference (Athens, 9 December 2005) reviewed, among other things, progress with national development programming and the results of the consultation procedure with the social and economic partners and presented a first draft of the National Strategic Reference Framework (NSRF) 2007-2013.
In particular, the key priorities of development strategy as identified in the first draft of the Strategy Part of the NSRF 2007-2013\(^1\) are consistent with the Community Strategic Guidelines on Cohesion 2007-2013 and are centred around the following axes: (i) regional development; (ii) cross-border, transnational and interregional cooperation; (iii) environment and sustainable development; (iv) reinforcement of accessibility and services of general economic interest; (v) entrepreneurship and external openness; (vi) development of human capital; and (vii) digital convergence and reform of public administration.

Specific priorities under the “regional development” heading are: to complete basic transport infrastructure; to develop an entrepreneurship infrastructure; to mobilise small and medium-sized enterprises; to support interventions aimed at protecting and promoting the cultural heritage of each region; to promote the competitive advantages of the regions and to enhance their export orientation; to boost the demographic and economic expansion of mountainous, border and insular regions; to facilitate access to research and development; and to support local initiatives for employment.

These priorities are seen as conducive to attracting investment, improving the regions’ international competitiveness, removing isolation, diffusing knowledge and technology — thereby improving the quality of locally produced goods and services— and upgrading the human capital, which would all serve the ultimate goal of reducing interregional and intraregional disparities.

To ensure the effective implementation of the development strategy envisaged in the NSRF, the country is divided into five Major Development Regions,\(^2\) each having its own authorities entrusted with the planning, management, monitoring, control and evaluation of the development projects in these regions. These are: (a) Macedonia and Thrace; (b) Thessaly, Epirus, Sterea Ellada; (c) Western Greece, Peloponnese, Ionian Islands; (d) Attica; and (e) Crete, South Aegean and North Aegean. The preparation, implementation and management of development projects will be entrusted to Development Organisations to be set up at the level of Major Development Regions. For certain categories of actions, sociétés anonymes (Development Companies) will be established, which will undertake the grouping and management of projects at the level of Administrative Regions.

The creation of Major Development Regions and the establishment of Development Organisations and Companies aim at reducing the number of managing authorities, thereby ensuring more flexible absorption and utilisation of funds. Furthermore, the creation of Major Development Regions does not affect any of the privileges of the 13 Administrative Regions of the country, while the resources of the NSRF 2007-2013 will be allocated on the basis of the current administrative structure of Greece.

Finally, it should be noted that the NSRF 2007-2013 will contribute to the promotion of the priorities set forth in Greece’s National Reform Programme 2005-2008, as the latter covers the first two years of the above programming period.

One of the key aspects of the growth model envisioned by the National Reform Programme 2005-2008 is greater regional cohesion. In this context, actions are being —

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According to NSSG national accounts estimates, exports of goods rose by 8.2% in 2005, following a fall by 2.5% in 2004. However, over the last five years, the growth rate of exports of goods was lower than that of external demand, reflecting cumulative losses in competitiveness during the same period. However, exports of services remained unchanged (–0.1%) in 2005 (2004: 21.8%), mainly because of the shortfall in transport receipts, which should be attributed to the drastic decrease in freight rates. According to Bank of Greece data, gross receipts from transport services grew by 4.2% in 2005, compared with about 40% in 2004. By contrast, gross tourism receipts recorded a satisfactory increase (6.7%, compared with 9.0% in 2004). Owing to these developments, the growth rate of aggregate exports of goods and services, on a national accounts basis, slowed down substantially in 2005 (2005: 3.0%, 2004: 11.5%).

According to NSSG estimates, imports of goods and services fell by 1.2%, having increased by 9.3% in 2004. Specifically, exports of goods remained unchanged (–0.1%), mainly owing to the extremely large volume of imports in previous years for the preparation of the Olympic Games, as well as — to a lesser extent — to the substantial deceleration in domestic demand growth in 2005.

As regards the outlook for 2006, GDP is projected to grow by 3.5%, compared with 3.7% in 2005. Private consumption is expected to grow at a slightly lower rate than in 2005, but will continue to be the main force driving domestic demand and will be boosted by the expected increase in income and employment, as well as the increase in consumer loans and the cumulative rise in the market value of household assets over the last few years. In addition, total gross fixed capital formation will make a significantly increased contribution to GDP growth in 2006, because of the expected recovery of public investment (following the drastic cut in 2005) and investment in dwellings (after the slight decline in 2005). Business investment is estimated to grow at a substantially higher rate than in 2005, given that public enterprises plan to increase their investment significantly, while private firms are expected to take advantage of the incentives of the development law and credit conditions, which remain favourable. By contrast, it is estimated that the growth rate of government consumption will slow down because of fiscal consolidation.

The change in the real external balance of goods and services is estimated to make a negative contribution to GDP growth in 2006, unlike 2005. Specifically, while the rise in exports of goods will be significant owing to the projected developments in global economic activity, imports of goods are expected to make a noticeable recovery in 2006. In services, the favourable external environment should support demand for shipping services (but receipts may drop because of reduced rates), while tourism receipts will rise further.
1.2 Consumer demand

The strong — albeit decelerating — growth of private consumption contributed substantially to GDP growth (by 2.6 percentage points\(^1\)) in 2005 as well. According to NSSG national accounts estimates, private consumption increased by 3.7% in 2005 (against 4.7% in 2004 and 4.5% in 2003). As available short-term indicators show, this can be attributed to increased household expenditure for purchases of goods and —mostly— services (see Charts III.2A and III.2B and Table III.2). Specifically, the value of retail sales (except sales of passenger cars and fuel) grew by 5.9% in 2005 (2004: 6.2%), while the volume of retail sales increased by 3.0% (2004: 4.5%). A considerable contribution to this growth was made by food, pharmaceutical products and cosmetics, as well as durable consumer goods. Expenditure for passenger car imports increased by 5.5% in 2005, despite the 3.0%\(^2\) decline in new passenger car registrations (following a conjunctural 15.7% rise in 2004\(^3\)). This reflects increases in both the prices and the average engine capacity of new cars.

Despite the slight drop (0.7%) in the IOBE\(^4\) index of business expectations for services (except retail trade and banks) in 2005,\(^5\) which had recorded a significant rise in 2004 (12.8%), the increase in consumer demand for services is estimated to have been strong, also confirmed by the rapid growth of demand both for land and air transport services and for mobile telephony services.\(^6\)

<table>
<thead>
<tr>
<th>Categories</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Big food stores</td>
<td>6.3</td>
</tr>
<tr>
<td>2. Department stores</td>
<td>4.9</td>
</tr>
<tr>
<td>3. Food – beverages – tobacco</td>
<td>3.2</td>
</tr>
<tr>
<td>4. Pharmaceuticals – cosmetics</td>
<td>6.5</td>
</tr>
<tr>
<td>5. Clothing – footwear</td>
<td>5.8</td>
</tr>
<tr>
<td>6. Furniture – electrical appliances – household equipment</td>
<td>5.2</td>
</tr>
<tr>
<td>7. Books – stationery – other paper goods</td>
<td>5.8</td>
</tr>
<tr>
<td>8. Retail sales not in stores</td>
<td>1.1</td>
</tr>
</tbody>
</table>

| General turnover index in retail trade     | 5.9  |

**Source:** NSSG. Revised turnover index in retail trade (on the basis of the new NSSG’s sample for the year 2000).

---

1. The contribution of government consumption and total investment to GDP growth in 2005 amounted to zero.
2. The annual rate of decrease fell to 0.8% in the first quarter of 2006.
3. The conjunctural increase in the number of new passenger car registrations in 2004 may be attributed, to a certain extent, to increased needs for the Olympic Games.
4. The survey covered industries such as hotels and restaurants, travel agencies, land and other transport, advertising and provision of business services, insurance etc.
5. The rate of decline was lower in the first quarter of 2006 (-0.4%).
6. See section III.3.
CHART III.2

CONSUMER DEMAND

A. RETAIL SALES VOLUME AND RETAIL TRADE BUSINESS EXPECTATIONS*

- Retial Sales Volume - Total (2000=100)
- Business Expectations in Retail Trade (1993=100)

B. NEW PASSENGER CAR REGISTRATIONS*

* Percentage change over the same month of the previous year.

Sources: NSSG (retail sales and cars) and Foundation for Economic and Industrial Research - IOBE (expectations).

The revised retail sales index is calculated excluding VAT. As from January 2006, new revised retail trade index. The business expectations index is based on firms’ estimates of sales and stocks, as well as on their forecasts of business activity over the next six months.
Regarding households' consumption pattern, the latest Household Budget Survey (HBS)\(^1\) conducted by the NSSG between February 2004 and January 2005 recorded relatively small changes over the 1999-2004 period. As shown in Table III.3, the share of food fell to 17.1% in 2004 (from 17.4% in 1999), while similarly small changes were recorded in other major expenditure categories, such as housing (from 10.1% to 10.7%), transport (from 12.2% to 12.6%), clothing-footwear (from 9.3% to 8.4%) etc. It should be noted that the share of expenditure for recreation-culture, education and hotels-restaurants remained almost unchanged in the period 1999-2004.\(^2\) It is estimated that the relative stability of the consumption pattern can be attributed, to a certain extent, to the fact that the latest HBS recorded a significant number of households of economic immigrants, in the consumption pattern of which basic necessities are more important than services. Indeed, as shown in Table III.3, 20.5% of the total expenditure of households the head of which was an economic immigrant concerns food (compared with 17.0% for households with a Greek head of family), 19.6% housing, water supply and fuel (compared with 10.3% for Greeks), while a mere 10.2% concerns health, education and recreation (compared with 15.3% for Greeks).\(^3\) In the last five years there was also increased household demand for housing, which, in conjunction with other factors (e.g. households’ obligations from loans, increased housing credit, lower interest rates), led to higher expenditure for house purchase.

In 2005 the growth of private consumption continued to be boosted by households’ disposable income, which, however, grew considerably less, in real terms, than private consumption.\(^4\) This is equivalent to a decline in households’ average propensity to save (following the reversal, in 2002-2004, of the downward path in the rate of savings observed in the previous period). The slower growth of households’ real disposable income was mainly due to the deceleration (in 2005) in the growth rate of both average real pre-tax pay of employees and of net average pay of employees (see Table IV.4), as well as other (non-labour) income.\(^5\)

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1 The survey was carried out by the NSSG on a sample of 6,555 private households throughout the country and gathered detailed information about the value of households’ purchases and receipts in kind, as well as their demographic and social characteristics. These data are fully harmonised with data from Household Budget Surveys in other EU countries and will be used mainly for the revision of the Consumer Price Index.

2 Given the relatively higher prices of these services over the same period.

3 The processing of data from the 2004-2005 HBS shows that the average number of persons per household with a Greek head of family is 2.7, while it rises to 3.3 per household with an economic immigrant head of family. Immigrant households have a very restricted presence of elderly people (65 years and over), while the number of children aged up to 14 is double that seen in Greek households. Moreover, the monthly consumption expenditure in immigrant households is 16% lower than in Greek households. Therefore, differences in consumption patterns are associated, to a certain extent, with the composition and the size of households, as well as the level of income.

4 Since there are no recent available national accounts estimates about households’ real disposable income, the real disposable income of the private sector has been taken into account, which, in addition to household income, includes undistributed profits of the business sector (private and public). Specifically, the growth rate of the real disposable income of the private sector dropped to 1.0% in 2005, from 6.9% in 2004.

5 Non-labour incomes (which include the income of self-employed) are estimated to have increased (at current prices) by 4.8% in 2005, compared with 8.3% in 2004.
### TABLE III.3

**HOUSEHOLDS’ AVERAGE MONTHLY PURCHASES OF GOODS AND SERVICES**

<table>
<thead>
<tr>
<th>Average number of household members</th>
<th>HBS 2004/05</th>
<th>Immigrants</th>
<th>HBS 1998/99</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total members</td>
<td>2.73</td>
<td>2.70</td>
<td>3.30</td>
<td>2.82</td>
</tr>
<tr>
<td>Members aged up to 14</td>
<td>0.42</td>
<td>0.40</td>
<td>0.79</td>
<td>0.45</td>
</tr>
<tr>
<td>Members over 14 and up to 64</td>
<td>1.75</td>
<td>1.72</td>
<td>2.42</td>
<td>1.86</td>
</tr>
<tr>
<td>Members over 64</td>
<td>0.56</td>
<td>0.58</td>
<td>0.08</td>
<td>0.51</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenditure category</th>
<th>Value of expenditure (euro)</th>
<th>Percentage %</th>
<th>Value of expenditure (euro)</th>
<th>Percentage %</th>
<th>Value of expenditure (euro)</th>
<th>Percentage %</th>
<th>Value of expenditure (euro)</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and non-alcoholic beverages</td>
<td>306</td>
<td>17.1</td>
<td>306</td>
<td>17.0</td>
<td>310</td>
<td>20.5</td>
<td>241</td>
<td>17.4</td>
</tr>
<tr>
<td>Alcoholic beverages and tobacco</td>
<td>72</td>
<td>4.0</td>
<td>71</td>
<td>3.9</td>
<td>80</td>
<td>5.2</td>
<td>51</td>
<td>3.7</td>
</tr>
<tr>
<td>Clothing and footwear</td>
<td>150</td>
<td>8.4</td>
<td>152</td>
<td>8.4</td>
<td>119</td>
<td>7.9</td>
<td>129</td>
<td>9.3</td>
</tr>
<tr>
<td>Housing, water supply, fuel and electricity for the main and secondary or country residence</td>
<td>192</td>
<td>10.7</td>
<td>186</td>
<td>10.3</td>
<td>297</td>
<td>19.6</td>
<td>140</td>
<td>10.1</td>
</tr>
<tr>
<td>Household durables – immediately consumed household items and household services</td>
<td>134</td>
<td>7.5</td>
<td>136</td>
<td>7.5</td>
<td>98</td>
<td>6.5</td>
<td>112</td>
<td>8.1</td>
</tr>
<tr>
<td>Health</td>
<td>128</td>
<td>7.2</td>
<td>131</td>
<td>7.3</td>
<td>67</td>
<td>4.4</td>
<td>94</td>
<td>6.8</td>
</tr>
<tr>
<td>Transport</td>
<td>226</td>
<td>12.6</td>
<td>229</td>
<td>12.7</td>
<td>161</td>
<td>10.6</td>
<td>168</td>
<td>12.2</td>
</tr>
<tr>
<td>Communications</td>
<td>81</td>
<td>4.5</td>
<td>82</td>
<td>4.5</td>
<td>62</td>
<td>4.1</td>
<td>49</td>
<td>3.5</td>
</tr>
<tr>
<td>Recreation and culture</td>
<td>90</td>
<td>5.0</td>
<td>92</td>
<td>5.1</td>
<td>61</td>
<td>4.0</td>
<td>68</td>
<td>4.9</td>
</tr>
<tr>
<td>Education</td>
<td>51</td>
<td>2.9</td>
<td>53</td>
<td>2.9</td>
<td>27</td>
<td>1.8</td>
<td>39</td>
<td>2.8</td>
</tr>
<tr>
<td>Hotels, cafés and restaurants</td>
<td>172</td>
<td>9.6</td>
<td>176</td>
<td>9.7</td>
<td>105</td>
<td>7.0</td>
<td>129</td>
<td>9.4</td>
</tr>
<tr>
<td>Miscellaneous goods and services</td>
<td>189</td>
<td>10.6</td>
<td>192</td>
<td>10.7</td>
<td>129</td>
<td>8.5</td>
<td>163</td>
<td>11.8</td>
</tr>
<tr>
<td>Total</td>
<td>1,792</td>
<td>100.0</td>
<td>1,806</td>
<td>100.0</td>
<td>1,516</td>
<td>100.0</td>
<td>1,383</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Source:** Calculations based on NSSG Household Budget Surveys (HBS).
Factors associated with financial market deregulation and competition (lower interest rates, increased access to bank lending and consumer credit etc.) seem to continue to exert a positive effect on the growth rate of private consumption. Indeed, the annual growth rate of the outstanding balance of consumer loans (including securitised loans) remained high at end-2005 (28.0%), despite its significant slowdown compared with December 2004 (34.7%). In addition, the annual growth rate of the outstanding balance of housing loans stood at very high levels (December 2005: 33.4%, December 2004: 27.2%, including securitised loans), thereby boosting demand for dwellings and property prices. Specifically, the average annual growth rate of the prices of dwellings, which are the most important household asset, accelerated considerably in 2005 and reached 11.8% for non-Athens urban areas, from 5.4% in 2004 (see Table III.4). Part of this increase may be attributed to tax reforms announced in early 2006 (VAT on newly-built houses, adjustment of objective prices). The rise in the prices of dwelling is estimated to have had a positive effect on private consumption, since it leads to an increase in the market value of household assets and improves the ability to borrow by using dwellings as collateral. Indeed, it is estimated that the total market value of the stock of dwellings increased by 7.8% in 2005 (compared with 5.3% in 2004). To a much lesser extent, the value of household assets also increased owing to the rise in the average price level of shares listed on the Athens Exchange (29.4% in 2005, compared with 27.3% in 2004).1

In addition, an increase in rents usually follows the rise in dwelling prices. According to a recent analysis, the ratio of residential prices to rents increase in Greece has been stable in the last three years. Specifically, the ratio of property prices to rents was rising from 1996 to 2002 (mainly due to the fall in interest rates), but has been stable since then.2

---

1 A more contained, but clearly higher than in 2004, increase was recorded in property prices in Athens as well (average annual rate of 8.0% in the first half of 2005).
2 It is estimated that the boost given to household consumption expenditure by the rise in ATHEX prices was rather small, given that this rise was selective in certain large capitalisation shares mainly held by major institutional investors, often foreign.
4 This ratio is similar to the ratio of share prices to profits, which is used by stock market analysts.
5 By contrast, in other economies (USA, UK, euro area as a whole) the upward trend of the price-to-rent ratio was preserved, without interest rates continuing to fall. The same analysis (see footnote 3) underlines that: (a) “When the price-to-rent index rises without any change in market variables, such as interest rates, this usually means that purchasing a house becomes more expensive than renting it; as a result, households gradually turn to renting, which then leads to increases in rent and stabilisation of the price-to-rent index without the prices of dwellings necessarily falling”. (b) The analysis of the development of the price-to-rent ratio “cannot document the existence or not of overpricing, since it does not take into account factors such as the level of interest rates, investors’ risk premia, supply conditions on the property market (prices of materials, supply of workforce, region, empty buildings etc.), the market liquidity conditions, as well as qualitative features of the dwelling, such as environment, access to means of transport, shopping centres etc.”.
### TABLE III.4
DWELLING PRICE INDEX

<table>
<thead>
<tr>
<th>Year</th>
<th>Urban areas – total</th>
<th>Athens</th>
<th>Other urban areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Index 1997=100</td>
<td>Percentage changes</td>
<td>Index 1997=100</td>
</tr>
<tr>
<td></td>
<td>Over previous period</td>
<td>Over corresponding period of previous year</td>
<td>Over previous period</td>
</tr>
<tr>
<td>1994</td>
<td>76.1</td>
<td>9.5</td>
<td>9.5</td>
</tr>
<tr>
<td>1995</td>
<td>82.6</td>
<td>9.2</td>
<td>9.2</td>
</tr>
<tr>
<td>1996</td>
<td>91.2</td>
<td>11.0</td>
<td>11.0</td>
</tr>
<tr>
<td>1997</td>
<td>100.0</td>
<td>12.5</td>
<td>12.5</td>
</tr>
<tr>
<td>1998</td>
<td>114.4</td>
<td>15.5</td>
<td>15.5</td>
</tr>
<tr>
<td>1999</td>
<td>124.5</td>
<td>12.2</td>
<td>12.2</td>
</tr>
<tr>
<td>2000</td>
<td>137.6</td>
<td>15.1</td>
<td>15.1</td>
</tr>
<tr>
<td>2001</td>
<td>157.7</td>
<td>17.6</td>
<td>17.6</td>
</tr>
<tr>
<td>2002</td>
<td>178.2</td>
<td>16.2</td>
<td>16.2</td>
</tr>
<tr>
<td>2003</td>
<td>188.4</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>2004</td>
<td>193.3</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td></td>
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</tbody>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>212.7</td>
<td>207.1</td>
<td>209.9</td>
<td>208.0</td>
<td>211.5</td>
<td>208.5</td>
<td>208.8</td>
<td>212.4</td>
<td>212.1</td>
<td>217.9</td>
<td>219.1</td>
<td>231.3</td>
</tr>
<tr>
<td>2005</td>
<td>223.6</td>
<td>223.5</td>
<td>224.0</td>
<td>226.4</td>
<td>229.1</td>
<td>231.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sources:** For the other urban areas: Bank of Greece (quarterly data). For Athens: calculations based on data from "Danos and Associates" (1993-1997) and "Property Ltd." (monthly data 1997-2005). For the total of urban areas: weighted index based on the housing stock in Athens and the other urban areas.
1.3 Investment demand

Investment demand decreased in 2005 and gross fixed capital formation fell by 1.4%, having risen by 5.7% in 2004 and 13.7% in 2003. Thus the long-standing increase in capital stock came to a halt (temporary, according to estimates). The drop in total investment in 2005 concerned both investment in construction (−4.4%) and investment in equipment (which grew by a mere 0.5%). This development was solely due to the large decrease in general government investment and the further decline in residential investment. These developments were not offset by the increase in business investment.

In greater detail, general government investment fell substantially at constant prices (by 13.6% in 2005, having increased by 7.7% in 2004), both because of the completion of projects related to the Olympic Games and fiscal consolidation. Therefore, public investment, although it represents a relatively small percentage of total investment, had a negative effect (of 0.6 percentage point) on the GDP rate of change in 2005.

Residential investment decreased for the second year in a row (by 1.4% in 2005 and 0.6% in 2004). This indicates that demand for dwellings, fuelled by the further expansion of housing credit, was met by the existing stock of dwellings. Investment in other construction (including public investment in construction) fell by 6.1% in 2005 (after a 6.0% increase in 2004), despite the fact that certain major infrastructure projects were still underway, mainly in transport and energy-telecommunications infrastructure. These developments are also reflected in the substantial drop in the index of business expectations in construction, compiled by the IOBE (2005: −22.9%, 2004: −28.9% – see Chart III.3).

The considerable deceleration in the growth rate of business investment (to 1.5%, from 7.0% in 2004) is associated with the completion of major projects relating to the Olympic Games. It should be noted that investment by public enterprises and by private industrial firms decreased.

Specifically, investment by public enterprises fell, at current prices, by 21.4% in 2005 to €2.3 billion (from €2.9 billion in 2004), according to provisional estimates by the Ministry of Economy and Finance included in the Introductory Budget Report for 2006.

In addition, according to the latest IOBE investment survey (October 2005), private industrial firms (which make up only a part of the business sector) estimate that their

---

1 The ratio of gross fixed capital formation to GDP at current prices rose to 25.2% in 2004, from 22.7% in 1999. Although it fell in 2005, it stood at the relatively high level of 23.7%.
2 Public Investment Programme disbursements also fell substantially (by 21%), having increased by 11.7% in 2004.
3 In 2005 they represented 14.6% of total fixed capital formation.
4 The very large increase in the volume of private building activity on the basis of permits (35.2% in 2005, following a 3.4% decrease in 2004) reflects the impressive recovery of the index from July to December, which is due to the pre-announcement of changes in the tax regime on real properties (in January 2006 the index fell at an annual rate of 13.7%). This is a “leading” indicator – i.e. the recovery of building activity itself will emerge gradually in the course of 2006 and 2007.
5 The annual rate of the indicator began to recover in September 2005. In the first quarter of 2006, the indicator rose at an annual rate of 50.7%.
CHART III.3

MAIN INDICATORS OF INVESTMENT ACTIVITY

VOLUME OF NEW BUILDINGS AND EXTENSIONS (PERMITS)

DISBURSEMENTS OUT OF THE PUBLIC INVESTMENT BUDGET

INDEX OF CAPITAL GOODS OUTPUT

INDEX OF BUSINESS EXPECTATIONS IN CONSTRUCTION

1 Twelve-month moving average centred on the last month of the period.
2 Disbursements to finance the public investment programme (cash basis, current prices).

Sources: NSSG, IOBE and Bank of Greece.
investment expenditure, at current prices, decreased by 18.2% in 2005 (in the previous survey, conducted in March 2005, firms estimated an 8.4% drop in expenditure\(^1\)). The only exception is food-beverages-tobacco companies, which revised upwards their already positive estimates (a 7.9% increase in investment expenditure). According to the survey, in 2005 there was a drop in the percentage of investment to replace existing capital equipment and to increase production capacity for goods already being produced. Also, there was an increase in expenditure aimed at expanding production capacity for new products, improving already applied production methods and introducing new ones, as well as in investment to protect the environment, improve safety etc. For 2006, private industrial firms are optimistic and predict a 10.7% increase in investment expenditure, at current prices. Specifically, investment in the sectors of chemical products, non-metallic minerals and basic metallurgy will increase substantially, the negative course of 2005 will be maintained in textiles and clothing-footwear, and the positive climate in food-beverages-tobacco will be reversed.\(^2\)

Broadly speaking, the business investment outlook is positive, since financing conditions are favourable\(^3\) and profitability is satisfactory in many industries.\(^4\) Specifically, in the course of the first year of application of the development law 3299/2004 (until 3 March 2006), 1,391 investment plans worth €2.7 billion were submitted to the Evaluation Committee; 710 investment plans worth €1.1 billion were approved by early March 2006, which call for the creation of 3,898 new jobs directly (and more jobs indirectly).\(^5\) Moreover, there was a very substantial increase in the major investment plans which are the responsibility of the Hellenic Centre for Investment (ELKE). Their approved amount rose to €334 million in 2005, from a mere €22.8 million in 2004 and €138.9 million in 2003.

2. PRIMARY AND SECONDARY PRODUCTION

2.1 Agricultural production

According to NSSG national accounts data, the value added of the primary sector (at 1995 prices) decreased by 2.1% in 2005, compared with a 0.7% rise in 2004 and a 3.5% drop

\(^1\) As underlined by the IOBE (The Greek Economy, quarterly report 3/05, February 2006) in a comment on the corresponding outcomes for the EU countries as a whole (given that the investment survey is part of an EU harmonised survey), (a) “the downward revision of investment expenditure is a feature of the entire EU and the euro area”, (b) “in early 2005 a 5% increase was expected for the EU-25, but later on in 2005 a marginal fall in expenditure (−1%) is anticipated” and (c) “at country level, there is a downward reversal of the March climate in most of the countries”.

\(^2\) There are positive expectations of a 5% rise in investment for the EU as a whole and 6% for the euro area. Also see European Commission, Business and consumer survey results, January 2006 (Table 8a).

\(^3\) The annual growth rate of total business financing by MFIs, including MFI holdings of corporate bonds, stood at 12.5% in the last quarter of 2005, compared with 12.6% in the same quarter of 2004 (see Chapter VI.2.2).

\(^4\) By contrast, the relocation of domestic companies to neighbouring countries with lower labour costs and lower taxation leads to a slowdown in the growth rate of domestic business investment.

\(^5\) Announcements by the Minister of Economy and Finance, 9 March 2006.
in 2003. The production of major crops (olive oil, industrial tomato, peaches, apples, maize, soft wheat) decreased slightly, while sugar beet and durum wheat output increased considerably. At the same time, livestock production remained virtually unchanged (see Table III.5).

Concerning price formation, according to NSSG data (see Table III.6) there was a 3.1% rise in agricultural products’ prices paid to producers (compared with a 1.9% decrease in 2004), which reflects price increases in the prices of both plant products (2.4%, compared with −3.2% in 2004) and livestock products (5.2%, compared with 2.1% in 2004, especially meat (6.9%, compared with 2.4% in 2004). However, the large increase in fuel prices and the substantial rise in fertilisers’ prices contributed to a 5.1% increase in the prices of agricultural inputs (2004: 7.5%), which led to a deterioration of the terms of trade for producers. In addition, according to data from the Economic Accounts for Agriculture (published by Eurostat for all EU countries), real agricultural income decreased by 2.8% in 2005 (−7.9% in EU-25), while real agricultural income per full-time employee fell by 1.8% (−5.6% in EU-25).

The new agricultural subsidies regime (whose implementation began with the revision of the CAP as from 1 January 2006) is expected in the medium term to strengthen...
pressures to abandon less efficient agricultural operations,¹ as subsidies are completely dissociated from current production, at least for the basic agricultural products. Therefore, the need to effectively implement reforms and support viable business initiatives in the agricultural sector becomes clearer; thus, ensuring agricultural income should stem mainly from meeting the needs of modern consumers for qualitative and safe products, without endangering the country’s natural capital. In any event, the implementation of Law 3399/2005 (which deals with agricultural development and came into force in October 2005) is expected to contribute to the improvement of scientific, professional and technological support to farmers at the local level (Local Agricultural Development Centres, Accredited Agricultural Consultants), as well as to the resolution of several other issues of the agricultural sector, such as the improvement of incentives to new farmers and cooperatives, the establishment—within the Ministry of Agricultural Development and

<p>| TABLE III.6 | PRODUCER PRICES¹ AND INPUT PRICES |</p>
<table>
<thead>
<tr>
<th>Weight</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plant production</strong></td>
<td>70.704</td>
<td>5.4</td>
<td>11.0</td>
<td>11.6</td>
<td>-3.2</td>
</tr>
<tr>
<td><strong>Livestock production</strong></td>
<td>29.296</td>
<td>7.7</td>
<td>-2.2</td>
<td>1.3</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>General producer price index</strong></td>
<td>100.000</td>
<td>6.1</td>
<td>7.1</td>
<td>8.8</td>
<td>-1.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weight</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consumables</strong></td>
<td>74.854</td>
<td>1.4</td>
<td>2.3</td>
<td>4.2</td>
<td>9.0</td>
</tr>
<tr>
<td><strong>Fixed capital</strong></td>
<td>25.146</td>
<td>4.0</td>
<td>4.4</td>
<td>3.2</td>
<td>3.1</td>
</tr>
<tr>
<td><strong>General input price index</strong></td>
<td>100.000</td>
<td>2.1</td>
<td>2.8</td>
<td>4.0</td>
<td>7.5</td>
</tr>
</tbody>
</table>

1 Producer prices do not include subsidies on products.  
Source: NSSG.

Food—of “enlarged working groups” per product, with the participation of social partners, the upgrading of the National Agricultural Research Foundation (N.AG.RE.F), the creation of an Office for the Promotion of Agricultural Products within the Hellenic Export Promotion Organisation etc.

2.2 Manufacturing

The relevant NSSG volume index shows that total industrial output fell in 2005 (–0.9%), having increased (+1.2%) in 2004. This mainly reflects the decline in the pro-

¹ It is estimated that the number of agricultural businesses in Greece exceed 800,000.
duction of intermediate and capital goods and, to a smaller extent, consumer non-durables. The large increase in the production of consumer durables and the small increase in the generation of energy did not offset the decline in the production of the aforesaid groups of goods (see Table III.7).

Specifically, manufacturing production, having recovered in 2004 (+1.2%), fell again (−0.8%) in 2005. It should be noted, however, that from August 2005 on (with the exception of December) the downward trend of the rate of change in the relevant index was reversed; as a result, manufacturing production increased in the fourth quarter of 2005 (+2.3%) and continued its upward course in January 2006 (see Chart III.4).

<table>
<thead>
<tr>
<th>TABLE III.7</th>
<th>INDUSTRIAL PRODUCTION (2000=100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>100.0</td>
</tr>
<tr>
<td>1. Mining and quarrying</td>
<td></td>
</tr>
<tr>
<td>Coal and lignite extraction</td>
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</tr>
<tr>
<td>Oil wells and extraction of natural gas</td>
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</tr>
<tr>
<td>Ore extraction</td>
<td>5.2</td>
</tr>
<tr>
<td>Other extraction and quarrying activities</td>
<td>11.5</td>
</tr>
<tr>
<td>2. Manufacturing</td>
<td></td>
</tr>
<tr>
<td>3. Electricity - natural gas - water supply</td>
<td>16.6</td>
</tr>
<tr>
<td>Electricity</td>
<td>80.9</td>
</tr>
<tr>
<td>Natural gas</td>
<td>5.3</td>
</tr>
<tr>
<td>Water</td>
<td>13.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Main industrial groupings

Energy | 28.5 | 2.3 | 2.9 | 0.3 | 0.6 | 105.9 |
Intermediate goods | 31.1 | 1.6 | −0.4 | 1.0 | −1.7 | 100.0 |
Capital goods | 10.6 | −7.2 | 0.8 | −0.5 | −5.1 | 76.8 |
Consumer durables | 2.5 | −15.4 | −3.6 | 1.8 | 11.4 | 79.1 |
Consumer non-durables | 27.3 | 2.3 | −1.4 | 2.7 | −0.9 | 103.3 |

Source: NSSG.

1 However, in February 2006 the annual rate of change in manufacturing production was negative and in the period January-February 2006 the average annual rate stood at −1.3%.
CHART III.4

OUTPUT AND BUSINESS EXPECTATIONS IN MANUFACTURING

A. INDICES

- MANUFACTURING OUTPUT (2000=100)
- INDEX OF BUSINESS EXPECTATIONS IN INDUSTRY (MANUFACTURING) (1990=100)

B. PERCENTAGE CHANGES OVER SAME MONTH OF PREVIOUS YEAR

- MANUFACTURING OUTPUT (2000=100)
- INDEX OF BUSINESS EXPECTATIONS IN INDUSTRY (MANUFACTURING) (1990=100)

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.
index of business expectations in industry, despite a 6.6% decrease in 2005, showed a gradual improvement from July, which continued into the first quarter of 2006 (when the index rose by 6.8% relative to the first quarter of 2005).¹ The index of months of secured production² also stood at lower levels (4.5) compared with 2005 (5.0), while the capacity utilisation rate for industry as a whole³ continued to fall (by 2.9 percentage

¹ Twelve-month moving average centred on the last month of the period.
Sources: NSSG and IOBE.

² According to the business survey carried out by IOBE, in 2005 industrial firms’ estimates of output and new orders were positive, while estimates of total demand and foreign demand were negative (especially in the first quarter of the year). Enterprises’ forecasts for 3-4 months ahead were positive, but less optimistic than in 2004 (and in the five years 2000-2004).
² However, in the first quarter of 2006, the months of secured production of manufacturing firms reached 4.8, from 4.6 in the corresponding quarter of 2005.
³ It should be noted, however, that in the first quarter of 2006 the capacity utilisation rate increased and came to 74.1 for industry as a whole, compared with 70.7 in the corresponding quarter of 2005.
points) (see Chart III.5), especially as far as capital and intermediate goods are concerned. More positive developments in manufacturing production were recorded by the Purchasing Managers’ Index (PMI – see Chart III.6), which was constantly above 50 throughout 2005 (except April) and reached an average of 51.5 (lower than the 2004 average of 52.3).²

1 The corresponding index for manufacturing in the euro area also increased in 2005, exceeding the level of 50 (except in the period April-June). However, from July on the index followed a steady upward course, reaching 56.1 in March 2006.

2 In January 2006 the index fell slightly below 50, but rose to 51 in February and 52 in March, indicating an improvement in production and an increase in orders and employment. As for the main PMI sub-indices, the greatest increase in 2005 was recorded in output and new orders, whilst the sub-index for employment improved marginally. Moreover, supplier deliveries decreased marginally, while inventory levels recorded a slight drop.
## Table III.8
MANUFACTURING PRODUCTION (2000=100)

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<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100.0</td>
<td>2002</td>
<td>2003</td>
</tr>
<tr>
<td>Manufacturing, total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food – beverages</td>
<td>20.0</td>
<td>2.0</td>
<td>-2.9</td>
</tr>
<tr>
<td>Tobacco</td>
<td>1.2</td>
<td>1.9</td>
<td>2.4</td>
</tr>
<tr>
<td>Textiles</td>
<td>5.6</td>
<td>-2.6</td>
<td>-3.3</td>
</tr>
<tr>
<td>Wearing apparel</td>
<td>4.3</td>
<td>-5.7</td>
<td>-0.6</td>
</tr>
<tr>
<td>Leather – footwear</td>
<td>0.9</td>
<td>-5.4</td>
<td>-10.1</td>
</tr>
<tr>
<td>Wood and cork</td>
<td>1.1</td>
<td>-1.3</td>
<td>-5.2</td>
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<tr>
<td>Paper and paper products</td>
<td>2.4</td>
<td>-3.3</td>
<td>-1.4</td>
</tr>
<tr>
<td>Publishing – printing</td>
<td>4.2</td>
<td>1.5</td>
<td>2.9</td>
</tr>
<tr>
<td>Coke and refined petroleum products</td>
<td>11.2</td>
<td>2.1</td>
<td>0.4</td>
</tr>
<tr>
<td>Chemicals</td>
<td>7.7</td>
<td>6.1</td>
<td>2.0</td>
</tr>
<tr>
<td>Rubber and plastics</td>
<td>3.6</td>
<td>-1.4</td>
<td>-0.6</td>
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<tr>
<td>Non-metallic minerals</td>
<td>8.5</td>
<td>2.6</td>
<td>1.8</td>
</tr>
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<td>Basic metals</td>
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<td>6.6</td>
<td>-0.9</td>
</tr>
<tr>
<td>Metal products</td>
<td>4.3</td>
<td>1.1</td>
<td>5.8</td>
</tr>
<tr>
<td>Machinery and equipment</td>
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<td>9.0</td>
<td>-1.9</td>
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<td>Office machinery and computers</td>
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<td>92.1</td>
<td>-89.3</td>
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<td>-14.3</td>
<td>16.1</td>
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<tr>
<td>Radio, TV and communication equipment</td>
<td>3.7</td>
<td>-29.0</td>
<td>-12.7</td>
</tr>
<tr>
<td>Medical tools and precision instruments</td>
<td>0.2</td>
<td>-18.3</td>
<td>30.6</td>
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<tr>
<td>Motor vehicles</td>
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<td>14.6</td>
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<tr>
<td>Other transport equipment</td>
<td>4.3</td>
<td>-4.4</td>
<td>-2.5</td>
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<tr>
<td>Furniture – other manufacturing</td>
<td>2.3</td>
<td>-16.7</td>
<td>-9.5</td>
</tr>
<tr>
<td>Recycling</td>
<td>0.0</td>
<td>25.0</td>
<td>8.6</td>
</tr>
</tbody>
</table>

### Contributions by industry to changes in total manufacturing production (percentage points)

<table>
<thead>
<tr>
<th>Industry</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing, total</td>
<td>-0.13</td>
<td>-0.40</td>
<td>1.18</td>
<td>-0.76</td>
</tr>
<tr>
<td>Food – beverages</td>
<td>0.43</td>
<td>-0.61</td>
<td>0.78</td>
<td>-0.31</td>
</tr>
<tr>
<td>Tobacco</td>
<td>0.02</td>
<td>0.03</td>
<td>0.13</td>
<td>-0.09</td>
</tr>
<tr>
<td>Textiles</td>
<td>-0.14</td>
<td>-0.17</td>
<td>-0.53</td>
<td>-0.82</td>
</tr>
<tr>
<td>Wearing apparel</td>
<td>-0.23</td>
<td>-0.02</td>
<td>-0.20</td>
<td>-0.54</td>
</tr>
<tr>
<td>Leather – footwear</td>
<td>-0.05</td>
<td>-0.09</td>
<td>-0.07</td>
<td>-0.08</td>
</tr>
<tr>
<td>Wood and cork</td>
<td>-0.01</td>
<td>-0.05</td>
<td>0.01</td>
<td>-0.05</td>
</tr>
<tr>
<td>Paper and paper products</td>
<td>-0.07</td>
<td>-0.03</td>
<td>0.07</td>
<td>0.09</td>
</tr>
<tr>
<td>Publishing – printing</td>
<td>0.06</td>
<td>0.12</td>
<td>0.16</td>
<td>0.63</td>
</tr>
<tr>
<td>Coke and refined petroleum products</td>
<td>0.24</td>
<td>0.04</td>
<td>-0.29</td>
<td>0.29</td>
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<tr>
<td>Chemicals</td>
<td>0.50</td>
<td>0.18</td>
<td>0.59</td>
<td>0.17</td>
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<tr>
<td>Rubber and plastics</td>
<td>-0.05</td>
<td>-0.02</td>
<td>-0.15</td>
<td>-0.15</td>
</tr>
<tr>
<td>Non-metallic minerals</td>
<td>0.23</td>
<td>0.17</td>
<td>-0.07</td>
<td>0.08</td>
</tr>
<tr>
<td>Basic metals</td>
<td>0.56</td>
<td>-0.09</td>
<td>0.47</td>
<td>0.12</td>
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<td>Metal products</td>
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<td>0.24</td>
<td>0.44</td>
<td>0.19</td>
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<td>0.24</td>
<td>-0.06</td>
<td>-0.05</td>
<td>0.40</td>
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<tr>
<td>Office machinery and computers</td>
<td>0.03</td>
<td>-0.05</td>
<td>0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td>Electrical machinery and apparatus</td>
<td>-0.33</td>
<td>0.32</td>
<td>0.15</td>
<td>0.12</td>
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<tr>
<td>Radio, TV and communication equipment</td>
<td>-0.82</td>
<td>0.26</td>
<td>0.14</td>
<td>-0.72</td>
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<tr>
<td>Medical tools and precision instruments</td>
<td>-0.06</td>
<td>0.08</td>
<td>-0.09</td>
<td>0.02</td>
</tr>
<tr>
<td>Motor vehicles</td>
<td>-0.19</td>
<td>0.10</td>
<td>0.03</td>
<td>-0.28</td>
</tr>
<tr>
<td>Other transport equipment</td>
<td>-0.20</td>
<td>-0.11</td>
<td>-0.32</td>
<td>-0.09</td>
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<tr>
<td>Furniture – other manufacturing</td>
<td>-0.31</td>
<td>-0.15</td>
<td>-0.02</td>
<td>0.25</td>
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<tr>
<td>Recycling</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Source: Calculations based on NSSG data.
As regards developments in individual manufacturing industries, of a total of 23 industries, 11 increased and 12 decreased their production. It should be noted, however, that the output of the seven most dynamic industries\(^1\) showed a cumulative increase of 11.7% in the period 2000-2005 (2005: 1.7%). In the same five-year period, the production of four smaller industries\(^2\) also recorded a cumulative increase (14.9%). By contrast, in the same period a sharp fall (–23.1%) was recorded in the production of five main industries.\(^3\) As a result, the cumulative output of all manufacturing industries fell by 2.6% between 2000 and 2005.

Among the industries that increased their production in 2005, the leaders were furniture and other manufacturing, machinery and equipment and publishing-printing, followed by medical tools and precision instruments, electrical machinery and apparatus, paper and paper products, as well as metal products. A recovery in production was also recorded in coke and petroleum products, while these firms’ sales and profits seem to have posted high rates of growth, mainly because of high oil prices globally.\(^4\) Of the three remaining industries with smaller increases, it is worth mentioning the continuing rise in the activity of chemical products and basic metals, as well as the recovery in non-metallic minerals. See Table III.8 for more details.

The largest positive contribution to the change in total manufacturing production in 2005 came from publishing-printing, machinery and equipment, coke and refined petroleum products, furniture and other manufacturing, as well as metal products. The contribution of chemicals and basic metals was positive, albeit smaller, while even smaller was the contribution of paper, as well as medical tools and precision instruments. By contrast, a significant drop in production was recorded in radio, TV and communication equipment, means of transport, textiles, wearing apparel, leather-footwear, tobacco, wood-cork, as well as rubber and plastics.\(^5\)

Specifically, the large drop in the production of textiles and wearing apparel in the last few years (the cumulative production of both industries has declined by 32.8% since 2000) is

---

\(^1\) Industries with the largest increase in production between 2000 and 2005. These industries (whose production in 2000 accounted for 64% of manufacturing) are: food-beverages, coke and refined petroleum products, non-metallic minerals, basic metals, chemicals, metal products and publishing-printing.

\(^2\) Production of electrical machinery and apparatus, tobacco, medical tools and recycling. Their share in manufacturing production was a mere 3.8% in 2000.

\(^3\) That is, textiles, wearing apparel, other transport equipment, rubber and plastic products, as well as furniture and other manufacturing, which in 2000 accounted for 20.0% of manufacturing.

\(^4\) According to the ELPE financial results (21 February 2006), the sales of the group (which holds the biggest share in the Greek oil market) increased by 36% and net profits by 161%. However, the sales volume of the group in the fields of refining, supply and trade came to 15.5 million metric tonnes in 2005, declining by 2% compared with 2004. By contrast, the quantities of crude oil transferred through the Thessaloniki-Skopje pipeline rose (960 thousand metric tonnes, compared with 830 thousand metric tonnes in 2004), as was the total sales volume of OKTA AD (refinery in FYROM, 69.5% of the share capital of which is held by ELPE), which came to 958 thousand metric tonnes, increasing by 21% compared with 2004. It should also be noted that the construction of the Burghas-Alexandroupolis pipeline is under way and is expected to reduce considerably the cost of crude oil imports (it is estimated that the pipeline will start operating in late 2008 or early 2009).

\(^5\) A smaller drop in production was recorded in other transport equipment and recycling.


<table>
<thead>
<tr>
<th>Industries¹</th>
<th>Current prices</th>
<th>2000 prices</th>
<th>Import penetration³</th>
<th>Export performance⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Import bill²</td>
<td>Export receipts²</td>
<td>Gross value of production</td>
<td>Gross value of production</td>
</tr>
<tr>
<td>Food-beverages (15)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>4.6</td>
<td>9.8</td>
<td>5.6</td>
<td>2.2</td>
</tr>
<tr>
<td>2002</td>
<td>–0.7</td>
<td>9.8</td>
<td>6.0</td>
<td>2.0</td>
</tr>
<tr>
<td>2003</td>
<td>–2.8</td>
<td>13.3</td>
<td>–0.5</td>
<td>–2.9</td>
</tr>
<tr>
<td>2004</td>
<td>10.8</td>
<td>–11.4</td>
<td>12.4</td>
<td>3.7</td>
</tr>
<tr>
<td>2005</td>
<td>0.1</td>
<td>17.1</td>
<td>0.0</td>
<td>–1.4</td>
</tr>
<tr>
<td>Tobacco (16)</td>
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<td></td>
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</tr>
<tr>
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<td>2.0</td>
<td>37.0</td>
<td>8.2</td>
<td>1.5</td>
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<tr>
<td>2002</td>
<td>7.0</td>
<td>–15.5</td>
<td>6.5</td>
<td>1.9</td>
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<td>2003</td>
<td>–14.1</td>
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<td>2004</td>
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<td>–23.5</td>
<td>12.8</td>
<td>9.9</td>
</tr>
<tr>
<td>2005</td>
<td>5.0</td>
<td>8.1</td>
<td>–5.4</td>
<td>–6.1</td>
</tr>
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<td>Textiles, wearing apparel, leather, footwear (17, 18, 19)</td>
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<td></td>
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<td></td>
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<tr>
<td>2001</td>
<td>17.3</td>
<td>3.4</td>
<td>–3.8</td>
<td>–7.0</td>
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<td>2002</td>
<td>3.8</td>
<td>3.0</td>
<td>–3.5</td>
<td>–4.1</td>
</tr>
<tr>
<td>2003</td>
<td>–1.9</td>
<td>11.9</td>
<td>–1.5</td>
<td>–2.8</td>
</tr>
<tr>
<td>2004</td>
<td>5.7</td>
<td>–3.5</td>
<td>–5.8</td>
<td>–8.2</td>
</tr>
<tr>
<td>2005</td>
<td>5.1</td>
<td>–6.5</td>
<td>–17.1</td>
<td>–16.4</td>
</tr>
<tr>
<td>Wood, cork (20)</td>
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<tr>
<td>2001</td>
<td>–11.6</td>
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<td>–7.6</td>
<td>–10.7</td>
</tr>
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<td>–5.8</td>
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<td>Paper and paper products, publishing-printing (21, 22)</td>
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<td>1.3</td>
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<td>2004</td>
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<td>15.9</td>
<td>3.7</td>
<td>3.5</td>
</tr>
<tr>
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<td>–4.2</td>
<td>11.4</td>
<td>10.3</td>
</tr>
<tr>
<td>Petroleum and carbon products (23)</td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>–25.3</td>
<td>–23.9</td>
<td>–9.8</td>
<td>–1.3</td>
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<td>1.1</td>
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<td>2004</td>
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<td>21.7</td>
<td>7.1</td>
<td>–2.4</td>
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<tr>
<td>2005</td>
<td>46.6</td>
<td>45.1</td>
<td>28.5</td>
<td>2.6</td>
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<td>Chemicals, rubber and plastic products (24, 25)</td>
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<td></td>
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</tr>
<tr>
<td>2001</td>
<td>20.2</td>
<td>0.2</td>
<td>6.0</td>
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</tr>
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<td>2002</td>
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<td>33.5</td>
<td>4.5</td>
<td>3.9</td>
</tr>
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<td>2003</td>
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<td>2.6</td>
<td>1.3</td>
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<td>2004</td>
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<td>6.4</td>
<td>3.3</td>
<td>3.7</td>
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<tr>
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<td>6.3</td>
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<tr>
<td>Non-metallic minerals (26)</td>
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<tr>
<td>2001</td>
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<td>–61.6</td>
<td>8.2</td>
<td>2.2</td>
</tr>
<tr>
<td>2002</td>
<td>–22.3</td>
<td>232.0</td>
<td>6.5</td>
<td>2.6</td>
</tr>
<tr>
<td>2003</td>
<td>1.3</td>
<td>–12.5</td>
<td>2.3</td>
<td>1.8</td>
</tr>
<tr>
<td>2004</td>
<td>13.9</td>
<td>33.4</td>
<td>1.3</td>
<td>–0.7</td>
</tr>
<tr>
<td>2005</td>
<td>–6.4</td>
<td>17.3</td>
<td>3.4</td>
<td>0.9</td>
</tr>
</tbody>
</table>
**TABLE III.9 (continued)**

IMPORT PENETRATION AND EXPORT PERFORMANCE OF BASIC MANUFACTURING INDUSTRIES

<table>
<thead>
<tr>
<th>Industries 1</th>
<th>Current prices</th>
<th>2000 prices</th>
<th>Import penetration 3</th>
<th>Export performance 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Import bill 2</td>
<td>Export receipts  2</td>
<td>Gross value of production</td>
<td>Gross value of production</td>
</tr>
<tr>
<td></td>
<td>2000 prices</td>
<td>2000 prices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic metals and metal products (27, 28)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>3.2</td>
<td>3.9</td>
<td>2.1</td>
<td>0.0</td>
</tr>
<tr>
<td>2002</td>
<td>4.4</td>
<td>-14.8</td>
<td>3.8</td>
<td>5.3</td>
</tr>
<tr>
<td>2003</td>
<td>9.4</td>
<td>-3.4</td>
<td>0.0</td>
<td>0.6</td>
</tr>
<tr>
<td>2004</td>
<td>18.5</td>
<td>38.9</td>
<td>12.5</td>
<td>6.4</td>
</tr>
<tr>
<td>2005</td>
<td>6.7</td>
<td>45.3</td>
<td>7.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Machinery and apparatus (29, 30, 31, 32, 33)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>6.2</td>
<td>28.9</td>
<td>-10.8</td>
<td>-14.2</td>
</tr>
<tr>
<td>2002</td>
<td>-3.2</td>
<td>-5.0</td>
<td>-9.1</td>
<td>-10.2</td>
</tr>
<tr>
<td>2003</td>
<td>-2.1</td>
<td>43.2</td>
<td>4.1</td>
<td>2.8</td>
</tr>
<tr>
<td>2004</td>
<td>6.2</td>
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<td>6.7</td>
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</tr>
<tr>
<td>2005</td>
<td>0.3</td>
<td>7.0</td>
<td>6.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Means of transport and other transport equipment (34, 35)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>1.7</td>
<td>53.5</td>
<td>-6.1</td>
<td>-5.2</td>
</tr>
<tr>
<td>2002</td>
<td>5.2</td>
<td>-25.1</td>
<td>-4.8</td>
<td>-9.6</td>
</tr>
<tr>
<td>2003</td>
<td>9.3</td>
<td>134.5</td>
<td>4.2</td>
<td>1.7</td>
</tr>
<tr>
<td>2004</td>
<td>18.2</td>
<td>87.3</td>
<td>2.2</td>
<td>-4.4</td>
</tr>
<tr>
<td>2005</td>
<td>-2.6</td>
<td>39.5</td>
<td>-10.9</td>
<td>-12.6</td>
</tr>
<tr>
<td>Furniture and other industries (36)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>34.0</td>
<td>19.5</td>
<td>-15.7</td>
<td>-18.5</td>
</tr>
<tr>
<td>2002</td>
<td>1.0</td>
<td>-16.0</td>
<td>-15.5</td>
<td>-16.7</td>
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<tr>
<td>2003</td>
<td>-2.9</td>
<td>28.7</td>
<td>-8.7</td>
<td>-9.5</td>
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<tr>
<td>2004</td>
<td>16.5</td>
<td>16.8</td>
<td>0.0</td>
<td>-1.7</td>
</tr>
<tr>
<td>2005</td>
<td>-8.2</td>
<td>-10.3</td>
<td>22.1</td>
<td>18.4</td>
</tr>
<tr>
<td><strong>Total manufacturing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>3.2</td>
<td>0.6</td>
<td>-1.3</td>
<td>-2.5</td>
</tr>
<tr>
<td>2002</td>
<td>3.3</td>
<td>4.0</td>
<td>1.4</td>
<td>-0.1</td>
</tr>
<tr>
<td>2003</td>
<td>1.3</td>
<td>19.0</td>
<td>0.6</td>
<td>-0.4</td>
</tr>
<tr>
<td>2004</td>
<td>10.3</td>
<td>5.4</td>
<td>7.3</td>
<td>1.2</td>
</tr>
<tr>
<td>2005</td>
<td>9.7</td>
<td>19.1</td>
<td>4.7</td>
<td>-0.8</td>
</tr>
<tr>
<td><strong>Total manufacturing (except fuel)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>10.0</td>
<td>7.8</td>
<td>0.8</td>
<td>-2.8</td>
</tr>
<tr>
<td>2002</td>
<td>0.6</td>
<td>5.5</td>
<td>1.5</td>
<td>-0.7</td>
</tr>
<tr>
<td>2003</td>
<td>0.0</td>
<td>17.1</td>
<td>0.8</td>
<td>-0.6</td>
</tr>
<tr>
<td>2004</td>
<td>9.5</td>
<td>2.0</td>
<td>7.3</td>
<td>2.1</td>
</tr>
<tr>
<td>2005</td>
<td>1.7</td>
<td>12.7</td>
<td>-0.2</td>
<td>-1.6</td>
</tr>
</tbody>
</table>

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1 The numbers in parentheses are the two-digit codes corresponding to each industry.
2 Based on the Combined Nomenclature Codification (CNC).
3 Ratio of imports to apparent consumption. Apparent consumption is defined as the gross value of production plus imports minus exports.
4 Ratio of exports to gross value of production (current prices).

**Sources:** Bank of Greece and NSSG. Revised data.
associated with intense competition from corresponding products, mainly of Chinese origin, while the acceleration of the decline in their production in 2005 was also due to the elimination of quotas in the international trade in textiles and wearing apparel (see Box IX.1).

Moreover, the contribution of food-beverages to the change in total manufacturing production was negative in 2005; their production fell by 1.4%, having increased by 3.7% in 2004. However, despite the decrease recorded in the industry as a whole, the sub-industries of meat and meat products, flour mills and other foodstuff increased their production by 3.7%, 1.7% and 3.9%, respectively. In addition, according to the relevant annual report of IOBE for 2005 (The Greek Food-Beverages Industry), many firms are being restructured, since their investment expenditure (on the basis of the IOBE investment survey) increased in 2004 (+9.6%), while the general finding is that the industry comprises both export-oriented and developing companies, as well as firms that lag behind.1

In 2005 exports of manufactured products (except fuel) grew at a higher rate than in 2004 and at almost double the growth rate of total goods exports (except fuel). According to the balance of payments statistics compiled by the Bank of Greece, receipts from exports of manufactured goods (except fuel) grew by 12.7% (while total exports, except fuel, increased by 7.5%). Hence, the manufacturing industry’s export performance, i.e. the share of production sold in foreign markets, increased considerably in 2005 (to 27.6%, from 24.5% in 2004, see Table III.9). Specifically, a significant rise in exports and a simultaneous improvement in export performance in 2005 were achieved by tobacco, basic metals and metal products, means of transport and transport equipment, coke and refined petroleum products, food-beverages, rubber-plastics and chemicals, non-metallic minerals, as well as machinery and apparatus.2 It should be noted, however, that as far as means of transport and other transport equipment, food-beverages and tobacco are concerned, the improvement in export performance was not combined with a proportionate strengthening of the industry’s position in the domestic market.3

By contrast, the continuing rise in payments for imports of textiles and clothing-footwear in 2005 led to a large increase in import penetration (i.e. the ratio of imports to apparent consumption)4 in these industries (by 8.2 percentage points).5 Moreover, import payments increased in most manufacturing industries. This increase was combined with a pickup in import penetration, with the exception of furniture and other manufacturing, paper-publishing-printing, non-metallic minerals and machinery-apparatus, which experi-

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1 According to this report, food-beverages face three main challenges: (i) product differentiation by developing innovative activities to meet the increased needs of consumers, (ii) restructuring and modernising production plants and (iii) reinforcing export orientation, which will disengage the industry from the domestic market and will support higher growth rates.
2 It should be noted that this group comprises machinery and equipment, office machinery and computers, electrical machinery and apparatus, radio, TV and communication equipment, as well as medical tools and precision instruments.
3 Wood-cork recorded a rise both in exports and in export performance, while furniture and other manufacturing, as well as paper and publishing-printing recorded a drop in exports and export performance.
4 Apparent consumption is the gross value of production plus imports minus exports.
5 However, the improvement in the export performance of textiles, clothing-footwear and leather reflects the fact that the drop in production was bigger than the decline in exports.
enced a drop in import penetration. In any event, total payments for imports of manufactured products (except fuel) increased by 1.7% in 2005, compared with a much larger increase in 2004 (9.5%), while the import penetration of manufactured products (except fuel) rose by 1.5 percentage points.

2.3 Mining and quarrying

In 2005 mining and quarrying production decreased significantly (–6.2%), having increased by a mere 0.3% in 2004. According to NSSG data (see Table III.7), the fall in mining output was mainly associated with the drop in the production of quarrying materials, as well as energy goods (coal, lignite and crude oil). By contrast, ore production recovered slightly, after a decrease in the past two years.

In greater detail, coal and lignite mining dropped in 2005, having increased in 2004, owing to reduced demand for lignite by Public Power Corporation’s (DEH) lignite-fired power plants.1 At the same time, a significant decline was recorded in crude oil output (–29.7%), which —with the exception of 2004 (+3%) — has been falling since 2001; as a result, the production level of this industry was 62% lower in 2005 than in 2000.2 Non-ferrous ores,3 after a continuous decrease in 2003-2004, increased in 2005 (especially the last four months). This is connected with the gradual re-opening of the Chalkidiki mines, which had closed in March 2003.4 Moreover, foreign demand for certain ores remained high. As shown by provisional NSSG trade statistics, the volume of aluminium and alumina ore exports during January-November 2005 grew by 15.5%, because of increased demand for these ores by both non-EU and EU countries (29.2% and 6.1%, respectively). In addition, over the same period, the volume of aluminium exports to third countries grew by 0.4%, while EU demand for this mineral fell by 8.7%.

The production of quarry materials decreased significantly in 2005 (–11%), having dropped less in 2004 (–0.7%). This is attributable to the completion of the projects related to the Olympic Games. In more detail, quarrying of gravel and sand recorded the largest decline (–18.8%) compared with 2004, while foreign demand for these materials also dropped significantly in 2005. According to NSSG data, the volume of stone, sand and gravel exports over January-November 2005 decreased by 21.4% (the drop in exports to EU coun-

1 According to DEH data, the quantity of lignite extracted from its own mines in 2005 decreased by 3.8% compared with 2004 and amounted to 67,265 thousand tonnes (down from 69,890 thousand tonnes in 2004).
2 It should be recalled that oil production in 2000 had increased substantially, because the Prinos deposit was re-opened that year.
3 Bauxite, chromite and nickel being the most important ones.
4 It is noted that the Joint Ministerial Decision 43088/11 April 2005 approved the environmental terms for the re-opening of the Cassandra mines (mixed sulphur deposits) by “Hellenic Gold S.A.”, which has taken up the exploitation of the mines after the withdrawal of TVX HELLAS S.A. (Law 3220/15 January 2004). At the same time, these investors have made a commitment for compensatory provisions to the local society worth €15 million in order to preserve the environment and €8 million for social policy measures and the construction of infrastructure.
tries was steeper: –55.5%). The production of marble and other stones continued to drop (–2.4%) in 2005, albeit at lower rates than in 2004 (–3.9%). Foreign demand for marble was also limited in 2005. According to provisional NSSG customs data, during January-November 2005 the volume of marble exports declined by 6.9% (10.3% over the same period of 2004). Marble exports to China, which in recent years has absorbed almost half of Greek marble exports, recorded an even larger decrease (–19%), although their level remained high. Thus, according to NSSG data, during January-November 2005 marble exports to China reached 84.8 tonnes, against 104.8 tonnes over the same period of 2004. However, increased domestic demand\(^1\) for marble caused a 5.4% increase in the volume of imports (mainly of raw marble) over the same period, mainly from Turkey (+2.3%), which covers more than 50% of domestic demand.

A 12.1% drop was also recorded in the production of other mining and quarrying materials (magnesite, asbestos, perlite etc.), as well as limestone, gypsum and chalk (–1.6%), despite the increase in foreign demand for some of these products. (Indeed, the volume of exports of raw minerals increased by 6.3% in January-November 2005, reflecting exclusively EU demand: +19.2%). By contrast, a continuous rise was recorded in 2005 in the mining of clay and kaolin (+12%), as well as the production of salt (+5.3%).

It should be noted that, as industry representatives have repeatedly underlined, the complex legislative framework on licensing and operation of mining firms has restricted the development of new mining activities. However, in order to support domestic mining and quarrying production and modernise small and medium-sized mining and quarrying enterprises, the Ministry of Development approved 13 projects with a budget of €6.3 billion, under the programme “Support to integrated SME business plans in natural resources”\(^2\).

2.4 Electricity-natural gas-water supply

As shown by the relevant NSSG index, the generation of electricity, the production of natural gas and the supply of water (see Table III.7) grew in 2005, albeit at a lower rate than in the previous three years. This was the result of the increased demand for electricity and natural gas, while the index of water treatment and distribution dropped to the 2003 level. Therefore, the three industries made a small positive contribution (0.1 percentage point) to the total rate of change in industrial output, which, however, was negative (–0.9%) because of the decrease in mining and manufacturing output.

In more detail, according to the Public Gas Corporation (DEPA) data, the total quantities of natural gas distributed in 2005 increased by 6.2% (from 2,514 million Nm\(^3\) to

\(^1\) According to ICAP’s sectoral study of the marble-granite market (November 2005), it is estimated that domestic marble consumption will grow by 3-5% in 2005-2006.

\(^2\) Action 7.3.4: “Development and promotion of new materials, new technologies and new uses for raw mineral materials” of the Operational Programme “Competitiveness” (Ministry of Development).
2,669 million Nm³). This increase stemmed mainly from the very large rise in demand for this fuel by natural gas suppliers (EPA), which supply small industrial and commercial firms and households (+41.4%), owing to the development and operation of city networks, as well as the consumers’ shift to cheaper types of energy, following the steep rise in oil prices.\(^1\) An increase was also recorded in industrial demand (12.6%) —mainly for heating (+20.8%)— and special commercial consumers\(^2\) (to 13 million Nm³, from 12 million Nm³ in 2004), while demand for natural gas to produce electricity remained at 2004 levels (+0.2%).\(^3\) As a result, its share in total gas consumption dropped to 67.9% (2004: 72%) and the share of the industrial sector and the EPAs increased by 20.1% and 11.4%, respectively. However, a large increase (16.7%) in natural gas demand for electricity generation is expected in 2006, mainly because the ELPE power plant will start operating in early 2006, while total natural gas sales are expected to increase by 17.9% in 2006 (to 3.1 billion Nm³). Moreover, total demand for natural gas is forecast to reach 6.15 billion Nm³ by 2010 and a large part of this increase is expected to be absorbed by the new power stations to be built by independent producers.\(^4\) It should also be noted that, by virtue of Law 3428/2005 on the deregulation of the natural gas market,\(^5\) passed in December 2005, the

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\(^1\) According to Ministry of Development data, the number of new natural gas connections (in all sectors: industry, commerce, households) amounted to 57,000 by November 2005, compared with 33,000 in November 2004 and 17,300 in November 2003. At the same time, the effort to increase the penetration of natural gas comprises the government’s initiative to connect public sector buildings to the natural gas network (by 30 April 2006). In this respect, the Ministry for the Interior signed (on 20 December 2005) contracts worth €6 million for the construction of necessary facilities and the change of burners to use natural gas in 1,100 schools and approximately 100 municipal buildings in Attica, Thessaloniki and Thessaly. The cost will be met entirely by the state.

\(^2\) Athens International Airport, Thermal Buses S.A. etc.

\(^3\) It is noted, however, that natural gas demand for electricity generation during the period 1999-2004 grew at an average annual rate of 16.1%, which is associated with the conversion of a large number of DEH’s oil-fired stations into stations burning natural gas (Law 2165/1993); as a result, the installed capacity of natural gas burning stations amounted to 1,581 MW in 2005.

\(^4\) The rise in demand is expected to be covered in part by new inflows of natural gas from Turkey, after the Greek-Turkish pipeline comes on stream at the end of 2006 (the official ceremony for the start of construction was held on 3 July 2005), when the part of the pipeline on Turkish territory is completed and the commercial agreement between the Greek DEPA and the Turkish BOTAS will be activated. Natural gas inflows will initially (in 2006) amount to 250 million m³, the aim being to reach 750 million m³ annually in 2008. It should also be noted that the operation of the pipeline will provide Greece with a third supply source (apart from Russia and Algeria). This will enhance the system’s security, which is necessary for the operation of the deregulated market. An agreement was also signed between Greece and Italy on 4 November 2005 for the construction of an undersea natural gas pipeline, which will be essentially an extension of the Greek-Turkish pipeline. It should be noted that the linkup of the natural gas distribution networks of the three countries will enable the transport of large quantities of natural gas from the Caspian region and Central Asia to European markets. The Greek-Italian pipeline, which is one of the five priority axes of Inter-European Energy Networks, is designed to carry approximately eight billion m³ and is expected to be completed by the end of 2009. This pipeline will be built and operated by Poseidon, to be established jointly by DEPA and Edison.

\(^5\) According to Law 3428/2005, the natural gas market will open up initially (when the law enters into force) for the holders of electricity and heat co-generation licences. As of November 2008, the market will be open to non-household customers in areas outside the jurisdiction of the EPAs and as of 2009 it will open to all consumers. Moreover, the new institutional framework provides for the split of DEPA into two companies, i.e. a parent company that will be involved in commercial activities and a new company, being 100% subsidiary of DEPA S.A., under the name “National Natural Gas System Manager S.A.” (DESFA), to which the ownership of the National Natural Gas System (ESFA) will be transferred, along with all rights of exploitation, development, maintenance and operation. DESFA will start operating by 31 December 2006 at the latest.
market is expected to expand further, since other suppliers are allowed to enter the market in addition to DEPA, while consumers will gradually be able to choose their supplier.

As shown by provisional DEH data, net electricity generation\(^1\) increased by 1.3% in 2005 (1.7% in 2004) and amounted to 54,947 GWH. This rise mainly stemmed from the recovery of production at oil-fired power plants (2005: 10.6%, 2004: –7%), which is also associated with the further rise in the installed capacity of these plants (by 53 MW), as well as hydroelectric stations (+9%), following a 5.5% drop in 2004. By contrast, a decrease was recorded in the output of lignite-fired plants (2005: –1.5%, 2004: 2.6%, 2003: 1.4%) and natural gas-fired plants (–5%), which had increased considerably during 1998-2004 (31.2% on average). A decrease was also recorded in the output of DEH stations using renewable energy sources (RES) (to 74 GWH from 76 GWH in 2004); their capacity has remained unchanged since 2000 (37 MW). However, according to data of the System Manager (DESMHE),\(^2\) electricity generation using wind energy and other RES amounted to 894.8 GWH in 2005 (+18.4%). In 2005 the installed capacity of private RES plants operating under Law 2244/1994 also increased,\(^3\) while a more favourable regime is expected for investment in this sector by the imminent amendment to the current legislative framework. The Ministry of Development has already made public (16 January 2006) a bill meant to simplify and expedite the licensing procedures for electricity generation stations using RES with “High performance electricity and heat co-generation” procedures. The aim of the new bill is to increase the participation of RES in the national energy balance since, on the basis of Community Directive 2001/77, the share of RES in total generated electricity should rise to 20.1% by 2010, from the current 10%.\(^4\) At the same time, the increased participation of RES in the energy balance will also be facilitated by financing, both through the Ministry of Development and on the basis of the new development law 3299/2004.\(^5\)

On the demand side, total electricity consumption increased, according to DEH data, by 1.0% in 2005 (2004: 2.3%). This rise was caused mainly by stronger demand for

\(^1\) Including DEH purchases (2,014 GWH) from domestic producers and surplus imports by private firms that were fed into the system.
\(^2\) DESMHE data concern only the interconnected system, i.e. they do not include the power produced on the islands.
\(^3\) According to Ministry of Development data, 16 additional operating licences were issued in 2005, for a total capacity of 74.5 MW. Thus, the capacity of RES stations operating under Law 2244/1994 rose to 585.6 MW. Following an assessment by RAE, the Ministry of Development issued 137 new licences for RES-based electricity generation (1,335.8 MW) in 2005, while 631 licences for 5,012.4 MW have been issued since 2001.
\(^4\) Including the output of major hydroelectric stations. The target set in Greece for the increase in the share of RES in electricity generation is associated with the commitments stemming from the Kyoto protocol (ratified by Law 3017/2002).
\(^5\) In the framework of the call for action 6.5 “Promote greater use of renewable energy sources, energy saving and co-generation of electricity and thermal power (CHP) in the country's energy system” of the Ministry of Development (which expired on 30 January 2006), out of 239 energy investment plans submitted in total, 150 investment plans cover the field of RES, with a total budget of €335.16 million. At the same time, from the entry into force of the new development law (December 2004) to date, applications for RES projects with a total budget of €235 million have been submitted, and projects with a total budget of €100 million have been approved for financing. The subsidisation percentage of electricity generation using RES and CHP processes varies from 30% to 50%, while the cost of interconnecting with the DEH network is covered to the extent of 45%-50%, depending on the location.
commercial uses (+3.6%), agricultural uses (+5.1%) and by the public sector (+5.5%), while demand by households rose slightly (+0.1%, compared with +2.4% in 2005). By contrast, industrial demand for electricity continued to fall for the third year in a row (2005: –2.2%, 2004: –1.2%, 2003: –0.9%). This was due to reduced demand for low- and medium-voltage electricity (–2.6%), as well as falling demand for high-voltage power (2005: –1.8%, 2004: –2.7%, 2003: –3.3%). However, according to DESMHE data, demand for electricity by selecting customers (major industrial and commercial consumers) grew by 4.7% in 2005.

The gap between generated and required energy worsened the energy balance, with electricity imports rising by 17% and electricity exports falling by 10.4%. Thus, the net imports-to-sales ratio rose to 7.5% in 2005, from 5.6% in 2004. This was also due to a limited increase in productive capacity in 2004-2005, since DEH total capacity was raised by a mere 138 MW and reached 12,277 MW in 2005 from 12,139 MW in 2003. However, the severe problem of electricity adequacy that emerged in 2005 is expected to be overcome in 2006, with the introduction into the system of the 390 MW ELPE plant in January 2006, while DEH’s 400 MW station in Lavrio is expected to start operating by the end of 2006.

It should be underlined that significant steps were taken during 2005 for the deregulation of the electricity market at the institutional level, as the new Management Code for Electricity Generation and Transmission was put into force by the Ministry of Development (in May 2005) and a new law was passed (3426/2005) on “accelerating the procedure for the deregulation of the electricity market”, which completed the structural changes initially introduced in the domestic electricity market by Law 2773/1999. Thus, Greek legislation is fully harmonised with the rules of Directive 2003/54/EC. Owing to these developments, the System Manager (DESMHE) started holding tenders for the sup-

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1 Commercial demand includes electricity consumption by the Athens International Airport.
2 Mainly for lighting public areas.
3 Selecting customers are consumers who are entitled to cover part of their needs by purchasing electricity directly from the domestic market or importing it. It is noted that, on the basis of the framework of market operation initially set by Law 2773/1999, selecting customers were major industrial and commercial consumers, with an annual consumption of over 100 GWH (34% of the total market). However, after Law 3426/2005 was passed, the right to select electricity supplier is initially extended (by 1 July 2007) to all non-household consumers and later (as of 1 July 2007) to all consumers.
4 It is noted that the Ministry of Development, in order to address this problem, took energy saving and demand management measures in 2005, such as the application of special DEH pricelists for major industrial and commercial consumers, provided that they would transfer the peak of their consumption to hours other than peak electricity demand hours.
5 “Energiaki Thessalonikis”, which is the first independent (non-DEH) power plant (official start of operation on 24 December 2005). A private air-turbine station (“IRON Thermoelectric S.A.”) has been operating since 2004, with a capacity of 160 MW to ensure backup power.
6 The new Code was prepared on the basis of Law 3175/2003 and will replace, as well as unify, the previous two Codes (Code of System Management and Code of Electricity Transactions) which defined the operating framework of the market on the basis of the initial law on deregulation (2773/1999).
7 Passed on 30 November 2005.
8 The structural changes in the electricity market were also supplemented by Laws 2837/2000, 2491/2001 and 3175/2003.
ply of 900 MW of electric power by private producers, as was stipulated in the law.¹ Specifically, the first tender² (the call for which was published in April 2006) is addressed to licensed electricity generation firms³ and concerns the construction of a natural gas plant with a capacity equal to or higher than 360 MW, installed in the system of Southern Greece. The new plant is expected to be completed and integrated into the system in 2009, while it is estimated that a total of three private power plants, with a capacity of approximately 400 MW each, will be gradually integrated into the system by the end of 2010,⁴ which will make a significant contribution to meeting the increasing power requirements of the country.⁵ In this respect and in the framework of the possibilities offered by the law on the deregulation of the electricity market, DEH plans to replace within 4-8 years four old plants, with a total capacity of 1,600 MW.⁶

3. SERVICES

Services, which account for over 70% of domestic production, have supported GDP growth in 2005, with sectors such telecommunications, financial services, real estate management and trade recording a satisfactory performance. Specifically, the increase in the gross value added of the services sector in 2005 was the result of growing demand in most industries. Thus, the share of the services sector in total Gross Production Value at current basic prices continued to expand (to 74.0% in 2005, from 73.1% in 2004).

In greater detail, the increase in transport-communications activity is associated with the larger volume of road and sea transport (owing to the expansion of external

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¹ The tender procedure for power generation contracts was initially introduced by Law 3175/2003, on the basis of which the guaranteed power of 900 MW was foreseen to enter the system by 2007. However, due to delays in licensed private electricity generation projects, the time limit was transferred to 2010. It should also be recalled that DEH cannot participate in the first tenders of 900 MW. It can, however, claim contracts for up to 50% of the 400 MW increase and participate on an equal footing in tenders for plants to be entered into the system after 31 December 2010.
² According to the terms of call for the first tender, the System Manager signs Power Availability Contracts with the contractor. These contracts will constitute the guarantee of revenue for 70% of net capacity of the new plant, in order to facilitate its financing, while the length of the period of guaranteed revenue will be 12 years. The commercial operation of the new plant will start 27 months after the execution of the contracts.
³ According to RAE’s files, from February 2001 (commencement of the market’s formal deregulation) until January 2006, 782 licences for electricity generation were granted (total capacity of 11,322.5 MW), plus 14 licences for electricity supply (2,800 MW). Out of the generation licences, 12 concern major private thermal plants with a total capacity of 4,507 MW.
⁴ The aim of the Ministry of Development is to award the project by December 2006, when another plant will be put to tender, while the third call is expected in spring 2007.
⁵ According to the IOBE sectoral study on the electricity market, published in November 2005, the necessary addition of net available power to ensure the reliability of the country’s power supply system for the period 2005-2010 is estimated at about 1,950 MW.
⁶ According to the decision of DEH’s Board of Directors (18 May 2005). The first of the plants to replace the old ones will be the natural gas-fired plant (400 MW) at Aliveri, which will come on stream in early 2008 and is expected to boost the stability of the Southern Greece system.
Charts 11.1-7

Activity Indicators for Services

1 Twelve-month moving average centred on the last month of the period.

Sources: IOBE, Ministry of Economy and Finance, Olympic Airways (OA), Piraeus Port Authority (OLP), Hellenic Railways Organisation (OSE).
trade), air transport (see Chart III.7)\(^1\) and the growing demand for telecommunications services, especially mobile telephony. Coastal transport recorded an increase in passenger traffic, while cargo transport declined.\(^2\) It has been mentioned in the past\(^3\) that the liberalisation of coastal transport, in force since 1 January 2004 (Law 2932/2001), has not yet led to the creation of a fully competitive market. Finally, OSE (Hellenic Railways Organisation) registered a 3.6% increase in cargo transport in 2005. It should be noted that international railway cargo transport is deregulated as from 1 January 2006 in the EU and all types of cargo transport\(^4\) will be deregulated as from 1 January 2007, including intra-transport, in order to boost railways over other means of transport.

In telecommunications,\(^5\) mobile telephony\(^6\) recorded the largest activity and increased competition. In fixed telephony, competition is intensified with the activation of alternative telecommunication providers, but OTE is still dominant. It should be noted that the law on “electronic communications” (Law 3431/2006) was passed in January 2006. It includes arrangements that directly concern telecommunication service providers (procedures for the granting of transit rights, installation of ground networks, installation of antennas) and the development of the market and the protection of consumers in general.\(^7\)

The rate of penetration of broadband connections in the population was a mere 1% at the end of 2005 (the lowest percentage in EU-25). However, according to more recent data from the Observatory on the Information Society, there is an increase in competition and a decrease in prices, while the rate of penetration of broadband connections in the population in early 2006 was over 1.5%.\(^8\) In any event, the use of computers and the Internet did not increase in 2005; by contrast, a rise was recorded in the possession and use of mobile telephones.\(^9\) Despite the fact that the total rate of penetration of new tech-

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1 Total passenger traffic (domestic and foreign) through the Athens International Airport increased by 4.5%. Specifically, according to Olympic Airlines data, the passenger carriage task rose by 8.1%, while Aegean Airlines passenger traffic (the market share of which amounts to 22%) increased by 12.3% in 2005.

2 Passenger traffic from and to the port of Piraeus increased by 4.1% in 2005, while cargo transport decreased by 3.7%, according to Piraeus Port Authority data. On the basis of the 2005 annual results, three of the five listed coastal shipping companies recorded profits despite the significant increase in the cost of fuel.


4 In the EU as a whole only 8% of cargo transport is handled by rail (this percentage was over 20% in 1970), while the corresponding percentage is even smaller in Greece (2%).

5 According to the Eleventh Report of the European Commission on “European Electronic Communications Regulation and Markets 2005” (February 2006), in June 2005 mobile telephony subscriptions in Greece reached 9.9 million (it is self-evident that a person may have more than one subscription). In fixed voice telephony, 24 authorised service providers operated in September 2005, but only 13 of them (including OTE) offered services through leased or owned networks on a commercial basis. OTE’s share, according to the same Report, is 82.1% in local calls (including internet calls), 74.6% in long-distance calls and 68.6% in international calls.

6 According to Ministry of Economy and Finance data, revenue from mobile telephony grew by 10.8% in 2005.

7 This law does not include any provisions concerning the deregulation of the digital broadcasting services market according to Directive 2002/77/EC.

8 It should be noted that the provision (to students) of a cheaper and faster Internet connection (ADSL connection at a speed of 384/128 Kbps without any limitations as to the volume of data) will begin gradually in March 2006.

9 According to the latest national survey on new technologies and the Information Society, conducted in 2005 by VPRC on behalf of the National Research and Technology Network (EDETA S.A.), 27.3% (34.3% for ages 15-65) of the population makes use of a computer, while 19.5% (24.6% for ages 15-65) of the population had access to the Internet. By contrast, the percentage of the population that owns and uses a mobile telephone rose to 73.1%, from 69.4% in 2004 and 64.7% in 2003.
nologies and Internet use remains low, more than 90% of firms employing over 10 persons has access to the Internet, while one out of three firms has broadband access.\(^1\) Moreover, according to a survey by the Competitiveness Observatory, firms that use the Internet for transactions with the State amount to 81%, ranking Greece 5th among the 24 countries of Europe for which data are available.

According to data from the Secretariat for the Information Society, at the end of 2005 the rate of absorption of the “Information Society” Operational Programme reached 33.7% of the public expenditure budget, while the target of completion of Programme planning was achieved: indeed, projects approaching 100% of the total programme budget were included therein.\(^2\) Concerning 2006, the targets of the Programme “are very high and require the absorption of funds amounting to €519 million”, while “at the level of contracts for new information projects, the target for 2006 was 100% of the programme budget, i.e. additional contracts of approximately one billion euro for information projects”.\(^3\) In addition, the National Public Administration Network “Syzefxis” began its pilot operation in January 2006. Moreover, the implementation of the 2006-2013 Digital Strategy will begin in the first quarter of 2006, which aims at promoting the use of information technologies by firms, boosting investment in broadband infrastructure for local access in rural areas, the use of new technologies in the public sector and their utilisation by the citizens.

Retail trade activity grew in 2005, as shown by the 3.0% increase in retail sales volume and the 2.2% increase in persons employed in retail trade (NSSG data).\(^4\) However, according to the monthly conjunctural indicators survey of IOBE for retail trade, the business expectations index fell by 7.7%. Data from the NSSG regular survey on turnover in retail trade and retail sales volume show a shift of the turnover from small and very small firms to large food stores and department stores from 2000 to the end of 2005. The development of franchising in 2005 was also considerable since, according to an ICAP study, networks increased by 13.7%.

Tourism activity is estimated to have increased in 2005. Specifically, arrivals of foreign tourists increased,\(^5\) while hotel booking indicators remained virtually unchanged.\(^6\) The continuing promotion of the country as a tourist destination, investment in tourism (especially

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\(^1\) According to the first complete measurement of the penetration of new technologies in Greece on the basis of the eEurope indicators, presented by the Observatory for the Greek Information Society, among firms employing more than 10 persons, 92.8% had Internet access and 55.6% had their own website. In small firms, the corresponding percentages are lower (38% and 10%). Broadband access is available to 36% of the firms employing more than 10 persons and 72% of public bodies. Moreover, all major firms (employing over 250 persons) of the non-financial sector have Internet access, while 77% of them have broadband access. Approximately one in two households has a computer and one in four has Internet access. A small percentage (about 5%) of the population places orders and buys products and services for private use through the Internet, while a mere 0.15% of the turnover of Greek firms originates from e-commerce.


\(^3\) Press release of the Secretariat for Information Society, 15 March 2006.

\(^4\) Retail trade accounts for 66.3% of employment in trade (18.8% for wholesale trade and 14.9% for trade in and maintenance of vehicles), according to the NSSG Labour Force Survey for 2005.

\(^5\) According to Bank of Greece data, the number of total arrivals (by air, road and sea) of foreign travellers increased by 5.3% in 2005, while gross travel receipts at constant prices increased by 2.9%.

\(^6\) According to data from the Athens Hotel Association, average bookings of hotels in the Attica region stood at 64.1% in January-November 2005, compared with 64.6% in the corresponding period of 2004.
for modernisation, as well as for establishment or extension of hotels),\(^1\) the upgrading of the quality of services and price restraint in order to increase the competitiveness of the tourist product, as well as the boosting of alternative forms of tourism so as to prolong the tourist season, are expected to have a positive effect on tourism in 2006 and in the coming years.

It is estimated that insurance production also increased. According to data from the Association of Insurance Companies of Greece, the relevant indicators picked up in 1998-2004, but premia as a percentage of GDP and total investment by insurance companies as a percentage of GDP remained at relatively low levels compared with EU-25.\(^2\)

The provision of health services by private firms has been on an upward course in the last few years, with an average annual growth rate of 12.9% in 1997-2004.\(^3\) Moreover, health service groups with Athex-listed shares increased their turnover in 2005.

Developments in the banking sector are reviewed in Chapter X.

Finally, it should be noted that the implementation of the Operational Programme “Competitiveness” continues with a view to supporting very small enterprises (employing up to 9 persons) in the services sector. In the framework of this programme, the largest percentage of available public funds is channelled to regional firms (Measure 2.11.2). Specifically, 2,588 business plans were recently approved, with a total budget of €169.9 million (public expenditure amounts to about €80.5 million). Of the approved plans, 81% concerned the regions and 19% concerned Attica.

4. EMPLOYMENT AND UNEMPLOYMENT

The labour market in 2005 was marked by a 1.3% increase in employment relative to 2004, according to Labour Force Survey (LFS) data, a 1.8% rise in total hours worked\(^4\) and a 0.6 percentage point decrease in the unemployment rate, which fell to 9.9%.

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\(^1\) According to data from the study “Greek Tourism: The course in 2005 and the investment orientation for 2006” (prepared by “Xenia Exhibitions-Conferences S.A.”), from 1998 until the end of 2005 1,119 tourism investment plans were approved — on the basis of development laws 2601/1998 and 3299/2004 — with a total budget of €1.3 billion and total subsidisation amounted to €355 million. The third cycle of support to tourism enterprises in the framework of Regional Operational Programmes (ROP) will begin in March 2006, for which total public expenditure amounts to €71.5 million. However, major investment for modernisation, renovation and extension in the previous years has increased the obligations of hotels, which in 2001-2004 recorded negative financial results, according to a Hellastat study on hotels. In 2004 six out of ten hotels recorded losses (compared with four out of ten in 2002), while the return on equity capital decreased significantly. Moreover, according to ICAP data, the turnover of the 1,574 hotels operating throughout the country increased by 8.1% in 2004, but operational results decreased by 51.8%. It should be noted that, on the basis of the 2005 annual results for hotels-restaurants-recreation, the turnover increased very little, while profits dropped considerably (see Chapter IV.3).

\(^2\) According to data from the Association of Insurance Companies of Greece (Private insurance in Greece in 2004 – annual statistical report, December 2005), total investment by insurance companies stood at 4.7% of GDP in 2004 (compared with about 50% in EU-25), while premiums were 2.1% of GDP, i.e. about the same level as in previous years (compared with about 8% in EU-25).

\(^3\) According to the ICAP sectoral study, NSSG data show that the private share in aggregate health expenditure reached 47.5% in 2003.

\(^4\) Total hours worked are calculated by multiplying the average weekly working hours per worker by the number of workers. The average weekly working hours per worker increased by 0.5% in 2005.
### TABLE III.10

POPULATION, LABOUR FORCE, EMPLOYMENT AND UNEMPLOYMENT: SECOND QUARTER

(Thousand persons)

<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>Labour force</th>
<th>Employed</th>
<th>Unemployed</th>
<th>Unemployment rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2001</td>
<td>2002</td>
<td>2003</td>
<td>2004</td>
<td>2005</td>
</tr>
<tr>
<td>Men and women</td>
<td>8,898</td>
<td>8,958</td>
<td>9,009</td>
<td>9,057</td>
<td>9,108</td>
</tr>
<tr>
<td>– aged 15-64</td>
<td>4,849</td>
<td>4,767</td>
<td>4,774</td>
<td>4,823</td>
<td>4,849</td>
</tr>
<tr>
<td>– aged 25 and over</td>
<td>4,849</td>
<td>4,767</td>
<td>4,774</td>
<td>4,823</td>
<td>4,849</td>
</tr>
<tr>
<td>Women</td>
<td>3,500</td>
<td>3,528</td>
<td>3,536</td>
<td>3,544</td>
<td>3,550</td>
</tr>
<tr>
<td>– total (aged 15 and over)</td>
<td>3,500</td>
<td>3,528</td>
<td>3,536</td>
<td>3,544</td>
<td>3,550</td>
</tr>
<tr>
<td>– aged 15-64</td>
<td>3,500</td>
<td>3,528</td>
<td>3,536</td>
<td>3,544</td>
<td>3,550</td>
</tr>
<tr>
<td>– aged 25 and over</td>
<td>3,500</td>
<td>3,528</td>
<td>3,536</td>
<td>3,544</td>
<td>3,550</td>
</tr>
</tbody>
</table>
The increase in employment, combined with the fact that the population aged 15-64 remained essentially unchanged (see Table III.10), raised the average employment rate\textsuperscript{1} from 59.4% in 2004 to 60.1% in 2005 (see Chart II.3). The employment rate rose for all age groups except 15-24 years, which fell from 26.8% in 2004 to 25% in 2005.\textsuperscript{2}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chart.png}
\caption{CHART III.8

EMPLOYMENT

(PERCENTAGE CHANGES OVER CORRESPONDING QUARTER OF PREVIOUS YEAR)}
\end{figure}

\textsuperscript{*} Other employed persons: Self-employed with staff (employers) + Self-employed without staff + Assistants in family businesses.

\textsuperscript{1} The ratio of workers aged 15-64 to the population of the same age.

\textsuperscript{2} For those aged 15-24, despite the reduction of population (by 3.5%), employment fell due to the significant drop (approximately 10%) in the number of employees. It should be noted, however, that the fall in employment for this age group was accompanied by a 14.3% reduction in the number of unemployed, while the number of economically inactive persons rose by a mere 1%, mainly due to increased participation in training programmes.

LFS data show that, even though the most common form of employment involves indefinite-term full-time contracts, fixed-term contracts have been more widely applied to newly-hired people from 2005 onwards (as expected for new recruits).
In more detail, the majority of private sector employees (86.5%) work under indefinite-term contracts. The average duration of fixed-term contracts in the private sector is about 15 months. Of the employees who began working in 2005, 61% are employed under indefinite-term contracts. The average duration of fixed-term contracts is estimated at 9 months. Moreover, although 94% of total private sector employees work on a full-time basis, the percentage is lower (about 84%) for those who started working in 2005.

1 The data give no indication regarding the possibility of contract renewal.
The rise in total employment in 2005 mainly stemmed from salaried employment (see Chart III.8)\(^1\) and was concentrated in parts of the services sector (e.g. trade, hotels & restaurants, etc.).\(^2\) In more detail (see Table III.11):

- Data from the NSSG survey show that employment in retail trade increased by 2.2% in 2005. The dynamics of trade (i.e. retail and wholesale trade, car trade and vehicle repair) and of hotel and restaurants are also evident from LFS data, which show that the share of these sectors in new recruits\(^3\) (21.6% for trade and 13.4% for hotels-restaurants) is higher than their share in total employment (17.8% and 6.8% respectively). Moreover, the sectors’ largest firms also participate in new recruits more than in total employment.
  - By contrast, it is estimated that in 2005 employment in the primary sector continued on its downward trend: many employees retired and were not fully replaced by new recruits.
  - Manufacturing recorded a small decrease in employment (–0.3%) and in weekly working hours per employee (–0.2%) as a result of reduced manufacturing output in 2005. The drop in employment in manufacturing reflects the decrease in the number of persons employed in the manufacture of rubber products, textiles and garments, which was offset to a large degree (but not fully) by the significant increase in employment in the food sector.
  - LFS data for the construction sector show a rise in the average annual number of workers. This might reflect the increase in the number of workers in projects related to the construction and operation of buildings (e.g. plumbing and electrical installations etc.), for which there is growing demand (the large number of building permits in recent years show a rise in the number of buildings, houses etc.). By contrast, large listed construction companies, whose main field is infrastructure projects, recorded a slight decrease in their permanent staff (5% of total employees in the construction sector) in 2005.\(^4\)
  - Data from banks show that the number of employees in the banking sector at the end of 2005 was higher than at the end of 2004 (when large numbers of voluntary quits were recorded in some banks) but that the average annual level of employment in the largest banks fell by 1.7%.

\(^1\) The number of employees, according to Labour Force Survey (LFS) data, increased by 1.8% in 2005.
\(^2\) It should be noted at this point that the available NSSG data do not allow for the systematic and timely monitoring of developments at branch level. NSSG data on the number of employees in 2005 are not derived from surveys conducted at the level of the firm, as far as the majority of economic activity branches, except retail trade, is concerned. NSSG’s Labour Force Survey (LFS) is carried out at household level (sample basis) and for this reason it is not suitable for a detailed sectoral analysis of employment. The results from the LFS household sample are converted to reflect the whole population by means of an estimator, which takes into consideration the possibility of choosing the particular sample households, the response ratio of households in the sample, as well as the distribution of population by sex and age group in each area. Consequently, the precision of estimates on sectoral employment depends on the link between (i) the distribution of employees by geographical area, age and sex and (ii) the sectoral breakdown of employment. In this analysis, therefore, LFS results are complemented, where possible, by other data sources (e.g. banks for the banking sector, the Ministry of Economy and Finance as regards the civil service and employment in public enterprises, etc.).
\(^3\) New recruits concern current employees that were unemployed a year ago, i.e. changes in employer are not taken into account.
\(^4\) In more detail, the number of employees in the 22 listed construction companies that have published balance sheets for 2004 and 2005 came to 17,730 at end-2005, against 17,788 at end-2004. It should be noted that the reported number of permanent staff is but a fragment of the total number of workers in the projects these companies undertake.
Finally, average annual employment in the public sector grew by 3%, as shown by Ministry of Economy and Finance data, while average annual employment in public utility companies (including OTE) decreased by 1.4%.

In terms of geographical breakdown, employment increased mainly in the south of Greece and the islands. By contrast, it fell in Northern Greece except for Central Macedonia, where employment grew faster than in the country as a whole. Reduced employment in Northern Greece reflects the decline in specific sectors of economic activity (e.g. textiles), which were important to this particular region.

Another useful indication concerning the labour market relates to job vacancies. Available data suggest that the number of vacancies in the first half of 2005 decreased relative to the corresponding 2004 period in all sectors of economic activity, excluding financial intermediaries, where it increased.

The 0.5% increase in weekly hours worked per employee in the whole economy reflects the increase in actual weekly hours worked mainly in hotels-restaurants, trade, construction, transport-communications and financial intermediaries.

Notwithstanding the tendency of employment to increase in recent years, a drop in the number of persons with two jobs has also been recorded. This was not due to the shrinkage of the primary sector, as it was recorded both in the whole economy and in the non-agricultural sector. It may be attributed, however, to the rise in female employment.

The increase in employment, combined with the limited increase in the labour force (0.6%), has led to the reduction of the total unemployment rate from 10.5% in 2004 to 9.9% in 2005 (see Chart III.9).

The reduction of unemployment is exclusively attributed to the drop in the number of unemployed without working experience. On the other hand, the number of unemployed with working experience increased marginally. The drop in unemployment mirrors inter alia a rise in the number of economically inactive persons, as a result of increased participation in educational/training programmes. In particular, in 2004 about 770,000 people were not working nor were they looking for a job, as they were participating in such programmes. This figure rose to about 800,000 in 2005.

Despite increased participation in educational/training programmes, young unemployment (15-24 years old) remained very high, although slightly reduced to 26% in 2005 (from 26.9% in 2004).

As recent studies by the Centre for Planning and Economic Research (KEPE)\(^1\) have concluded, the risk of young unemployment and its duration varies dramatically according to the education/training choices made.

As regards developments in the institutional framework of the labour market in 2005, the liberalisation of stores’ opening hours (articles 12 and 13 of Law 3377/2005) and the stipulations for a reduction in the cost of overtime and for the arrangement of work-

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ing hours (Law 3385/2005) are expected to affect employment growth positively.\textsuperscript{1} Although it is difficult to quantify the impact of these measures on job creation, it should be noted that, as evidenced by a survey conducted by IOBE in 2004,\textsuperscript{2} enterprises in all sectors regard the inability to arrange working hours as a significant indication of labour market rigidity.\textsuperscript{3}

Despite the increase in 2005, the Greek employment rate is still well below the EU-15 rate (65.1\% in January-September 2005). This is because young and female employment rates are lower in Greece, while the male employment rate (men 15-64 years old –

\begin{chart}
\centering
\includegraphics[width=\textwidth]{chart.png}
\caption{Total unemployment rate (percentages of the labour force)}
\end{chart}

\textsuperscript{3} According to the IOBE survey, working hours arrangements were applied to some extent in 2004 despite the lack of an institutional framework.
74.2%) is marginally higher than that in the EU-15 (72.9% in January-September 2005). In more detail, the employment rate of young people aged 15-24 stands at 25.0% in Greece, compared with 39.4% in EU-15 (in 2005 Q2). Moreover, the female employment rate (women aged 15-64) is 46.1% against 57.4% in EU-15 (January-September 2005). It should also be noted that the employment rate varies considerably depending on geographical area. For example, in tourism-intensive areas it exceeds 65%, while in other areas, e.g. Western Macedonia, it comes to a mere 52%.

As far as the short-term outlook for the labour market is concerned, firms in retail trade, services (excluding retail trade and banks) and construction expect an increase in employment, while, by contrast, industrial firms expect a drop (see Chart III.10).

In summary, a review of the Greek labour market reveals that important challenges are still to be met, namely the low employment rate and high unemployment, especially as...
regards young people and women. These problems suggest the need for policies that will boost entrepreneurship and for measures that will reduce structural unemployment through timely interventions in declining sectors of the Greek economy (e.g. through re-orientation training programmes, life-long learning) and targeted actions for the promotion of female and young employment, as already mentioned in Chapter II.
IV. INFLATION, WAGES AND BUSINESS PROFITS

1. INFLATION

1.1 Inflation: developments and determinants in 2005

The average annual inflation rate based on the Harmonised Index of Consumer Prices (HICP) increased from 3.0% in 2004 to 3.5% in 2005 (see Chart II.4). By contrast, the average annual rate of core inflation, as measured on the basis of the HICP excluding energy and unprocessed food prices, fell to 3.2% in 2005 from 3.4% in 2004. If the effect of the increase in indirect taxation is excluded, the fall in core inflation in 2005 is more substantial.

On the basis of the Consumer Price Index (CPI), the average annual inflation rate rose to 3.5% in 2005, from 2.9% in 2004. By contrast, core inflation (measured by the annual rate of change in the CPI excluding fuel, fresh fruit and vegetable prices) fell to 3.1%, from 3.3% in 2004 (see Chart IV.1).
The acceleration of inflation in 2005 was mainly due to exogenous factors (see Chart IV.2). Specifically, in 2005 crude oil prices increased more than in 2004. The same is true of the rise in the prices of other imported products, which partly reflected the small average annual depreciation of the euro against the other currencies, in contrast to the appreciation recorded in 2004. Moreover, from April 2005 indirect taxation increased (as a result of the package of measures introduced on 29 March 2005).

The average annual price of Brent crude oil in US dollars in the world market increased in 2005 at a much higher rate (46.3%) than in 2004 (33.6%). Moreover, the appreciation of the euro against the dollar came to a halt (0.1% on average in 2005, compared with 10.0% in 2004). Owing to these developments, the increase of oil prices in euro was larger (46.2% in 2005 from 21.5% in 2004). According to the new Import

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1 See ECB, *Monthly Bulletin*, Tables 5.1.2 and 8.2 of the statistical appendix (various issues). If the average of three types of oil (Brent, Dubai and West Texas intermediate) is taken into account, the average annual rate of increase of world market prices in US dollars was 41.3% in 2005 compared with 30.7% in 2004. See IMF, *World Economic Outlook*, April 2006.
2 In the period December 2004-December 2005 the exchange rate of the euro against the dollar dropped by 11.6%.
3 If the average of Brent, Dubai and West Texas intermediate is taken into account, the average annual rate of increase of oil prices in euro terms was 41.0%, compared with 18.9% in 2004. See IMF, *ibid*. 
A. EVOLUTION OF CPI/PPI FUEL PRICES AND OF THE EURO PRICE OF BRENT CRUDE OIL

(Percentage Changes Over Same Month of Previous Year)

B. INFLATIONARY CONTRIBUTION OF CHANGES IN FUEL PRICES

Source: Calculations based on NSSG data and forward contracts on the London market for the price (in US dollars) of Brent oil.
Price Index in Industry compiled by the NSSG (this index concerns not only final products, like the previous Wholesale Import Price Index, but also raw materials and intermediate goods), the prices of imported energy raw materials (crude oil and natural gas) increased at an average annual rate of 57.1% in 2005, while the prices of the imported fuel final products (petrol as well as heating oil, diesel and heavy oil) rose at an average annual rate of 22.7%.

In the domestic market, the retail prices of fuel included in the CPI increased at an average annual rate of 18.0% in 2005, from 7.5% in 2004 (see Charts IV.3A and IV.3B).1 At the wholesale level, fuel prices (solely final products) included in the Producer Price Index in Industry for the domestic market rose at an average annual rate of 25.1% in 2005 (compared with an increase of 4.3% in 2004).

CHART IV.4

IMPORT PRICE INDEX IN INDUSTRY AND INVERSE OF THE EFFECTIVE EXCHANGE RATE OF THE CURRENCY

(Percentage changes over same month of previous year)

Note: Since 2004 the import price index also includes crude oil (and not only final petroleum products); thus, the rise in the general index becomes steeper.

Source: Bank of Greece.

1 It should be recalled that the domestic consumer prices of fuel change less than the international prices of crude oil, mainly because a large part of fuel retail prices in Greece consists of the “special consumption taxes”, which are fixed, are set per unit of volume and not of value and so do not change when the price of the product changes. It is estimated that in winter time a 10% increase in the euro price of crude oil leads directly to: (i) an increase in fuel retail prices (petrol and heating oil) of only 3.8% and (ii) an increase in the general CPI of only 0.19% (see also Bank of Greece, Monetary Policy 2004-2005, February 2005, Box III.1, pp 48-50).
In the world market, the euro prices of other (non-energy) raw materials increased at a slightly slower rate (9.4%) in 2005, against 10.8% in 2004.\(^1\) According to other indices, however,\(^2\) the euro prices of basic commodities (excluding fuel) increased by 10.0% in 2005, (2004:7.8%), while the euro prices of industrial products rose by of 4.3%, compared with a slight drop of 0.3% in 2004.

In the domestic market, the average rate of increase of the Import Price Index in Industry excluding energy prices (NSSG) accelerated to 1.2% in 2005, from 0.8% in 2004 (see Chart IV.4). This acceleration reflects partly the small average annual depreciation of the euro against other currencies\(^3\) (0.7% in 2005, following an appreciation of 1.5% in 2004 – see Chart IV.5), which raised the euro prices of products imported from countries outside the euro area.

---

1. See ECB, *Monthly Bulletin*, Table 5.1.2 of the statistical appendix.
2. See IMF, *ibid*. The rates of increase in the prices of these products (in dollars) fell to 10.3% from 18.5% for commodities excluding fuel and to 4.5% from 9.6% for industrial products.
3. According to the revised index of the nominal effective exchange rate for Greece. In the new index the weighting is based on Greece’s external trade with 27 countries/trading partners, which include the other 11 countries of the euro area (in relation with which the exchange rate, obviously does not change, as the currency is common). In the old index, the weighting was based on Greece’s external trade with 15 countries-trading partners.
Furthermore, the increase in inflation is also attributable to the fact that, although the prices of fresh fruit and vegetables continued to fall, they fell less than in 2004 (−8.1% on average, compared with −11.9%, see Chart IV.6).\(^1\)

However, it should be noted that the rise in inflation was relatively limited in 2005, reflecting the fact that core inflation decreased slightly. Specifically, there was a noticeable drop in the rate of increase in the prices of food excluding fresh fruit and vegetables (2.5% against 3.6%), rents (4.2% against 5.3%), services for the repair and maintenance of dwellings (2.9% against 5.2%), medical services (6.0% against 7.9%), recreation services (2.0% against 4.9%) and hotels-cafés-restaurants (3.2% against 4.3%). These developments more than offset the faster rise in the prices of transport services (4.7% against 2.2%), hospital treatment (4.1% against 2.0%), consumer durables (1.8% against 0.9%), electricity (2.9% against 2.1%) and footwear and clothing (4.7% against 4.1%), as well as the much slower drop in the prices of telephone services (−0.4% against −4.4%).

Inflationary pressures on producer prices remained significant, in spite of a considerable easing in 2005. Indeed, producer prices in industry (excluding energy) for the

\(^1\) It should be recalled that in the preceding two-year period the prices of fresh fruit and vegetables increased significantly: 13.8% in 2002 and 10.7% in 2003.
<table>
<thead>
<tr>
<th>Year or quarter</th>
<th>Industrial producer price index</th>
<th>Import price index in industry</th>
</tr>
</thead>
<tbody>
<tr>
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<td>General index</td>
<td>Sub-indices</td>
</tr>
<tr>
<td></td>
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<td>External market</td>
</tr>
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<td><strong>2002</strong></td>
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<td><strong>2005</strong></td>
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</tr>
<tr>
<td><strong>2006</strong></td>
<td>3.5</td>
<td>3.4</td>
</tr>
</tbody>
</table>

**Source:** NSSG.
domestic market increased at an average annual rate of 3.0% in 2005 from 4.7% in 2004 (see Table IV.1 and Chart IV.7). The respective prices for the external market increased at an average annual rate of 0.3% in 2005 from 1.8% in 2004 (see Table IV.2).

The deceleration of core inflation and the limited acceleration of HICP inflation are due to a number of factors:

(a) Core inflation was pushed up, albeit to a limited extent, by the increase in indirect taxation (see Chapter VIII), which was not fully passed on to prices, as business firms absorbed part of it, either owing to the slowdown of the rise in demand or because of tax evasion, as indicated by the marginal increase in VAT revenue.\(^1\) On the basis of December 2005 data, it is estimated that the increase in indirect taxation contributed only 0.75 of a

\(^1\) It increased by a mere 2.8% in 2005 (see Chapter VIII).
percentage point to the annual rate of CPI inflation. Furthermore, since indirect taxation was adjusted gradually after 1 April 2005, the impact on average annual inflation in 2005 is estimated at 0.6 percentage point.

(ii) The rate of increase in the prices of imported products (excluding fuel) accelerated, as mentioned above, but remained very low. This development is associated with the increased imports of low-cost products—mainly clothing-footwear and consumer durables—from the emerging Asian economies. Besides, the rate of increase in the prices of consumer products imported from euro area countries seems to have decelerated (as indirectly implied by the fact that core inflation in the euro area fell to 1.5% from 2.1% in 2004). This development helped maintain the rate of increase in the prices of all imported consumer

![Chart IV.7: Producer Price Index](chart.png)

Source: Calculations based on NSSG data.

---

1 The increase in VAT rates affected mainly the prices of food, services provided by hotels-cafés-restaurants, footwear and clothing and consumer durables, while the increase in special consumption taxes (SCT) on alcoholic beverages and certain types of cigarettes had a negligible—less than 0.1 percentage point—effect on inflation.

2 The effect of these low-cost imports on consumer prices seems to be much stronger in the euro area as a whole (where clothing-footwear prices included in the HICP increased by 0.7% in 2004 and a mere 0.1% in 2005) in comparison with Greece (where, as mentioned above, the said prices increased by 4.1% in 2004 and 4.7% in 2005, possibly implying a widening of profit margins).
products at a relatively low level (1.4% in 2005, against 0.6% in 2004, according to the new NSSG Index of Import Prices in Industry), and, at all events, lower than domestic inflation.

(iii) Although increases in public utility rates were smaller than the adjustments requested by certain public enterprises because of the rise in cost items, the prices of public utility services (provided by public and private enterprises) as well as certain fees and duties set by the State increased in 2005 at a rate higher than inflation as well as faster than they had increased in 2004 (4.6% on average against 3%) if telecommunications services rates are excluded. Thus, it is estimated that they contributed 0.27 percentage point to the annual increase in the general CPI, compared with 0.16 percentage point in 2004. As a result, however, of the effort to restrain, as far as possible, the rise in public utility rates, the rise remained smaller than the increase in cost items for public enterprises, as revealed by the negative effects on their financial results. If public utility rates had increased in line with costs, their inflationary impact would have been stronger.

(iv) Market surveillance by the Ministry of Development and the Competition Commission was intensified, in order to prevent the infringement of market operation rules or collusion in price-setting by business enterprises.

(v) Inflationary pressures on the domestic demand side in 2005 were lower in 2005 than in 2004. This is reflected also in the narrowing of the profit margins of non-financial enterprises (see Section 3 of this chapter). Indeed, available national accounts estimates and short-term indicators imply that the growth rate of private consumption remained high, but slowed down (see details in Chapter III). Moreover, according to available estimates (see Chart IV.8), the output gap of the Greek economy narrowed in 2005, but was still positive (with actual output exceeding potential output).

(vi) Finally, the growth rate of unit labour costs in the business sector fell slightly, but remained higher than in the euro area (see Part 2 of the present chapter).

---

1 Comprising the rates of the Public Power Corporation (DEH), the Hellenic Post Office (ELTA), the Hellenic Railways Organisation (OSE), the Water Supply and Sewerage Company (EYDAP) and other water supply companies, Olympic Airlines and private airlines fares, urban public transport fares, hospital and private clinic rates, National Radio and Television Network (ERT) fees, municipal fees, tolls and road taxes. All these together in 2005 represented 5.9% of the CPI basket. The rates applied by the Hellenic Telecommunications Organisation (OTE) and by private mobile telephone companies (2.3% of the basket in 2005) are excluded.

2 Owing to competitive conditions in the telecommunications market, the trend of telecommunications rates is still downward, although it almost came to a halt in 2005, as they dropped at an average annual rate of only 0.4%, while in 2004 they had fallen by 4.4%.

3 Recent estimates by the IMF (Greece: Staff Report for the 2005 Article IV Consultation, January 2006), the European Commission (Autumn 2005 Economic Forecasts, November 2005) the OECD (Economic Outlook, November 2005) and the Bank of Greece.

4 The output gap is defined as the difference between the level of actual output (GDP) and the production potential of the country (level of potential GDP) as a percentage of the level of potential GDP. It is an aggregate not directly measurable, but is estimated by various alternative methods. The estimates of the potential output and the output gap are highly uncertain and this must be taken into account when the results of relevant analyses are assessed. A more reliable indicator may be the change in the output gap, measured in GDP percentage points.

5 Estimates that the positive output gap of the Greek economy narrowed in 2005 are consistent with the fact that the degree of capacity utilisation in industry, which produces only 11% of GDP, fell to 72.3 on average in 2005, from 75.2 in 2004 (see Chart III.5 in Chapter III).
A. THE OUTPUT GAP OF THE GREEK ECONOMY: LEVEL
(PERCENTAGE OF POTENTIAL GDP)

B. THE OUTPUT GAP OF THE GREEK ECONOMY: CHANGES
(PERCENTAGE OF POTENTIAL GDP, ANNUAL PERCENTAGE CHANGES)

Sources: OECD, Economic Outlook, December 2005.
European Commission, Autumn 2005 Economic Forecasts.
IMF, Greece - Staff Report for the 2005 Article IV Consultation Supplementary Information,
January 2006.
These factors more than offset the inflationary impact of the increase in indirect taxation and the faster — in relation to 2004 — rise in the prices of oil and other imports. The deceleration of core inflation may reflect also the fact that some firms — in an effort to remain or become competitive — do not fully pass the increase in production costs onto product prices. To the extent, however, that such firms fail to raise productivity and reduce production costs so as to increase their competitiveness to a satisfactory degree, they incur losses and face a higher risk of going out of business.

1.2 The inflation differential between Greece and the euro area

Given that the average annual rate of inflation in the euro area remained unchanged at 2.2% (2004: 2.1%) and core inflation fell to 1.5% (2004: 2.1%), the inflation differential between Greece and the euro area as a whole rose to 1.3 percentage points (from 0.9 percentage point) and the core inflation differential increased to 1.7 percentage points from 1.3 percentage points. (see Charts II.4, II.5 and IV.9.)

Specifically, if we examine the prices of the various groups of goods and services making up the core inflation “basket”, we will see that in 2005 (compared with 2004) the positive inflation differential decreased as regards processed food, but increased for industrial goods (excluding food and energy) and services. Regarding the two groups of goods that are not included in the core “basket”, (i) the positive differential of the rate of increase in energy prices rose (owing to the greater dependence of the Greek economy on oil) and (ii) the negative differential of the rate of increase in the prices of unprocessed food remained significant, as these prices fell in Greece but rose in the euro area (see Table IV.3 and Chart IV.10).

The positive inflation differential between Greece and the euro area as a whole is attributed partly to the convergence of price and income levels – particularly to the faster rise in the prices of certain internationally non-tradable goods and services which is linked with the process of real convergence (the “Balassa-Samuelson effect”). In addition to this factor, however, it should be recalled that the persistence of core inflation at relatively high levels and its positive differential from inflation in the euro area is due to macroeconomic factors, linked with demand and production costs (as well as with the interaction between them) and with the unsatisfactory conditions of competition in certain markets that do not operate efficiently. Specifically, excess demand continued to contribute to the persistence of inflation at a high level in Greece, although less than in 2004 (namely the existence of a positive output gap, as shown by the above-mentioned estimates, while in the euro area the output gap is negative). Furthermore, the growth rate of unit labour cost is still appreciably higher than in the euro area. Of course, unit labour cost in the business sector is not only an “autonomous” cost factor, but also reflects the effects of changes in demand, since excess demand affects firms’ wage policies as well as the bargaining power of workers. Besides, as mentioned above, competitive conditions are not satisfactory in certain markets that do not operate effi-
### TABLE IV.3

THE EVOLUTION OF PRICES IN GREECE AND THE EURO AREA

(Annual percentage changes)

|------|-----------|-----------|------------|-----------|-----------|-----------|-----------|-----------|------------|

**A. Euro area**

**Harmonised Index of Consumer Prices (HICP) and its components**

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<tbody>
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<td>2.3</td>
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<tr>
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<td>1.9</td>
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<td>1.8</td>
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<tr>
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**Producer prices in industry**

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**International non-oil commodity prices**

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**Oil prices (euro per barrel)**

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**B. Greece**

**Harmonised Index of Consumer Prices (HICP) and its components**

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**Producer prices in industry for the domestic market**

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<td>9.1</td>
<td>9.9</td>
<td>9.5</td>
<td>9.5</td>
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</tbody>
</table>

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1 Including alcoholic beverages and tobacco.
2 In euro.
3 Brent blend (delivery after one month).

**Source:** Calculations based on ECB and NSSG data.
ciently. So, depending on the case, prices are adversely affected by developments in production costs, excess demand, price inelasticity of demand (for certain articles), the fact that certain companies take advantage of their dominant market position, as well as harmonised practices or collusion between companies.

The fact that for a number of years inflation is higher in Greece than in the euro area as a whole and in Greece’s other trading partners implies a loss of the economy’s price competitiveness in the world market. This loss has been considerable in the past five years (see Table IX.4 and Chart IX.1 in Chapter IX for the indices of Greece’s real effective exchange rate).

1.3 Inflation prospects for 2006

In the first quarter of this year, the average annual rate of increase in the HICP was 3.2% (3.3% for the CPI), while core inflation came to 2.5% (both on the basis of the HICP

---

excluding energy and unprocessed food, and on the basis of the CPI excluding fuel and fresh fruit and vegetables).

For the whole of 2006, it is forecast that the average annual rate of increase in the HICP and the CPI will slow down to 3.3%, from 3.5% in 2005, but in the last quarter of 2006 it may be slightly higher than in the last quarter of 2005. Core inflation (based on the HICP excluding energy and unprocessed food prices) will drop to 2.9%, from 3.2% in 2005. Core inflation based on the CPI excluding fuel and fresh fruit and vegetables is expected to fall to 2.8%, from 3.1% in 2005.

These forecasts are based on certain estimates and assumptions concerning, on the one hand, the prices of oil and the other raw materials, the exchange rate of the euro and the prices of fresh fruit and vegetables and, on the other hand, unit labour costs, profit margins and demand (in conjunction with the production potential of the economy). At the same time, account is taken of the impact of the macroeconomic policy and the structural reform policy, together with the continuing more active involvement of the Competition Commission.\(^1\)

Specifically, the forecasts of a fall in HICP and CPI and core inflation reflect the assessment that the factors which contributed to a drop in core inflation and a limited acceleration of inflation in 2005 will continue to have an effect. Furthermore, account has been taken of the gradual elimination (from April 2006 onwards) of the impact of last year’s change in indirect taxation on the annual inflation rate, as well as the expected reduction of the effect of imported inflation (particularly the expected smaller increase in the price of crude oil). It is estimated that these factors will more than offset the impact of the appreciably faster rise expected in unit labour costs.

As always, these forecasts involve an element of uncertainty, to the extent that they depend on changes in oil prices, exchange rates and the prices of fresh fruit and vegetables during the year, as well as on the growth rate of unit labour costs. The latter will depend, on the one hand, on the final outcome of collective bargaining in the private sector and public enterprises and, on the other hand, on the growth rate of productivity.

Regarding individual factors, it is estimated that the impact of “imported inflation” will be limited in 2006. In more detail:

- The rise in oil prices is forecast to continue to push up the price level, both directly (through the increase in fuel prices in the CPI basket) and indirectly, influence-

\(^1\) Besides, as regards short-term expectations of the enterprises themselves concerning the prices of their goods or services, the surveys carried out by the IOBE in the first quarter of 2006 show that, in comparison with the last quarter of 2005, the percentage of enterprises in manufacturing, retail trade and services (excluding retail trade and banks) expecting that in the next 3-4 months the prices of their goods or services will rise increased (to be precise: the positive balance between the percentage of the firms that expect a rise in their prices and that of those that expect a reduction). The respective negative differential for construction companies remained unchanged (see Chart IV.11). In particular for manufacturing, the same picture appears also from the survey for the PMI (Purchasing Managers’ Index, sub-index: “output prices”). As regards consumers’ inflationary expectations, the evolution of the percentage of consumers expecting a rise of inflation in the next twelve months (as recorded in a survey conducted on behalf of the European Commission) implies a slight weakening of expectations (see Chart IV.11).
A. INFLATION EXPECTATIONS* OF CONSUMERS AND BUSINESS FIRMS

(Percentage balances of positive and negative responses)

B. PRODUCER PRICE INDEX** IN INDUSTRY FOR THE DOMESTIC MARKET AND INFLATION EXPECTATIONS* OF INDUSTRIAL FIRMS

* Expectations: Percentage balances of responses. Business firms’ responses 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 over the next 12 months. Data regarding consumers are seasonally adjusted.

**Annual percentage changes.

Source: Calculations based on NSSG, IFOE and European Commission (business and consumer survey results) data.
ing, with a time lag, production costs. However, its overall impact on inflation will be smaller than in 2005. Specifically, in the latest projections by ECB experts (2 March 2006) it was assumed, on the basis of recent forward prices, that the average annual price level of Brent crude oil in the world market will increase to about $66 per barrel in 2006 (from almost $55 in 2005), i.e. by about 21%, against 46.3% in 2005. Based on the technical assumption that exchange rates will remain stable at the level reached, on average, in the first half of April 2006 (€1=$1.2155), the euro will record an average annual depreciation of about 2.5% against the dollar in 2006. Hence, the increase in the average annual crude oil price in euro will be of the order of 24%, i.e. noticeably smaller than in 2005 (46.2%) but still appreciable. This forecast is surrounded by a high degree of uncertainty, which concerns both the price of oil in US dollars and the euro/dollar exchange rate.

1 The indirect impact is reflected in the acceleration of the rate of increase in the prices of consumer goods at the producer price level in the domestic market (wholesale prices) recorded in January this year. The size of the second-round effects that the rise in oil price may have on inflation through wage increases will depend on the overall outcome of collective bargaining.

The relatively low rate of increase in the prices of imports of consumer goods and services from euro area countries is not likely to change substantially, since inflation in the euro area is expected to remain approximately at the levels of 2005.

However, the prices of non-oil commodities (raw materials and other products), both in US dollars and in euro, may increase in 2006 more than in 2005 (according to ECB experts).\(^1\) The IMF also forecasts an acceleration of the rate of increase in these prices in euro.\(^2\)

On the other hand, it is forecast that in 2006 the growth rate of unit labour costs will accelerate significantly, both in the economy as a whole (to 3.7% from 2.2% in 2005) and in the business sector (4.3% from 2.3%), while its upward deviation from the corresponding rate in the euro area will increase\(^3\) (see Section 2 of this chapter).

Inflationary pressures on the demand side are expected to continue to decline in 2006. Indeed, private consumption growth is forecast to decelerate slightly but remain relatively high, while the output gap — according to available forecasts — will remain positive, but will narrow further in 2006 (see Chart IV.8). The fiscal policy pursued, which is aimed at reducing the general government deficit, will contribute to the abatement of inflationary pressures. Besides, overall monetary conditions remain relaxed and have not changed substantially (as shown by the Monetary Conditions Index, see Chart IV.12).

Forecasts of a drop in HICP and CPI inflation, as well as in core inflation, take into account — apart from the net final impact of the factors discussed above — the anti-inflationary impact of certain other factors:

- The rate of increase in unit labour costs in the business sector will, in practice, be lower than forecast, as it will be influenced by the provisions of Law 3385/2005, which reduce overtime costs and facilitate working time flexibility.
- Increased imports of relatively low-cost goods (chiefly clothing-footwear and consumer durables-household goods from China and other Asian economies) and structural changes in the retail trade sector, with the entry of new department store chains and an increased presence of discount stores in the supermarket sector, will strengthen competition. This will lead to a fall in the prices of certain goods and ultimately restrain the rise in the general level of consumer prices.

\section*{2. WAGES AND SALARIES}

In 2005 the annual growth rate of unit labour costs in the business sector,\(^4\) which influences more directly the course of prices, is estimated to have decelerated slightly (to

\begin{itemize}
\item \(^1\) See ECB, \textit{Monthly Bulletin}, March 2006.
\item \(^2\) From 10.0% in 2005 to 14.9% in 2006. See IMF, \textit{ibid}.
\item \(^3\) The average annual growth rate of unit labour costs in the euro area was 0.9% in the first nine months of 2005 and is forecast to slow down further in 2006.
\item \(^4\) It comprises private enterprises, public utilities and banks.
\end{itemize}
2.3%, from 2.7% in 2004). The sharp deceleration of the increase in average earnings in central government led to a slowdown of the increase in average pre-tax earnings in the whole economy to 4.6%, from 7.2% in 2004, a deceleration smaller than that of productivity growth (GDP per employee), which is estimated to have reached 1.9% in 2005, from 3.4% in 2004. Because of these developments, unit labour costs in the whole economy are estimated to have increased by 2.2% in 2005, i.e. much less than in 2004 (4.1%). It should be stressed, that, in spite of these developments, the growth rate of unit labour costs in Greece remained noticeably higher than the respective rate in the euro area (0.9% on average in the first nine months of 2005) and continued to exceed the level compatible with price stability, i.e inflation lower than but close to 2%. It should also be noted, that, while in central government the rise in average earnings slowed down considerably, in the non-bank private sector average earnings increased almost at the same rate in 2004 and 2005 (see Table IV.4).

Specifically, in central government, if account is taken of the latest ex post data from the State General Accounting Office, the estimates of the Introductory Report on the Budget for 2006, Law 3336/2005 on the incomes policy for 2005 and the estimated change in employment (average annual increase of 3% in the number of civil servants in 2005), it is estimated that the wage bill per employee eventually increased by 3.1%, compared with 9.7% in 2004.4

The level of unit labour costs in the business sector in 2005 reflects the estimated changes in average earnings in the non-bank private sector, public utilities and

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1 The reduction in overtime cost, which is provided for in the recent Law 3385/2005 and was put into effect from 1 October 2005, may have contained the increase in the unit labour costs in the business sector, but precise estimates cannot be made.

2 The wage bill per central government employee, which includes employer’s (social security and other) contributions to the insurance funds of employees as well as central government outlays for pensions, is estimated to have increased by 4.1% in 2005, compared with 7.6% in 2004.

3 For these estimates, (nominal) unit labour costs are defined as the ratio of total compensation of employees to real GDP or —expressed in a mathematically equivalent form— as the ratio of compensation per employee to productivity (measured as GDP per salaried employee). In the National Accounts they are defined differently, namely as the ratio of compensation per employee to productivity (measured as GDP per employed person in general, including the self-employed). The reasons for which the Bank of Greece—in its calculation of the change in unit labour costs—prefers to take into account the change in productivity on the basis of the change in GDP to the number of employees have been presented in previous reports (see Bank of Greece, Monetary Policy 2002-2003, Box 2, March 2003, pp. 47-48, and Bank of Greece, Annual Report 2002, Box IV.2, April 2003, pp. 151-153). It should also be noted that, since 1977, the Bank of Greece has published its own estimates concerning the increase in average earnings in the economy as a whole, which are not always the same as those produced by the National Accounts Department of the NSSG.

4 The total increase of central government personnel outlays excluding pensions (and healthcare expenses), as estimated ex post by the General Accounting Office, was 3.6% (compared with 13.9% in 2004) and including pensions also 3.6% (compared with 14.5% in 2004). If however —in order to estimate the increase of per capita outlays on a comparable basis— no account is taken of a part of the extraordinary central government personnel outlays of 2004 (€333 million), which was linked with the conduct of (i) the Olympic Games and (ii) the parliamentary elections and which does not seem to be reflected on the data for the number of civil servants, it is estimated that the rise in central government personnel outlays excluding pensions was 6.2% in 2005 (from 11.2% in 2004) or, including pensions, 5.6% in 2005 (compared with 12.1% in 2004). The considerable deceleration of the growth rate of compensation per civil servant in 2005 reflects the facts that (i) in 2004 increases were high owing to special factors and (ii) increases in 2005 were contained as a result of efforts to reduce the public deficit.
## TABLE IV.4
EARNINGS, LABOUR COSTS AND PRODUCTIVITY
(Annual percentage changes)

<table>
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<tr>
<th></th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
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<td>Average gross earnings¹</td>
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<td>4.5</td>
<td>6.0</td>
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<td>6.6</td>
<td>5.6</td>
<td>7.2</td>
<td>4.6</td>
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<td>6.3</td>
<td>6.3</td>
<td>5.3</td>
<td>3.8</td>
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<td>with average earnings²</td>
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<td>with average earnings²</td>
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<td>5.8</td>
<td>4.8</td>
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<td>3.8</td>
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<td>5.9</td>
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<td>of employees</td>
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<tr>
<td>Total outlays for salaries and pensions</td>
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<td>10.5</td>
<td>7.4</td>
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<td>10.9</td>
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<td>of employees⁸</td>
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<td>2.9</td>
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<td>of employees¹</td>
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<td>Minimum earnings¹</td>
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<td>5.1</td>
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<tr>
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<td>4.4</td>
<td>5.0</td>
<td>5.3</td>
<td>6.5</td>
<td>5.8</td>
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<td>9.2</td>
<td>10.7</td>
<td>9.6</td>
<td>9.4</td>
<td>7.5</td>
<td>7.4</td>
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<td>Hourly earnings of blue-collar workers in manufacturing¹</td>
<td>4.7</td>
<td>4.4*</td>
<td>5.5*</td>
<td>5.5*</td>
<td>6.4*</td>
<td>3.9*</td>
<td>5.8*</td>
<td>5.6*</td>
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<tr>
<td>Output per hour worked (manufacturing¹</td>
<td>4.4</td>
<td>0.6*</td>
<td>2.0*</td>
<td>-0.6*</td>
<td>0.8*</td>
<td>1.2*</td>
<td>1.2*</td>
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<tr>
<td>Unit labour costs (manufacturing¹</td>
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<td>3.8*</td>
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<td>6.1*</td>
<td>5.3*</td>
<td>4.7*</td>
<td>4.5*</td>
<td>...</td>
</tr>
</tbody>
</table>

1 Bank of Greece estimates.
4 Calculations based on NSSG survey data.
5 NSSG estimates (March 2006).
6 The business sector comprises public utilities, banks and the non-bank private sector.
7 Estimates based on data from the Ministry of Economy and Finance and from the Introductory Reports on the Budget. Healthcare outlays were not taken into account in the calculation of expenditure growth.
8 Calculations based on Ministry of Economy and Finance data and estimates, as well as OTE reports.
9 Data from annual income statements (1997-2005).
10 National General Collective Labour Agreement.
11 Calculations based on data from collective labour agreements at branch and occupational level.

* Estimates.
banks. These changes were largely determined by the two-year collective agreements signed in 2004.

In particular, it is estimated that in the non-bank private sector the average annual increase in contractual earnings at branch level (on the basis of the two-year agreements) was 5.0%, slightly higher than the average increase in minimum earnings (4.9%), while the increase in average gross earnings was 5.6%. It is estimated that the average annual contractual increase in public utilities was 5.9% (6.3% in the Public Power Corporation — DEH— and 5.5% in the Hellenic Telecommunications Organisation —OTE—, according to the two-year collective agreements) and that average gross earnings increased by 7.6%. In banks, the average annual contractual increase was 4.9% (on the basis of the branch collective agreement 2004-2005), but it is estimated that average gross earnings increased by 1.5%, because the voluntary retirement programmes in some banks led to the retirement of highly remunerated employees and this caused a negative “wage drift”.

This year, it is estimated that the growth rate of unit labour costs will accelerate significantly, both in the economy as a whole (to 3.7%, from 2.2% in 2005) and in the business sector (to 4.3% from 2.3%). This forecast takes into account the available data on the expected increase in central government personnel outlays, certain assumptions concerning the outcome of collective bargaining in the business sector, as well as the estimate that the growth rate of productivity (GDP per employee) will remain almost stable. Specifically, as regards the growth rate of average earnings in 2006, it is estimated — on the basis of budget forecasts — that in central government the gross wage bill per employee will increase by 6.1%\(^2\) (compared with 3.1% in 2005). In the non-bank private

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1 The effect of the “wage drift” (namely, the difference between the increase in actually paid earnings and that in contractual earnings) was relatively limited, as a result of the voluntary retirement in OTE.

2 According to the Government Budget for 2006, the total increase in civil servants’ wage bill excluding pensions will reach 6.3%, while outlays for salaries and pensions will increase by 6.1%. It is expected that the increase in the number of civil servants will be limited (in the order of 0.2%). As usual, the expected percentage increase in compensation per employee (6.1%) includes all kinds of increases in the compensation of civil servants in addition to the increase in their regular salaries. According to government announcements (1 February 2006), the basic salary payable to government functionaries and civil servants, to employees of Local Authorities and other legal persons in public law as well as to officers of the Armed Forces and the Security Forces, will increase by 3%. However, total regular salaries (including those benefits which will remain unchanged), will increase by 2.1-2.4%. In addition to these rates, in calculating wage increases for central government personnel account should also be taken of changes in seniority benefits (due to advancement, etc.) and of the award, from September 2006, of the second instalment of the new “special conditions allowance” payable to the uniformed members of the Armed Forces and the Security Forces (payment of the first instalment began in September 2005). Moreover, pensions paid by central government and those paid by social security organisations which follow the pension regime applied for central government pensioners will rise by 4.0%. According to government announcements, the auxiliary pension payable to central government pensioners who are also members of the Civil Servants’ Pension Fund (MTPY) will rise by an average of 5.0%. Furthermore, pensions of retirees from the Armed Forces will rise by 6.5% due either to the award of the fourth instalment of the “position of responsibility” allowance or the payment of a special allowance of €176 (depending on the individual case) plus the payments of the “special conditions allowance” and pay advancement. Finally, EKAS (“Pensioners’ Social Solidarity Allowance”) payments and OGA (Farmers’ Insurance Fund) pensions will rise by 7% (the income threshold used for the granting of EKAS will also be adjusted in line with the inflation levels recorded in 2005). On 24 June 2006, central government pensioners will receive the first instalment of the retroactive refund of contributions paid to LAFAKA (Social Security Organisations Solidarity Account).
sector, banks and public utilities, however, collective bargaining has not yet been completed, with the exception of the agreement of 3 April 2006 on the National General Collective Labour Agreement (NGCLA). On the basis of the NGCLA, the minimum earnings of unskilled blue- and white-collar workers increased by 2.9% as from 1 January 2006 and by 2.9% as from 1 September 2006, while they will increase by 5.1% as from 1 May 2007. These arrangements imply that the average annual increase in minimum earnings, namely the annual income of unskilled blue- and white-collar workers, will reach 6.1-6.2% in 2006 (including the “carry-over effect” from 2005) and 5.4% in 2007. In the whole economy, on the basis of the available data, it is estimated that the increase in average pre-tax gross earnings will come to about 6%, against 4.6% in 2005. Of course, the final rate of increase in unit labour costs and inflation will depend on the outcome of collective bargaining at the branch and the individual business level. However, it should be pointed out that in the euro area as a whole average earnings (to be precise: compensation per employee, which includes employer’s contributions) are expected to increase by 2.0% (compared with 1.5% on average in the first nine months of 2005) and unit labour costs less than 1%.

3. BUSINESS PROFITS

3.1 Profits, sales and profitability

Businesses’ profits, sales and other financial aggregates in 2005 are examined using a sample of 435 non-financial corporations, of which 251 (120 industrial firms, 46 commercial firms and 85 service providers or other companies) are listed on the stock exchange. Although the sample is relatively small and the published data — according to the inter-

1 In the non-bank private sector, as contractually agreed pay rises in 2005 were paid as of 1 January 2005 and as of 1 September 2005, “the carry-over effect” for 2006 — i.e. the percentage increase in average annual contractual earnings in 2006 even if no increases at all are awarded during this particular year — is relatively high (2.1%).

2 According to the circular (15 February 2006) referring to the Implementation Instructions for Law 3429/2005 (“Public enterprises and organisations – DEKO”), the new staff regulations to be drawn up in the form of collective agreements (for those public enterprises “that report negative financial results or are subsidised by central government for their consolidation”) “must necessarily contain”, inter alia, the following: (i) increases in the basic salaries of the staff will be granted in one instalment at the beginning of the year, (ii) in 2006 these increases will not exceed 3%, (iii) the allowances and benefits granted will be rationalised, (iv) outlays for overtime pay will be limited etc. On 5 April 2006, the Interministerial Committee for DEKO decided to propose to the managers of the above-mentioned public enterprises to pursue the conclusion of collective agreements that will provide for an increase in basic wages and salaries of 3% in 2006 and 4% in 2007. In this way, in conjunction with the other measures mentioned above, the increase in wage cost will not exceed 5% in 2006 and 6% in 2007.


4 Data are derived from balance sheets or summary financial statements according to the International Accounting Standards, published recently in the daily press. The criterion for the selection and publication were sales, which should exceed €5 million. The sample excluded businesses whose published data for 2005 are, for various reasons (splits, mergers etc) not comparable to those of 2004. It also excluded public enterprises (DEH) and financial enterprises, as well as holding companies whose subsidiaries’ published data were included. Moreover, the sample excluded OTE (for reasons mentioned below). Finally, the sample of 435 businesses, in comparison with the sample of 33,121 businesses (non-financial Sociétés Anonymes and Limited Liability Companies) monitored by ICAP, represents, in terms of sales...
national accounting standards—are limited, it is possible to draw certain basic conclusions concerning both the development of the sales and profits of these businesses in 2005 and their financial structure.

The relatively limited decrease in profits in 2004 came to a halt in 2005. Net pre-tax profits for the whole sample of 435 enterprises increased by 5.3% in 2005 compared with 2004. This reflects the considerable increase of 33.8% in profits in the industrial sector. The rise in profits in industry was the largest in recent years and mainly reflects the big profits of the businesses in the oil drilling-chemicals-plastics branch, as well as metallurgy. By contrast, commercial firms recorded a marginal drop in profits (–1.4%), following a continuous and noticeable increase in recent years. In 2005 the profits of companies in the “provision of services and other activities” branch kept falling (–8.5%), mainly owing to the decrease in the profits of hotels-restaurants-recreation facilities (–33.9%) and construction companies (–41.3%).

Sales, both in the various activity branches and in the enterprises of the sample as a whole, showed an increase in 2005 (10.1% for the total) similar to that recorded in the last three years.

The net profit margin, i.e. the ratio of net pre-tax profits to sales, fell by half a percentage point, namely from 9.9% in 2004 to 9.4% in 2005. Furthermore, the gross profit margin dropped by about one percentage point (2005: 21.9%, 2004: 21.0%), a development reflecting the fact that the sum total of administration and marketing expenses, financial costs and extraordinary expenses increased as a percentage of sales (by about half a percentage point).

Specifically, administration and marketing expenses, for the firms in the sample as a whole, increased by 3.4% and financial costs by 5.6%. Net extraordinary expenses (extraordinary expenses less extraordinary revenue) came to €23.7 million in 2005, while in 2004 net extraordinary revenue amounted to €64.9 million. If no account is taken of net extraordinary expenses-revenue, namely of factors which are not closely related to the operation of businesses, pre-tax operating profits show an increase of 7.8%.

Although net earnings increased for the sample as a whole in 2005, profitability, in terms of both return on equity (ROE) and return on total assets (ROA), did not change considerably. Specifically, ROE rose to 14.6% in 2005 from 14.3% in 2004, while ROA fell to 7.4% in 2005 from 7.5% in 2004. In industry, the large increase in profits in 2005 led to a considerable improvement in ROE (from 9.2% in 2004 to 11.7% in 2005) as well as ROA (from 5.2% in 2004 to 6.3% in 2005). In trade, the marginal reduction of net profits led to the reduction of ROE (to 19.7% from 22.1%) and of ROA (to 7.0% from 7.4%). The drop of profitability in the branch of services provision and other activities was similar: ROE fell to 16.6% in 2005 from 18.2% in 2004 and ROA to 8.6% from 10.0%. It should be noted, however, that in spite of these developments, both ROE and ROA in trade and services in 2005 were maintained at a considerably higher level than in industry.

The ratio of financial costs to gross profits, which is frequently used as an indicator of companies’ financial fragility, in 2005 remained at the level of 2004 (7.5%), given that gross profits and financial costs increased virtually at the same rate (5.5% and 5.6% respectively). It should be noted that in general this ratio, for the companies in the
sample as a whole, has reached a very low level, reflecting the favourable impact that the drop in bank interest rates in recent years had on corporate profitability. It is worth mentioning that in 2005 financial costs increased by 5.6%, as mentioned above, namely much less than the short-term and long-term bank borrowing of the sample companies (12.1%). Exceptions were the following branches: (i) the textile industry, where this ratio is hovering at high levels, although in 2005 it improved to 20.0% from 27.4% in 2004, (ii) construction companies, where the index worsened and increased to 28.6% in 2005 from 19.4% in 2004 and is the highest among all branches, and (iii) the hotels-restaurants-recreation and the transport branches, where the ratio remains high (16.7% and 25.2% respectively).

The sample excludes OTE, which, due to the voluntary early retirement of part of its staff, in 2005 recorded losses amounting to about €430 million. If OTE is included in the sample, the growth rate of sales (9.3%) of the firms of the sample (which are now 436), is not affected considerably. However, net pre-tax profits show a fall of 6.2% in 2005 (instead of increasing), gross profits a decrease of 3.7% (also instead of an increase) and pre-tax operating profits a drop of 5.8%. Net profit margins decreased from 9.2% in 2004 to 7.9% in 2005 and gross profit margins from 21.8% in 2004 to 19.2% in 2005. This means that in both cases the decrease is bigger than that recorded in the sample excluding OTE. Furthermore, profitability in terms of return on equity fell from 12.9% in 2004 to 11.8% in 2005, while profitability in terms of return on total assets dropped from 6.6% in 2004 to 5.8% in 2005.

3.2 Profits and sales by branch of economic activity

In industry, the considerable increase of 15.6% in sales, in conjunction with the decrease in administrative and marketing costs (–3.5%), the relatively small increase in financial costs (5.0%) and the drop in extraordinary costs (–31.1%), led to the large increase of 33.8% in profits in 2005. Specifically, most branches of the manufacturing industry recorded considerable profits, while only two industries (textiles-clothing and electrical appliances-furniture-other firms) recorded a decrease in profits.

The food-beverages-tobacco industry recorded a small increase in sales (2.1%), but profits grew by 17.1%. The rise in profits mainly reflects the very large decrease in net extraordinary costs, as well as the positive impact of the financial results of fish farming companies and of a large soft-drinks company.

In textiles-clothing, an industry particularly exposed to international competition (see also Box IX.1), sales dropped by 8.9% in 2005, but the losses recorded in 2005 were 24.9% less than in 2004. (Just as in 2004, if no account is taken of the results of two loss-incurring companies, this industry shows a rise in sales and increased profits.)
In **wood-paper-publishing-printing**, sales dropped by 1.4%, in spite of the increased (17.1%) profits (mainly of publishing firms). If the effect of factors not related to the operation of firms is excluded, operating profits record a decrease.

The **refineries-chemicals-plastics** industry recorded in 2005 the largest increase in sales (39.7%) and net profits (59.9%). As in 2004, the considerable increase in sales and profits of the two largest oil refineries had a significant favourable impact on the overall performance of this branch as well as the manufacturing industry as a whole.

The **non-metallic minerals** industry recorded a recovery in 2005, as sales increased by 3.3% and net profits by 17.6%. This performance was significantly influenced by the two major cement producing companies.

**Metallurgy** achieved a very good performance in 2005. Although sales recorded only a small increase (2.6%), net profits grew by 40.4%.

Finally, in the industry of **electrical appliances-furniture-other firms** the negative performance of the last two years continued with greater intensity in 2005. Sales dropped by 16.9% (the biggest decrease in the sample) and net profits by 34.7%.

In **trade**, for the first time in recent years, a limited increase was recorded in sales (6.5%) and a marginal decrease in net profits (−1.4%). Specifically, in wholesale trade of consumer goods, sales increased by 6.6%, while net profits grew by a mere 0.9%. By contrast, in wholesale trade of capital goods and other goods, sales rose by 7.7%, but profits fell by 11.4%. Finally, in retail trade, sales increased by 4.6% and net profits by 5.7%.

In the **information technology** industry, sales increased marginally (by 0.6%), while net profits rose by 12.7%

In **hotels-restaurants-recreation**, in which both sales and profits had increased in 2004, the year of the Olympic Games, in 2005 sales grew slightly (by 2.2%), but net profits fell considerably (by 33.9%).

In **transport**, sales and net profits increased marginally (by 0.7% and 1.5%, respectively). In **construction**, the decrease in sales and profits recorded in 2004 continued with greater intensity in 2005. The industry reported the second largest fall in sales (−14.7%) and the largest in net profits (−41.3%).

In the **telecommunications** industry, sales increased by 7.6% in 2005 and net profits by 10.5% (excluding OTE). If OTE is included in the sample, the industry presents a smaller growth rate of sales (2.9%) and a steep drop in net profits (−81.9%).

In **healthcare**, sales increased by 5.7% and net profits by 4.5%.

Finally, in **other activities** (a branch which does not include DEH), sales increased by 12.3%, but profits dropped by 12.5%.

In conclusion, the overall picture of the 435 businesses included in the sample for 2005 is better than that of 2004 only for manufacturing industry, but it is worse both for trade and for services and other activities. Corporate profits increased less than sales, leading to the narrowing of profit margins. Besides, profitability in terms of both ROE and ROA was not particularly affected by the rise in profits.
1. THE SINGLE MONETARY POLICY OF THE ECB

The key interest rates of the European Central Bank (ECB) remained unchanged until the end of November 2005, at the historically low levels prevailing since their last cut in June 2003, when the minimum bid rate on the main refinancing operations came to 2%, the interest rate on the marginal lending facility to 3% and the interest rate on the deposit facility to 1% (see Chart II.12 and Table V.1). On 1 December 2005, the Governing Council, based on its regular economic and monetary analyses, decided to raise the key ECB interest rates by 25 basis points with effect from 6 December 2005, thereby tightening its monetary policy stance. Following a further increase of 25 basis points decided on 2 March and effective from 8 March 2006, the minimum bid rate on the main refinancing operations came to 2.5%, the interest rate on the marginal lending facility to 3.5% and the interest rate on the deposit facility to 1.5%.

Data available in the first half of 2005 pointed to continuing weak GDP growth in the euro area (first quarter: 0.3%, second quarter: 0.4%). Nevertheless, the Governing Council’s assessment was that the anticipated recovery of the world economy would further support euro area exports; on the domestic side, investment should continue to benefit from favourable financing conditions and robust corporate earnings, while consumption growth—despite low consumer confidence—should develop in line with real disposable income growth. On the other hand, average annual inflation in the first half of 2005 stood at 2%. A very encouraging fact was that wage increases remained contained and there was no evidence of inflationary pressures induced by labour costs. However, the Governing Council repeatedly voiced a need for vigilance, identifying a number of upside risks to price stability. This need for vigilance was mainly indicated by monetary analysis,
which testified to the existence of excess liquidity in the euro area, as a result of the ongoing strengthening both in the annual growth of M3 —driven by its most liquid components (see Chart V.1 and Table V.2)— and in credit expansion to the private sector (see Table V.3) due to the stimulative effect of historically low interest rates.

In the second half of 2005, inflationary pressures intensified as a result of a new surge in oil prices and increases in certain administered prices and indirect taxes; thus annual inflation reached 2.6% in September. In the third quarter of 2005, real GDP growth rose to 0.7%, quarter-on-quarter, while the annual rate of increase in M3 and in loans to the private sector accelerated. Furthermore, Eurosystem staff projections about inflation in 2006 and 2007 were revised upwards, mainly reflecting an increase in the assumption for future oil prices. The Governing Council of the ECB continued to iden-
tify upside risks to price stability, chiefly related to a possible new rise in oil prices and second-round effects on prices and wages, as well as to further increases in indirect taxes and administered prices, especially in some euro area countries facing fiscal difficulties. Against this background, on 1 December 2006 the Governing Council decided to raise the key ECB interest rates by 25 basis points, in order to keep medium to longer-term inflation expectations anchored at levels consistent with price stability, i.e. below but close to 2%. As repeatedly stressed by the ECB, such anchoring of inflation expectations is a prerequisite for monetary policy to offer ongoing support to economic growth in the euro area.

In the early months of 2006, annual inflation continued to hover above 2% and is expected to persist at such levels in the short term. Nominal wage moderation should con-

| TABLE V.2 | MAIN COMPONENTS OF M3 IN THE EURO AREA |
|---|---|---|---|
| | (Annual percentage changes, derived from data adjusted for seasonal and calendar effects, quarterly averages) | |
| | 2004 | 2005 | 2006 |
| | Q4 | Q1 | Q2 | Q3 | Q4 | February |
| M1 | 9.3 | 9.6 | 9.8 | 11.2 | 10.9 | 9.9 |
| Other short-term deposits (=M2-M1) | 3.4 | 4.5 | 5.1 | 5.5 | 5.9 | 7.3 |
| M2 | 6.4 | 7.1 | 7.5 | 8.4 | 8.5 | 8.6 |
| Marketable instruments (=M3-M2) | 3.9 | 4.1 | 4.4 | 5.5 | 3.8 | 4.0 |
| M3 | 6.1 | 6.6 | 7.1 | 8.0 | 7.8 | 8.0 |

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 ECB Monthly Bulletin).

Source: ECB.

continue, mainly owing to strong global competition, and should dampen inflationary pressures despite rising oil prices. However, the ECB staff macroeconomic projections published in March 2006 implied a slight upward revision of HICP inflation figures for 2006 and 2007. In addition, the upside risks to price stability identified earlier continued to weigh on the medium-term inflation outlook.

According to the latest available indicators, quarter-on-quarter GDP growth slowed down considerably to 0.3% in the fourth quarter of 2005, but this development is deemed temporary, as economic activity in the euro area is expected to strengthen in both the short and the medium term. On the other hand, the annual growth of M3 decelerated in the fourth quarter of 2005, although it remained at high levels, while credit expansion continued to accelerate. Annual M3 growth picked up again in early 2006. Taking into consideration the looming inflationary risks, on 2 March 2006 the
Governing Council decided to raise anew the key ECB interest rates by 25 basis points. With this decision the Governing Council aimed at keeping medium- and long-term inflation expectations anchored at levels consistent with price stability in the medium term — which is the Eurosystem’s primary objective — thereby making the best possible contribution towards supporting economic growth. Indeed, despite the two recent increases in the key ECB interest rates, nominal and real interest rates across the entire maturity spectrum remain at relatively low levels. In any event, the Governing Council has stressed that vigilance continues to be warranted, given that risks to price stability in the medium term still persist.

2. DEVELOPMENTS IN M3 AND ITS INDIVIDUAL COMPONENTS

As already mentioned, the annual growth of the monetary aggregate M3 picked up in 2005 (with the exception of the fourth quarter) and in the first months of 2006 (fourth quarter 2004: 6.1%, fourth quarter 2005: 7.8%, February 2006: 8.0%, see Chart V.1 and Table V.2). The main driving factor behind this development is the low level of interest rates, which on the one hand strengthens demand for the more liquid components of M3 (particularly those included in M1), as it implies lower opportunity cost of holding money, and on the other hand adds to the private sector’s demand for credit, as it reduces the cost of borrowing. Furthermore, as portfolio shifts out of M3 and into longer-term assets (observed since the second half of 2004) lost momentum in 2005, their dampening effect on M3 growth was considerably weaker.

In more detail, the annual rate of increase in overnight deposits — the interest rates on which have not changed since the end of 2003 — rose considerably to 10.2% in the fourth quarter of 2005 from 7.7% in the corresponding quarter of 2004 and remained high in the first few months of 2006 (February: 9.2%), reflecting the low opportunity cost of this type of deposits in an environment of historically low interest rates, as well as the expansion of deposit accounts in Internet banks. Owing to the low remuneration of alternative instruments, a substantial and steady acceleration was also observed in the annual growth rate of time deposits with an agreed maturity of up to two years, which stood at 6.5% in the fourth quarter of 2005 and at 11.1% in February 2006, compared with a negative rate of change in 2004.

In contrast, the annual growth rate of currency in circulation continues to decline, as holdings of banknotes and coins have gradually returned to normal levels following the completion of the cash changeover — a trend that appears to prevail over the upward effect stemming from low interest rates. Finally, the annual rate of increase in money market fund shares/units, which are preferred in periods of economic and stock market uncertainty, fell considerably (to 1.1% in the fourth quarter of 2005 from 4.2% in the same quarter of 2004), reflecting — as already mentioned — portfolio shifts towards longer-term assets. In fact, their annual rate of change became negative in December 2005 and stood at –0.4% in February 2006.
The observed growth of M3 mainly reflects the continuous strengthening of credit expansion to the private sector (see Table V.3). As a result of low interest rates and, more generally, favourable financing conditions due to competition in the banking sector, the annual rate of increase in loans to the private sector picked up significantly (to 10.3% in February 2006 and 8.9% in the fourth quarter of 2005, from 6.9% in the same quarter of 2004). A more marked acceleration was seen in the growth of housing loans, in the context of strong house market dynamics in some regions of the euro area. Credit expansion to general government, after a continuous slowdown in the previous quarters, picked up to 2.7% year-on-year in the fourth quarter of 2005, reflecting increased demand for bank loans by general government and a rise in banks' holdings of government debt securities. However, in the following months credit expansion to the general government sector decelerated again and stood at 2.3% in February 2006.

On the other hand, a dampening effect on M3 growth was exerted by the high annual rate of increase in MFI longer-term financial liabilities (fourth quarter of 2004: 7.9%, fourth quarter of 2005: 8.7%, February 2006: 8.6%), which together with the subdued growth of money market fund shares/units reflected portfolio shifts into longer-term and riskier assets – although this trend was less pronounced in 2005 compared
with previous years. An effect in the same direction was also exerted by the decline in
the net external asset position of euro area MFIs, observed since August 2005 (with the
exception of December 2005 and January 2006) due to increased net outflows from
euro area residents for investment in foreign debt securities. Such outflows can be
attributed to the further widening of the differential between US and euro area short-
term interest rates. Indeed, despite continued strong credit expansion to the private
sector, the decline in the euro area’s net external asset position together with the rise
in MFI longer-term financial liabilities explain the moderation of M3 growth in the
fourth quarter of 2005.

4. MONEY MARKET INTEREST RATES

The euro area money market interest rates at the short end of the yield curve (for
maturities of up to one month) moved in line with developments in the key ECB interest
rates, i.e. they remained broadly stable at about 2.10% for the best part of 2005 and only
started to increase in November amid expectations of an increase in ECB rates. Once the
ECB interest rate change took effect on 6 December 2005, money market interest rates at
shorter maturities stabilised around 2.40%. At longer maturities (as represented by the
three-month and the twelve-month EURIBOR shown in Chart V.2) interest rates
remained practically unchanged in the first quarter of 2005, before falling in the second
quarter and rising again from June onwards into the first few months of 2006. Uncertainty
in the money market — as measured by the implied volatility of three-month EURIBOR1 — was rather limited for most of 2005. Implied volatility rose temporarily just
before the increase in the key ECB interest rates, then it fell; in early 2006 it stood lower
than the 2005 average.

The slope of the money market yield curve2 remained unchanged in the first quar-
ter of 2005 and declined in the second quarter (in fact, it became negative in the last ten
days of July reflecting a fall in interest rates at longer maturities). In the second half of
the year, however, the slope steepened, as expectations of an imminent increase in the ECB
rates affected mainly interest rates at the longer end of the yield curve. After the ECB
decision took effect as of 6 December 2005, the spread between twelve-month and one-
month EURIBOR stood at approximately 40 basis points (compared with about 20 basis
points at the beginning of 2005).

In the first quarter of 2006, interest rates in the euro area money market increased
across the maturity spectrum, amid growing expectations of a further monetary policy
tightening. The recent rise in the key ECB interest rates, effective from 8 March 2006, trig-

1 The implied volatility is derived from options on three-month EURIBOR futures contracts. The series of implied
volatility is compiled by Bloomberg and the ECB.
2 Measured as the difference between twelve-month and one-month EURIBOR.
gered a further rise in money market rates (March 2006: one-month EURIBOR: 2.63%, three-month EURIBOR: 2.72%, twelve-month EURIBOR: 3.11%), which was more pro-

nounced in the case of longer maturities, as markets seem to expect a further increase in the key ECB interest rates in the second quarter of 2006.

5. MFI INTEREST RATES

The interest rates of monetary financial institutions in the euro area showed some fluctuations in 2005, but remained at low levels.
In some deposit categories, interest rates declined overall between December 2004 and December 2005 – with the rates on deposits by enterprises with an agreed maturity of one to two years falling by 22 basis points to 2.48%. In other categories, interest rates rose (e.g. by 20 basis points to 2.15% in the case of households’ deposits with an agreed maturity of up to one year). Nevertheless, from September 2005 on, deposit rates recorded an upward trend, which was broadly based across individual categories.

Interest rates on most categories of loans, both to households and enterprises, decreased overall between December 2004 and December 2005 – in some cases considerably so (e.g. by 46 basis points to 4.03% for housing loans with an initial rate fixation of five to ten years). However, in some other loan categories interest rates increased (e.g. by 24 basis points to 4.06% for other loans with an initial rate fixation of up to one year). However, the overall pattern in lending rates in 2005 was one of declining longer-term rates and unchanged or increasing shorter-term rates. It should be noted that most of the lending rate increases were introduced in the fourth quarter of 2005 and in the first two months of 2006.

6. LONG-TERM BOND YIELDS

The yields of 10-year government bonds in the euro area were rather volatile in 2005, reaching a historic low of 3.1% on certain dates in September before reversing in the fourth quarter and standing at an average of 3.41% in December 2005, compared with 3.69% in December 2004 (see Chart V.3). The ten-year bond yield differential between the euro area and the United States (see Chart V.4) widened from –54 basis points at the end of 2004 to –105 basis points at the end of 2005, as an increase in bond yields was recorded in the United States throughout 2005 (from 4.23% in December 2004 to 4.46% in December 2005). Nevertheless, uncertainty in the euro area bond market\(^1\) remained at low levels in 2005.

In more detail, the yields of euro area 10-year bonds increased slightly, reflecting similar developments in US bond markets against the backdrop of inflationary pressures and robust growth. In the second and the third quarters of 2005, euro area bond yields recorded a relatively sharp decrease. Reflecting the credibility of monetary policy in the euro area, inflation expectations remained more or less stable despite rising oil prices, therefore the decline in the yields of 10-year bonds up to September 2005 is attributable to a decline in real interest rates against the background of a weak outlook for the euro area economy. From a broader perspective, however, there are a number of other factors\(^2\)

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\(^1\) Bond market uncertainty is indicated by the implied volatility extracted using data on futures contracts. Volatility in the euro area government bond market is measured by the implied volatility of options on 10-year German Bund futures contracts. The bond market volatility series is compiled by Bloomberg and monitored by the ECB.

that may help to explain the low level of long-term interest rates, by boosting demand for long-term debt securities. These factors include: (i) increased saving in the face of worsening demographics in the EU; (ii) higher holdings of long-term bonds by pension funds and insurance companies in the context of regulatory reforms in the EU; (iii) speculative activity in the form of “yield carry trade” (short-term borrowing and investment in long-term securities) in an environment of low short-term interest rates and ample liquidity conditions prevailing in the global financial system as a result of accommodative monetary policies conducted for a number of years; and (iv) heavier investment in bonds by oil-exporting countries and increased purchases of US Treasury securities by some Asian central banks.
Between October and December 2005, the yields of euro area 10-year bonds increased, reflecting both an improved economic outlook and expectations of a rise in short-term interest rates. Following a small decline in early 2006, they resumed their upward path, to stand at 3.73% in March 2006, i.e. roughly 30 basis points higher than at the end of 2005.

7. STOCK MARKET DEVELOPMENTS

Euro area stock markets were buoyant in 2005 (see Chart V.5). Between the beginning and the end of the year, the Dow Jones EURO STOXX index gained 23%, compared
with increases of 3% for Standard & Poor’s 500 in the United States and 40% for the Japanese index Nikkei 225. The upward trend of stock prices in the euro area is continuing in 2006, with Dow Jones EURO STOXX standing 11% higher at the end of March 2006 relative to the end of 2005. Stock prices benefited from robust corporate profitability — notwithstanding the impact of rising oil prices — and from low interest rates. Stock markets weathered well the oil price hike in 2005, given (i) the reduced oil-dependency of advanced economies; (ii) the demand-side (as opposed to supply-side) nature of the oil price shock; and (iii) the absence of second-round effects on wages and thus on earnings. Finally, energy sector firms in particular benefited from the rise in oil prices, as their shares recorded the biggest increase in 2005 (over 30%).
The underperformance of Standard & Poor’s 500 relative to its euro area counterpart is associated with increases in US short-term interest rates, as well as with the appreciation of the US dollar vis-à-vis the euro and the Japanese yen, which affected the international competitiveness of US exporters.

In contrast, the strong performance of the Nikkei 225 index reflects the high profitability of Japanese firms, combined with a brighter economic outlook given that, for the first time in 2005, there were clear signs that the Japanese economy was moving out of recession and that deflation was coming to an end.
APPENDIX TO CHAPTER V

CHRONOLOGY OF MONETARY POLICY MEASURES OF THE EUROSYSTEM

13 January 2005
The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.0%, 3.0% and 1.0% respectively.

14 January 2005
The Governing Council of the ECB decides to increase the allotment amount for each of the longer-term refinancing operations to be conducted in the year 2005 from €25 billion to €30 billion. This increased amount takes into consideration the higher liquidity needs of the euro area banking system anticipated in 2005. The Eurosystem will, however, continue to provide the bulk of liquidity through its main refinancing operations. The Governing Council may decide to adjust the allotment amount again at the beginning of 2006.

3 February, 3 March, 7 April, 2 June, 7 July, 4 August, 1 September, 6 October and 3 November 2005
The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.0%, 3.0% and 1.0% respectively.

1 December 2005
The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 0.25 percentage point to 2.25%, starting from the operation to be settled on 6 December 2005. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 3.25% and 1.25% respectively, both with effect from 6 December 2005.

16 December 2005
The Governing Council of the ECB decides to increase the allotment amount for each of the longer-term refinancing operations to be conducted in the year 2006 from €30 billion to €40 billion. This increased amount takes two aspects into consideration. First, the liquidity needs of the euro area banking system are expected to increase further in the year 2006. Second, the Eurosystem has decided to increase slightly the share of the liquidity needs satisfied by the longer-term refinancing operations. The Eurosystem will, however, continue to provide the bulk of liquidity through its main refinancing operations. The Governing Council may decide to adjust the allotment amount again at the beginning of 2007.
12 January, 2 February 2006
The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.25%, 3.25% and 1.25% respectively.

2 March 2006
The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 2.50%, starting from the operation to be settled on 8 March 2006. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 3.50% and 1.50% respectively, both with effect from 8 March 2006.

6 April 2006
The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.50%, 3.50% and 1.50% respectively.
VI. MONETARY AND CREDIT DEVELOPMENTS IN GREECE

1. MONETARY DEVELOPMENTS

The annual growth rate of the Greek contribution to the euro area M3 (excluding currency in circulation) slowed considerably in 2005 and stood at 6.4% in the fourth quarter of 2005 (fourth quarter of 2004: 9.2%). The deceleration in the Greek M3 growth rate was largely attributable to shifts out of M3 (mainly into foreign bond-type mutual funds). A moderation in the growth rate of GDP (2005: 7.5% from 8.3% in 2004), which is a determinant of demand for transaction balances, is also associated with this development, though to a lesser degree. Thus, since July 2005 the annual growth rate of the Greek M3 (excluding currency in circulation) has stood —for the first time in the 2004-2005 period— at levels below the corresponding euro area figure. This trend has continued into the first two months of 2006.

Developments in M3 components have been affected by the January 2005 change in the tax rates on deposit interest income and repo yields, i.e. the introduction of a single tax rate for both instruments (equal to that applying to yields on government securities). Individual deposit categories showed different trends during 2005. In particular, the annual growth rate of savings deposits decreased sharply, while that of time deposits rose strongly (due to considerable flows into time deposits, mainly out of repos and savings deposits). Holdings of repos and money market fund shares/units fell considerably, leading to high rates of decrease in both cases.

As a result, the growth rate of deposits included in M3 rose gradually in 2005 and stood at 19.2% in the fourth quarter (fourth quarter of 2004: 12.6%, see Table VI.1). During the January-February 2006 period, this growth rate fell (February 2006: 14.0%). A considerable acceleration was observed in the annual rate of increase in time deposits with an agreed maturity of up to two years, which rose to 42.6% in the fourth quarter of 2005 (fourth quarter 2004: 5.3%), reflecting the aforementioned shifts from repos and savings deposits as well as the relatively higher net (after tax) remuneration of time deposits. Thus, the share of time deposits with an agreed maturity of up to two years in M3 (excluding currency in circulation) stood at 31.2% at the end of 2005, i.e. almost 9 percentage points

---

1 The Greek M3, as well as that of any other euro area country (see the Glossary for the definitions of monetary aggregates), can no longer be calculated accurately, as quantities of euro banknotes and coins put in circulation by any one euro area country may be held by residents of other euro area countries (and/or residents of third countries). Therefore, due to the technical problems with the calculation of currency in circulation in each euro area country, developments are discussed with respect not to the Greek M3 but only to its key components excluding currency in circulation.

2 These growth rates of the Greek M3 (excluding currency in circulation) have been calculated by the ECB and do not take into account that part of the reduction in money market funds' assets which is attributable to the conversion (in 2005) of some such funds into bond-type mutual funds, the shares/units of which are not included in M3. Corrected for this effect, the deceleration of the Greek M3 growth is even larger.

3 The tax rate on interest income from deposits was reduced from 15% to 10%, while that on repo yields was raised from 7% to 10%.
### TABLE VI. 1
GREEK CONTRIBUTION TO THE KEY MONETARY AGGREGATES OF THE EURO AREA
(Not seasonally adjusted data)

<table>
<thead>
<tr>
<th>Outstanding balances on 31.12.05 (million euro)</th>
<th>2002 Q4&lt;sup&gt;1&lt;/sup&gt;</th>
<th>2003 Q4&lt;sup&gt;2&lt;/sup&gt;</th>
<th>2004 Q4&lt;sup&gt;3&lt;/sup&gt;</th>
<th>2005 Q1&lt;sup&gt;4&lt;/sup&gt;</th>
<th>2005 Q2&lt;sup&gt;4&lt;/sup&gt;</th>
<th>2005 Q3&lt;sup&gt;4&lt;/sup&gt;</th>
<th>2005 Q4&lt;sup&gt;4&lt;/sup&gt;</th>
<th>December&lt;sup&gt;5&lt;/sup&gt;</th>
<th>February&lt;sup&gt;5&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Overnight deposits</td>
<td>99,207</td>
<td>8.9</td>
<td>6.8</td>
<td>16.8</td>
<td>14.5</td>
<td>11.8</td>
<td>10.6</td>
<td>9.3</td>
<td>8.1</td>
</tr>
<tr>
<td>1.1 Sight deposits and current account deposits</td>
<td>24,768</td>
<td>5.7</td>
<td>17.7</td>
<td>19.1</td>
<td>17.2</td>
<td>18.4</td>
<td>21.2</td>
<td>20.2</td>
<td>19.7</td>
</tr>
<tr>
<td>1.2 Savings deposits</td>
<td>74,439</td>
<td>9.8</td>
<td>4.1</td>
<td>16.1</td>
<td>13.7</td>
<td>9.9</td>
<td>7.7</td>
<td>6.3</td>
<td>4.8</td>
</tr>
<tr>
<td>2. Time deposits with an agreed maturity of up to 2 years</td>
<td>50,623</td>
<td>10.1</td>
<td>29.3</td>
<td>5.3</td>
<td>21.2</td>
<td>31.7</td>
<td>34.6</td>
<td>42.6</td>
<td>47.6</td>
</tr>
<tr>
<td>3. Deposits redeemable at notice of up to 3 months</td>
<td>4,415</td>
<td>8.1</td>
<td>1.5</td>
<td>2.8</td>
<td>-1.5</td>
<td>30.1</td>
<td>67.0</td>
<td>105.2</td>
<td>111.2</td>
</tr>
<tr>
<td>4. Total deposits (1+2+3)</td>
<td>154,245</td>
<td>9.3</td>
<td>12.2</td>
<td>12.6</td>
<td>15.3</td>
<td>16.8</td>
<td>17.3</td>
<td>19.2</td>
<td>19.8</td>
</tr>
<tr>
<td>5. Repurchase agreements (repos)</td>
<td>2,728</td>
<td>-19.0</td>
<td>-47.7</td>
<td>-12.6</td>
<td>-46.3</td>
<td>-57.2</td>
<td>-64.7</td>
<td>-72.8</td>
<td>-71.4</td>
</tr>
<tr>
<td>6. Money market fund units</td>
<td>4,875</td>
<td>-3.7</td>
<td>68.0</td>
<td>-1.9</td>
<td>-4.1</td>
<td>-19.6</td>
<td>-34.7</td>
<td>-51.8</td>
<td>-60.2</td>
</tr>
<tr>
<td>7. Bank bonds with a maturity of up to 2 years</td>
<td>419</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>8. M3 excl. currency in circulation (4+5+6+7)</td>
<td>162,267</td>
<td>2.2</td>
<td>6.4</td>
<td>9.2</td>
<td>9.1</td>
<td>8.5</td>
<td>6.7</td>
<td>6.4</td>
<td>6.8</td>
</tr>
</tbody>
</table>

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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 ECB Monthly Bulletin).
3. Annual rates of change on the basis of the corresponding index at the end of the month.
4. Including savings deposits in currencies other than the euro.
5. Rates of change are not shown because, owing to the low calculation base, they are very high.

Sources: Bank of Greece and ECB.
higher than at the end of 2004. The growth rate of time deposits, though slightly lower in the first two months of this year, still remains high (February 2006: 34.8%). In contrast, the annual rate of increase in savings deposits (the major category of overnight deposits\(^1\)) slowed considerably in the year under review (fourth quarter 2005: 6.3%, fourth quarter 2004: 16.1%) and fell further in the January-February 2006 period (February 2006: 2.3%).

Among the other components of M3, holdings of repos declined further in 2005 (see Chart VI.1) and their annual rate of decrease picked up considerably (fourth quar-

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\(^1\) It should be recalled that, as of 2003, savings deposits are included in overnight deposits along with sight deposits and current account deposits. Savings deposits (as already mentioned in previous Annual Reports and Monetary Policy Reports) are broadly similar to current account deposits, since they are redeemable on demand (without penalty) and enable depositors to effect payments to third parties.
CHART VI.2

PERCENTAGE CONTRIBUTION OF M3 COMPONENTS (EXCLUDING M0) IN GREECE
(END-OF-YEAR DATA)

A. IN 2004

- MONEY MARKET FUND UNITS (55.0%)
- REPOS (8.3%)
- TIME DEPOSITS UP TO 2 YEARS (21.9%)
- DEPOSITS REDEEMABLE AT NOTICE OF UP TO 3 MONTHS (1.3%)
- SIGHT DEPOSITS AND CURRENT ACCOUNTS (13.6%)
- SAVINGS DEPOSITS (46.6%)
- BANK BONDS (0.3%)

B. IN 2005

- MONEY MARKET FUND UNITS (3.0%)
- REPOS (7.7%)
- TIME DEPOSITS UP TO 2 YEARS (31.2%)
- DEPOSITS REDEEMABLE AT NOTICE OF UP TO 3 MONTHS (27.7%)
- SIGHT DEPOSITS AND CURRENT ACCOUNTS (15.3%)
- SAVINGS DEPOSITS (45.8%)
- BANK BONDS (0.3%)

Source: Bank of Greece.
ter 2005: –72.8%, fourth quarter 2004: –12.6%). However, in the first two months of the current year (February 2006: –43.7%) repos recorded a slower rate of decrease. Aside from the effect of the change in the taxation of repo yields, this development also reflects to some extent the fact that in 2005 credit institutions further reduced their holdings of Greek government securities as a percentage of their assets.1 Thus, the share of repos in M3 (excluding currency in circulation) fell to 1.7% in December 2005, from 6.3% at end-2004 (see Chart VI.2) and 17.7% at end-2001, when repo yields were tax free. Finally, holdings of money market fund shares/units fell further in 20052 and their rate of decrease rose to 51.8% in the fourth quarter (fourth quarter 2004: –1.9%). This development is associated, on the one hand, with their lower yields (due to the historically low level of money market interest rates and a drop in bond yields during the best part of 2005, as bonds constitute a sizeable part of money market funds’ assets)3 and, on the other hand, with the normalisation of portfolio allocation behaviour following favourable stock market developments). As a result of the above developments, the share of holdings of money market fund units in M3 (excluding currency in circulation) fell to 3.0% at the end of 2005, from 10.0% at end-2004. During the first two months of this year even higher rates of decrease in these holdings were recorded (February 2006: –60.4%).

2. CREDIT DEVELOPMENTS

2.1 Total credit expansion and bank credit to general government

The annual growth rate of the total financing4 of the economy by Monetary Financial Institutions (MFIs) accelerated appreciably to 16.8% in the fourth quarter of 2005, from 10.8% in the last quarter of 2004 (see Table VI.2). This was mainly due to developments in general government financing by MFIs, while the annual rate of increase in the financing of enterprises and households increased only slightly. The high annual growth rate of total credit to the economy continued into the first two months of this year and stood at 18.6% in February.

1 In this respect, owing to the gradual decline in the yields of Greek government securities during the last few years, holdings of Greek government securities have been largely replaced by other holdings giving higher yields. In particular, in December 2005 the share of such securities in the total assets of credit institutions was almost half compared with December 2000.
2 It should be noted that assets of money market funds as a percentage of total assets of mutual funds fell to 18.2% in December 2005 from 48.8% in December 2004.
3 Furthermore, the change in the institutional framework for money market funds (Law 3283/2004) has limited the investment options of these funds.
4 The growth rate of the total financing of the economy by domestic MFIs concerns the change in loans to the general government, enterprises and households (including extraordinary write-offs and securitised loans), as well as government securities and corporate bonds held by MFIs.
TABLE VI. 2  
FINANCING OF THE ECONOMY BY DOMESTIC MFIs IN GREECE  
(Annual percentage changes)

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</tr>
</thead>
<tbody>
<tr>
<td>1. Total MFI financing(^1)</td>
<td>8.9</td>
<td>7.1</td>
<td>4.3</td>
<td>10.8</td>
<td>11.1</td>
<td>11.4</td>
<td>12.9</td>
<td>16.8</td>
<td>19.6</td>
<td>18.6</td>
</tr>
<tr>
<td>2. Financing of general government</td>
<td>-2.4</td>
<td>-5.2</td>
<td>-15.9</td>
<td>-5.6</td>
<td>-5.2</td>
<td>-5.7</td>
<td>-2.1</td>
<td>9.4</td>
<td>15.3</td>
<td>12.8</td>
</tr>
<tr>
<td>3. Financing of enterprises and households(^1)</td>
<td>23.1</td>
<td>18.2</td>
<td>18.7</td>
<td>19.3</td>
<td>18.9</td>
<td>19.0</td>
<td>19.3</td>
<td>19.9</td>
<td>21.3</td>
<td>20.8</td>
</tr>
<tr>
<td>3.1 Enterprises(^\dagger)</td>
<td>16.7</td>
<td>11.3</td>
<td>13.4</td>
<td>12.6</td>
<td>11.9</td>
<td>12.1</td>
<td>12.6</td>
<td>12.5</td>
<td>14.2</td>
<td>12.8</td>
</tr>
<tr>
<td>3.2 Households(^\dagger)</td>
<td>40.0</td>
<td>33.1</td>
<td>28.6</td>
<td>30.0</td>
<td>29.9</td>
<td>29.4</td>
<td>29.2</td>
<td>30.3</td>
<td>31.1</td>
<td>31.4</td>
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<td>of which:</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2.1 Housing loans(^\dagger)</td>
<td>36.7</td>
<td>35.4</td>
<td>27.7</td>
<td>26.9</td>
<td>27.5</td>
<td>28.0</td>
<td>28.8</td>
<td>31.3</td>
<td>33.4</td>
<td>33.6</td>
</tr>
<tr>
<td>3.2.2 Consumer loans(^\dagger)</td>
<td>44.3</td>
<td>27.4</td>
<td>24.8</td>
<td>37.9</td>
<td>35.6</td>
<td>33.7</td>
<td>32.1</td>
<td>29.9</td>
<td>28.0</td>
<td>28.4</td>
</tr>
</tbody>
</table>

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1. 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 ECB Monthly Bulletin).
2. Annual rate of change at the end of the month.
3. Including corporate bonds held by MFIs, as well as extraordinary write-offs of claims.
4. Including securitised loans.

Source: Bank of Greece.
In particular, the annual rate of change in the financing of the general government turned positive in September 2005, after a period of constant reduction in MFI claims against the Greek government. Then it accelerated significantly and stood at 9.4% in the last quarter of the year (fourth quarter 2004: −5.6%). Available data show that the extensive MFI portfolio restructuring during the last few years led to a fall in the share of claims against the general government in total MFI assets¹ from 26% in 2000 to 15% in 2004. Moreover, credit institutions now make relatively limited portfolio restructuring as regards claims against the general government. Thus, by the end of 2005 claims against the general government as a percentage of total MFI assets reached 16%, slightly higher than in 2004. Likewise, the annual growth rate of credit to the general government was also higher in the first two months of 2006, and stood at 12.8% in February.

2.2 Bank credit to enterprises and households

The annual rate of increase in credit to enterprises and households stood at 19.9% in the last quarter of 2005, showing a marginal acceleration against the corresponding quarter in 2004 (19.3%, see Chart VI.3). This development reflects the slight acceleration in the growth rate of credit to households to 30.3% in the fourth quarter of 2005 (fourth quarter of 2004: 30.0%). In contrast, the growth rate of credit to enterprises remained practically unchanged compared with the end-2004 levels (fourth quarter of 2005: 12.5%, fourth quarter of 2004: 12.6%). Credit to households accelerated further in the first two months of this year (February: 31.4%), while credit to enterprises rose marginally, compared with the last quarter of 2005 (February: 12.8%). The persistent relatively high growth rates of credit to enterprises and households led to an increase in their total liabilities vis-à-vis domestic credit institutions² to 82.8% of GDP at the end of 2005, which was significantly higher than the end-2004 figure (73.6%).

During 2005 new corporate bonds were issued, which remained in the portfolios of MFIs. At the same time, credit institutions further pursued the securitisation of housing loans and, for the first time, of loans through credit cards. Thus, the annual rate of change in total credit to households and corporations was significantly different, in terms of size as well as trend, from the rate of change in bank loans to enterprises and households alone. In particular, loans to enterprises and households rose at an annual rate of 14.9% in the fourth quarter of 2005, decelerating against the corresponding quarter in 2004 (16.1%, see Table VI.3).

In greater detail, the change in the outstanding balance of loans in foreign currency was positive for the best part of 2005, in contrast to developments in previous years. As

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¹ Excluding the Bank of Greece.
² Total liabilities include MFI loans to enterprises and households (taking into account balances of securitised loans), as well as MFI holdings of corporate bonds.
the rate of increase in these loans was higher at the end of the year compared with loans in euro, their contribution to total loans rose slightly to 4.9%, against 4.5% at end-2004. However, developments in the balance of loans in foreign currency, when expressed in euros, also include the effect of foreign exchange valuation differences. During 2005 the euro depreciated against major foreign currencies,\(^1\) particularly against the US dollar, the currency in which the bulk of foreign currency loans is denominated (December 2005: 83%). Thus, the annual growth rate of loans in foreign currency, as calculated on the basis of the changes in the balance of these loans expressed in euro (December 2005: 27.7%),

\(^1\) Excluding the Swiss franc, which depreciated marginally against the euro from end-December 2004 to end-December 2005.
### TABLE VI.3

**BREAKDOWN OF GREEK MFI CREDIT TO DOMESTIC ENTERPRISES AND HOUSEHOLDS**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Enterprises</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1. Agriculture</td>
<td>71,283</td>
<td>16.7</td>
<td>11.4</td>
<td>11.0</td>
<td>8.6</td>
<td>6.0</td>
<td>5.6</td>
<td>6.3</td>
<td>6.4</td>
<td>8.7</td>
<td>9.1</td>
</tr>
<tr>
<td>2. Industry</td>
<td>15,754</td>
<td>10.2</td>
<td>11.5</td>
<td>10.4</td>
<td>1.1</td>
<td>–1.9</td>
<td>0.1</td>
<td>0.5</td>
<td>–0.6</td>
<td>0.5</td>
<td>0.8</td>
</tr>
<tr>
<td>3. Trade</td>
<td>19,958</td>
<td>20.3</td>
<td>7.8</td>
<td>4.0</td>
<td>12.7</td>
<td>12.8</td>
<td>12.3</td>
<td>11.1</td>
<td>6.6</td>
<td>6.0</td>
<td>1.5</td>
</tr>
<tr>
<td>4. Tourism</td>
<td>4,190</td>
<td>14.2</td>
<td>33.7</td>
<td>24.4</td>
<td>17.6</td>
<td>15.1</td>
<td>13.2</td>
<td>7.8</td>
<td>4.6</td>
<td>3.7</td>
<td>2.9</td>
</tr>
<tr>
<td>5. Shipping</td>
<td>6,185</td>
<td>7.8</td>
<td>5.5</td>
<td>2.3</td>
<td>3.0</td>
<td>6.9</td>
<td>21.0</td>
<td>27.2</td>
<td>34.4</td>
<td>37.6</td>
<td>37.7</td>
</tr>
<tr>
<td>6. Non-monetary financial institutions</td>
<td>2,226</td>
<td>141.8</td>
<td>72.5</td>
<td>–3.2</td>
<td>9.5</td>
<td>–21.4</td>
<td>–41.2</td>
<td>–37.7</td>
<td>–29.7</td>
<td>–17.0</td>
<td>10.7</td>
</tr>
<tr>
<td>7. Other</td>
<td>20,006</td>
<td>24.6</td>
<td>14.3</td>
<td>26.5</td>
<td>11.7</td>
<td>9.8</td>
<td>8.6</td>
<td>11.3</td>
<td>15.7</td>
<td>20.6</td>
<td>21.6</td>
</tr>
<tr>
<td><strong>B. Households</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Housing loans</td>
<td>65,698</td>
<td>40.0</td>
<td>33.1</td>
<td>28.2</td>
<td>28.0</td>
<td>28.4</td>
<td>27.9</td>
<td>25.2</td>
<td>26.2</td>
<td>27.2</td>
<td>27.8</td>
</tr>
<tr>
<td>2. Consumer loans</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>– Credit cards</td>
<td>7,470</td>
<td>62.1</td>
<td>37.1</td>
<td>27.8</td>
<td>23.4</td>
<td>22.0</td>
<td>19.9</td>
<td>5.2</td>
<td>–0.7</td>
<td>–2.5</td>
<td>–5.2</td>
</tr>
<tr>
<td>– Other consumer loans</td>
<td>13,380</td>
<td>31.8</td>
<td>19.2</td>
<td>21.8</td>
<td>53.1</td>
<td>48.9</td>
<td>46.4</td>
<td>45.8</td>
<td>44.5</td>
<td>42.5</td>
<td>45.3</td>
</tr>
<tr>
<td>3. Other loans</td>
<td>1,649</td>
<td>165.5</td>
<td>62.6</td>
<td>135.7</td>
<td>18.8</td>
<td>22.0</td>
<td>13.4</td>
<td>7.8</td>
<td>11.5</td>
<td>13.3</td>
<td>14.7</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>136,981</td>
<td>23.2</td>
<td>18.3</td>
<td>17.1</td>
<td>16.1</td>
<td>15.0</td>
<td>14.7</td>
<td>14.1</td>
<td>14.9</td>
<td>16.9</td>
<td>17.5</td>
</tr>
<tr>
<td>– In euro</td>
<td>130,273</td>
<td>35.2</td>
<td>21.9</td>
<td>19.8</td>
<td>17.6</td>
<td>16.1</td>
<td>15.3</td>
<td>14.2</td>
<td>14.7</td>
<td>16.4</td>
<td>16.9</td>
</tr>
<tr>
<td>– In other currencies</td>
<td>6,708</td>
<td>–28.6</td>
<td>–12.3</td>
<td>–14.1</td>
<td>–7.2</td>
<td>–3.4</td>
<td>5.5</td>
<td>13.3</td>
<td>21.0</td>
<td>27.7</td>
<td>30.6</td>
</tr>
</tbody>
</table>

1 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 ECB Monthly Bulletin).
2 Annual rate of change at the end of the month.
3 Excluding corporate bonds held by MFIs and write-offs of claims. For the growth rates that the inclusion of these items would entail, see Table VI.2.
4 Comprising manufacturing and mining/quarrying.
5 Excluding securitised housing and consumer loans (€2,220 million and €975 million, respectively, in December 2005). For the growth rates that the inclusion of these items would entail, see Table VI.2.
6 The slowdown of consumer loan growth is partly connected to the securitisation of loans through credit cards, which took place in July 2005.
7 Including personal loans and loans against supporting documents.

*Source:* Bank of Greece.
is significantly higher than the already high growth rate which does not include foreign exchange valuation differences (December 2005: 14.9%).

Medium and long-term loans (i.e. loans with an initial maturity of more than one year) contributed the most to the total increase in loans in 2005. They rose at an annual rate of 21.8% in the fourth quarter of the year, against 22.2% in the fourth quarter of 2004. In contrast, short-term loans recorded much lower rates of change (fourth quarter of 2005: 5.3%, fourth quarter of 2004: 8.7%), thus further reducing their share in total loans to 37.6% in December 2005 (December 2004: 41.3%). The increase in the share of medium and long-term loans was partly due to the high growth rate of housing loans, most of which (December 2005: 98.4%) have an initial maturity of more than five years. In contrast, the maturities of the bulk of consumer loans (December 2005: 54.9%) are shorter than one year, reflecting the large share of loans through credit cards and open loans, which are classified as short-term loans. As regards corporations, despite the tendency to lengthen the average maturity of loans in the last years, short-term loans still account for the best part of the total (December 2005: 54.4%). The large share of loans with an initial maturity shorter than one year is associated with the fact that almost 1/3 of bank loans to enterprises are credit lines and not loans with a defined maturity.

Bank credit to enterprises

The growth rate of credit to enterprises remained relatively high last year, partly due to the significant contribution of new corporate bond issues, which, as mentioned above, continued in 2005, mostly because of the tax advantages they offer compared with normal bank lending.1 Specifically, the amount of MFI holdings of corporate bonds grew at an annual rate of 82%2 in the fourth quarter of 2005 (fourth quarter of 2004: 127%). As a result, these securities represented 12.0% of total MFI credit to enterprises by the end of the year (December 2004: 8.2%). Moreover, during 2005, one-off write-offs were effected, mainly by the Agricultural Bank of Greece (ATE), either pursuant to Law 3259/2004 regarding overdue debts, or as part of the bank’s strategy to restructure its portfolio. These two factors are taken into account in calculating the growth rates of credit to enterprises. If this was not done, the annual growth rate of credit to enterprises in the last quarter of 2005 would have been one percentage point lower (11.5%, instead of 12.5%).

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1 Corporate bonds are exempt from contributions under Law 128/1975, which are levied on bank loans.
2 When assessing the exceptionally high rates of change in the value of corporate bonds held by MFIs, account should be taken of the fact that up to the fourth quarter of 2003 the relevant amounts had been very low. Increased corporate bond issuance activity is essentially due to the enactment in June 2003 of Law 3156/2003, establishing the new institutional framework of corporate bond issuance, according to which, among other things, corporate bonds are exempt from contributions under Law 128/1975. For details on corporate bond issuance, see Bank of Greece, Monetary Policy 2004-2005, Appendix to Chapter IV, February 2005.
The breakdown of lending to enterprises by sector of economic activity shows that the rate of change in loans to shipping companies, as well as to “other” companies, accelerated in the fourth quarter of 2005, compared with the fourth quarter of 2004, while a deceleration was observed concerning other sectors (see Chart VI.4). At the same time, trade, shipping and “other” companies recorded higher rates of change than the average rate of total credit to enterprises.

In greater detail, the annual rate of change in loans to agriculture appears to have decelerated, even becoming negative since the second quarter of 2005 (fourth quarter of 2005: –12.7%, fourth quarter of 2004: 7.8%). However, the one-off write-offs mentioned above mainly concern agriculture, as Law 3259/2004 includes specific provisions on farmers’ debts. Thus, when the amount of the specific write-offs is taken into account, the annual rate of change in credit to agriculture remains positive in 2005 (fourth quarter of 2005: 8.2%), though slightly decelerating compared with the fourth quarter of 2004 (9.6%), while it remained at about the same level in the first two months of 2006 (February 2006: 8.3%).

The annual rate of change in loans to industrial firms appears to be particularly low or even negative since mid-2004. Specifically, after standing at marginally positive levels during the second and the third quarter of 2005, this rate returned to negative levels in the fourth quarter (fourth quarter of 2005: –0.6%, fourth quarter of 2004: 1.1%), while it remained particularly low, though positive, in the first two months of this year (February 2006: 0.8%). However, this development reflects, to some extent, the substitution of bank loans with corporate bonds, a practice widely used by companies in this sector. In particular, in December 2005, 22.4% of the total amount of MFI holdings of corporate bonds were bonds issued by industrial firms (see Chart VI.5). Thus, including these bonds, total MFI credit to industrial firms (loans and bonds) rose by 3.3% during the March-December 2005 period, while credit to this sector accounted for 21.9% of total MFI credit to enterprises in December 2005.

The growth rate of loans to trade firms, after recording a significant recovery since mid-2004, decelerated towards the end of 2005, and stood at 6.6% in the fourth quarter of the year (fourth quarter of 2004: 12.7%). This development continued into the first two months of 2006 (February 2006: 1.5%). It should be noted, however, that enterprises in this sector also substituted part of their bank loans with bonds, as they had issued 14.0% of corporate bonds held by MFIs in December 2005. Taking these bonds into account, the growth rate of total MFI credit to trade firms, from March to December 2005, stood at 5.7%. Moreover, trade firms still account for a very significant share of total credit to enterprises (26.1% in December 2005).

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1 In particular, pursuant to Art. 39 of Law 3259/2004, while, as regards other debtors, the total outstanding amount due should not exceed by more than three times the initial principal, in the case of agricultural loans the total outstanding amount due should not exceed by more than twice the initial principal.

2 Statistical information regarding MFI holdings of corporate bonds by sector is available since March 2005.
The annual growth rate of loans to shipping accelerated appreciably in 2005 and stood at 34.4% in the fourth quarter of the year, compared with a mere 3.0% in the corresponding period in 2004, and it rose even higher (37.7%) in February 2006. As more than 75% of loans to this sector are granted in US dollars, and given the development of the exchange rate of the US dollar against the euro, as mentioned above, this acceleration partly reflects foreign exchange valuation differences. However, even if these differences are not taken into account, the acceleration is still strong, as the annual growth rate stands at 26.0% in the fourth quarter of 2005, against 9.9% in the fourth quarter of 2004. This development is associated with increased investment spending by shipping companies for fleet renewals, along with the rise in ship prices observed in the recent past.

![Pie chart showing breakdown of corporate bonds held by MFIs by sector of economic activity.](chart.png)

**Chart V.1.5**

**Breakdown of Corporate Bonds Held by MFIs by Sector of Economic Activity**

(Percentage shares, end-2005 data)

- **Industry** (22.4%)
- **Agriculture** (0.2%)
- **Trade** (14.0%)
- **Shipping** (11.0%)
- **Other industries** (19.9%)
- **Tourism** (1.7%)
- **Non-monetary financial institutions and insurance companies** (40.7%)

1 Comprising manufacturing and mining-quarrying.

Source: Bank of Greece.
The substitution of bank loans with corporate bonds had a strong effect on the rate of change in loans to non-banking financial enterprises, which stood at –29.7% in the fourth quarter of 2005 (fourth quarter of 2004: 9.5%). In particular, bank subsidiaries, mostly leasing companies which constitute the bulk of this sector, had significant recourse to bond issuance. These bonds were fully absorbed by the parent banks, and were used to settle loans from the parent banks, as well as to fund the further expansion of the subsidiaries’ activities. It is worth noting that enterprises in this sector issued 40.7% of total bonds held by MFIs in December 2005. Thus, the annual growth rate of total MFI lending (loans and bonds) to non-banking financial enterprises rose by 11.7% in the fourth quarter of 2005, but was lower than in the same quarter of 2004 (29.5%). In February 2006, the February-2005 effects on the annual rate of change in loans to these enterprises from bond issuance in February 2005 (almost €500 million) wore off, and the above rate stood at 10.7%.

The deceleration of the rate of change in loans to tourist enterprises recorded in previous years, after the gradual decline in investment activity associated with the Olympic Games of 2004, became stronger and continued into 2005. Thus, the annual growth rate of loans to tourist enterprises fell to 4.6% in the fourth quarter of 2005 (fourth quarter of 2004: 17.6%), while it decelerated further in the first two months of 2006 (February 2006: 2.9%). In contrast, the growth rate of loans to “other” sectors accelerated in the second half of 2005 (fourth quarter of 2005: 15.7%, fourth quarter of 2004: 11.7%), and continued into the first two months of 2006 (February 2006: 21.6%). This acceleration was mainly due to a significant increase in loans to communications and transport companies (excluding shipping). Credit to construction firms, which had been the main driving force behind the high growth rates recorded in 2003 and partly in 2004 owing to the Olympic Games, contributed much less to this acceleration.

Bank credit to households

The annual growth rate of MFI credit to households remained high during 2005, accelerating slightly, as mentioned above, in the fourth quarter of the year, compared with the corresponding period in the previous year. This development masks the effect of counterbalancing trends evolving during the year in individual categories of loans to households. In particular, the growth rate of housing loans rose significantly, while the growth rates of consumer loans and other loans to households decelerated. Given that the growth rate of loans to households remained at levels well above the growth rate of nominal GDP, total household indebtedness (MFI loans including securitised loans) rose to 38.0% of GDP in December 2005, from 31.2% in the corresponding month of 2004. Excluding securitised loans, this percentage falls to 36.3% in December 2005 (December 2004: 30.7%), which remains lower than the corresponding euro area rate (December 2005: 52.6%, December 2004: 49.2%), though the difference is gradually diminishing. However, one
cannot draw safe conclusions about the total indebtedness of households based only on this comparison, as securitised loans, which account for part of household indebtedness, represent a different percentage of GDP in Greece, compared with the euro area. In order to assess the level of household indebtedness in Greece, the Bank of Greece commissioned TNS-ICAP to conduct a sample survey. This survey showed that the financial pressure on households, i.e. the ratio of the amounts needed by households for debt servicing to their income remains, for the majority of households, within limits generally considered to imply normal debt servicing without particular difficulty. A more detailed description of the survey and its results is presented in the Appendix to this chapter.

The announcement that VAT would be imposed on new residential buildings and that the objective values of real property would be readjusted as of January 2006 contributed to the build-up of strong dynamics in the real estate market, which is also reflected in housing loans. Thus, the growth rate of housing loans (including securitised loans) accelerated in 2005, particularly towards the end of the year, and stood at 31.3% in the fourth quarter, compared with 26.9% in the corresponding quarter of 2004. Due to the high growth rate of housing loans, their balance as a percentage of GDP rose to 25.1% in December 2005, from 20.2% in December 2004. Moreover, credit institutions conducted securitisations of housing loans amounting to €1,500 million. Excluding securitised loans, the outstanding balance of housing loans as a percentage of GDP stood at 23.9% in December 2005 (December 2004: 19.17%), which remains lower than the corresponding percentage for the euro area (December 2005: 36.6%, December 2004: 33.5%). The annual rate of increase in housing loans accelerated further in the first two months of 2006 (February 2006: 33.6%). However, the monthly increase in the outstanding balance of housing loans was lower in January-February 2006 than in the last few months of 2005, suggesting that the short-term dynamics is weaker.

The recovery observed in the growth rate of consumer loans in previous years, which had been fuelled by the abolition of all remaining restrictions on consumer credit in June 2003, was followed by a considerable deceleration in 2005. As a result, the growth rate of consumer loans stood at 29.9% in the fourth quarter of the year (fourth quarter of 2004: 37.9%), which, however, is still high. The deceleration seems to be continuing this year, as the growth rate of consumer loans fell to 28.4% in February 2006. When calculating this growth rate, account is also taken of the first ever securitisation of credit card receivables conducted by a domestic credit institution in July 2005, amounting to €952 million. Regardless of the securitisation, the slowdown in the growth rate of loans through

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1 Securitised loans are no longer included in the receivables of the credit institution, as they are transferred to a Special Purpose Vehicle (SPV), through which the securitisation takes place (see Monetary Policy 2004-2005, Appendix to Chapter IV, February 2005). However, they are still part of households’ indebtedness.

2 Securitisation of receivables is a relatively recent development in Greece (the first securitisation of receivables by Greek credit institution took place in November 2003), though it was previously used in the euro area. However, no statistical information about the outstanding balance of securitised loans in the euro area is available (see ECB, Monthly Bulletin, Box 1, September 2005).
credit cards continued in 2005 (fourth quarter of 2005: 12.4%, fourth quarter of 2004: 23.4%), while the growth rate of other consumer loans (including personal loans and loans against supporting documents) remained exceptionally high, despite the deceleration (fourth quarter of 2005: 44.5%, fourth quarter of 2004: 53.1%). To an extent, this development reflects the substitution of loans through credit cards with personal loans, due to the lower interest rates on personal loans.\footnote{1} Thus, in December 2005 the share of loans through credit cards in total consumer loans fell to 39% (including securitised receivables), from 45% in December 2004.

Finally, the growth rate of “other” loans to households, which pertain mostly to overdraft facilities on current accounts, decelerated in 2005 and was limited to 11.5% in the last quarter of the year (fourth quarter of 2004: 18.8%). As the share of these loans in total loans to households is very small and keeps decreasing (December 2005: 2.4%, December 2004: 2.8%), it is obvious that this type of lending is not widely used. However, in the first two months of this year the growth rate of “other” loans to households accelerated and stood at 14.7% in February.

\footnote{1 During 2005, while the interest rate on loans through credit cards was 14.07% on average, the interest rate on open loans, i.e. the major type of personal loan, was 12.14%.

\textbf{Box VI.1}

\textbf{Purpose and activities of “Tiresias S.A.”}

The ability of banks to correctly assess the creditworthiness of their customers is an essential prerequisite for the stability and further development of the Greek financial system, as well as its effective contribution to the mobilisation of savings in the economy. This ability depends on securing access to objective and comprehensive information about the economic behaviour of corporations and individuals. For this reason, banks operating in Greece, almost as a whole, have established “Tiresias – Banking Information Systems S.A.”. The purpose of Tiresias is the development, operation and management of information systems, which monitor the financial behaviour data, as well as the provision of this information to specific recipients.

Given that the data included in the database, developed by “Tiresias S.A.” within the scope of its purpose, are of a personal nature as regards individuals, the management of these data is subject to the operational principles of transparency, assurance of the objectivity of the database and respect of civil rights. These operational principles have been established by “Tiresias S.A.”, pursuant to the relevant provisions of Law 2472/97 on the “Protection of the individual from the processing of personal data”. Recipients of the data included in the company’s databank are solely banks and other financial institutions,\footnote{1} which evaluate this information and draw conclusions about the creditworthiness and credit quality of their
prospective customers. In particular, the use of information included in the company’s database does not necessarily imply that the recipient’s evaluation will depend exclusively on this information. For example, in the case of a loan application, the relevant information is evaluated and weighted together with other information available to the bank, as well as its general lending policy.

In detail, “Tiresias S.A.” has developed two main information systems:

a. Credit Profile Database (CPD): The first databank developed by “Tiresias S.A.”, computerised since 1993. It provides information concerning indications of past poor credit behaviour. In particular, it includes information on bounced checks (referred to the drawer), unpaid (at maturity) bills of exchange, filings for bankruptcy, adjudicated bankruptcies, issued orders of payment, auctions (on movables and immovables), confiscations and cheques to be paid pursuant to Legislative Decree 17.7/13.8.1923, mortgages and prenotations of confiscations, prenotations turned to mortgages, termination of card contracts, termination of personal or consumer loan agreements and administrative sanctions against tax legislation violators. The data sources of this information are banks, courts of first instance, magistrate’s courts, mortgage registries and the Ministry of Finance. The information remains in the CPD databank for a predetermined period of time after the payment or settlement of the corresponding debt,¹ pursuant to the provisions of Law 3259/2004.

b. Risk Consolidation System (RCS): This system operates since 2003 and provides information on debts of private individuals through consumer credit (personal, consumer, open loans and retail factoring) and credit cards, while information on housing loans and overdrafts from deposit accounts will also be included. The information included in the database concerns both current and overdue debts and is subject to monthly updating by banks and other credit institutions. When a debt is settled, the corresponding information is deleted from the databank. Given that the channelling of data into the database requires the consent of the customer of the corresponding credit institution, information on consumer loans and credit cards granted before 2003 is not included. This means that the databank is not complete as regards mainly long-term (e.g. housing loans) and indefinite time (e.g. credit cards) lending, though it is gradually becoming more comprehensive. In particular, by the end of 2005 the databank contained information on almost 1.2 million loans and 2.0 million credit cards, representing 66% and 21%, respectively, of total debts from consumer credit and credit cards (including securitised loans). Each month approximately 110,000 entries concerning new loans and credit cards are added to the databank, while almost 21,000 information searches took place on average in 2005 on a daily basis. As mentioned above, collection and processing of data in the RCS requires the written consent of the parties to whom the data are related. Obviously, denial to provide consent is assessed accordingly by the interested bank.

Aside from the aforementioned main systems created and managed by “Tiresias S.A.”, the company also provides credit institutions with a computerised listing of persons subject to financial and fiscal sanctions (e.g. with the aim to fight terrorism and drug dealing). The

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¹ This period varies from 0 to 84 months, depending on the kind and number of entries in the databank. Adjudicated bankruptcies are not deleted, while information on prenotations of mortgages, mortgages and prenotations turned to mortgages is deleted as soon as they are eliminated.
3. BANK RATES

Bank interest rates showed mixed changes in 2005, which were small as regards deposits and relatively larger as regards loans.

In greater detail, the average interest rate on new overnight deposits by households fell slightly (by 5 basis points) during 2005 and stood at 0.91% in December (see Chart VI.6), while it did not change substantially in the first two months of 2006. The interest rate on savings deposits (which make up 91% of overnight deposits) fell almost equally (by 6 basis points) and stood at 0.88% in December 2005, without showing any significant change during January-February this year. The real interest rate on savings deposits (calculated on the basis of the corresponding year-on-year inflation rate) was also negative and reached –2.7% on average in 2005 (it was –2.0% in 2004). This development was due to a small decrease, as mentioned earlier, in the nominal interest rate on savings deposits, as well as the higher average inflation rate.

In December 2005, the interest rate on new deposits by households with an agreed maturity of up to one year stood at slightly higher levels than in December 2004 (December 2005: 2.39%, December 2004: 2.30%), while it rose slightly further (by 6 basis points) in the first two months of 2006. The rate on new repos also rose (December 2005: 2.18%, December 2004: 2.01%) and this trend continued into the first two months of 2006 (February 2006: 2.25%).

The changes recorded in the corresponding categories of interest rates in the euro area countries during 2005 were also small, thus maintaining the positive differential in favour of Greek deposit rates. The greatest difference (24 basis points in December 2005) was observed in the category of households’ deposits with a maturity of up to one year, which after that did not change substantially (February 2006: 21 basis points, see Table

---

Note that, despite the significant convergence regarding interest rates on deposits in the euro area in the last few years, there are still small interest rate differences between individual countries. These are attributed, among other things, to differences as regards taxation and the characteristics of deposits (such as the degree of liquidity of deposits and their management costs due to services offered, e.g. standing payment orders and payment of bills through credit cards).
VI.4). The differential was a little smaller (20 basis points in December 2005) regarding the category of overnight deposits by households, which remained almost unchanged in February 2006. In contrast, although the interest rate on new repos in Greece was higher (by 17 basis points) in 2005, it stood at a marginally lower level (by 4 basis points) than in the euro area. This differential was almost eliminated in February of the current year. As regards these interest rates, divergences between different countries in the euro area are small, owing to the homogeneity of the products offered in this market, as well as to the fact that transactions usually concern large amounts.

Interest rates on new (consumer and housing) loans to households in Greece recorded a decrease last year, which is largely attributable to the intense competition between banks. As a result, interest rates kept falling in many different categories of con-
### TABLE VI.4
BANK INTEREST RATES ON NEW DEPOSITS AND LOANS
IN THE EURO AREA AND GREECE
(Percentages per annum)

<table>
<thead>
<tr>
<th>A. Deposits</th>
<th>December 2004</th>
<th>February 2006</th>
<th>Change Feb. 06/Dec. 04 (in percentage points)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A.1 Overnight by households</strong></td>
<td>Weighted average interest rate in the euro area 0.73</td>
<td>0.74</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>Maximum interest rate 1.17</td>
<td>1.33</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>Minimum interest rate 0.12</td>
<td>0.15</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>Interest rate in Greece 0.96</td>
<td>0.93</td>
<td>-0.03</td>
</tr>
<tr>
<td></td>
<td>Interest rate spread between Greece and the euro area 0.23</td>
<td>0.19</td>
<td>-0.04</td>
</tr>
<tr>
<td><strong>A.2 With an agreed maturity of up to one year by households</strong></td>
<td>Weighted average interest rate in the euro area 1.95</td>
<td>2.24</td>
<td>0.29</td>
</tr>
<tr>
<td></td>
<td>Maximum interest rate 2.35</td>
<td>2.61</td>
<td>0.26</td>
</tr>
<tr>
<td></td>
<td>Minimum interest rate 1.48</td>
<td>1.62</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>Interest rate in Greece 2.30</td>
<td>2.45</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>Interest rate spread between Greece and the euro area 0.35</td>
<td>0.21</td>
<td>-0.14</td>
</tr>
</tbody>
</table>

| B. Loans with a floating rate or an initial rate fixation of up to one year** |
|-------------------------------|---------------------------------------------|
| **B.1 Loans up to €1 million to non-financial corporations** | Weighted average interest rate in the euro area 3.98 | 4.12 | 0.14 |
| | Maximum interest rate 5.52 | 5.98 | 0.46 |
| | Minimum interest rate 3.48 | 3.73 | 0.25 |
| | Interest rate in Greece 5.04 | 5.44 | 0.40 |
| | Interest rate spread between Greece and the euro area 1.06 | 1.32 | 0.26 |
| **B.2 Loans of more than €1 million to non-financial corporations** | Weighted average interest rate in the euro area 3.05 | 3.24 | 0.19 |
| | Maximum interest rate 4.09 | 4.35 | 0.26 |
| | Minimum interest rate 2.67 | 2.87 | 0.20 |
| | Interest rate in Greece 3.77 | 3.74 | -0.03 |
| | Interest rate spread between Greece and the euro area 0.72 | 0.50 | -0.22 |
| **B.3 Housing loans** | Weighted average interest rate in the euro area 3.43 | 3.65 | 0.22 |
| | Maximum interest rate 4.37 | 4.58 | 0.21 |
| | Minimum interest rate 3.10 | 3.32 | 0.22 |
| | Interest rate in Greece 4.21 | 3.89 | -0.32 |
| | Interest rate spread between Greece and the euro area 0.78 | 0.24 | -0.54 |
| **B.4 Consumer loans** | Weighted average interest rate in the euro area 6.73 | 6.95 | 0.22 |
| | Maximum interest rate 10.99 | 10.63 | -0.36 |
| | Minimum interest rate 4.73 | 3.80 | -0.93 |
| | Interest rate in Greece 8.58 | 8.06 | -0.52 |
| | Interest rate spread between Greece and the euro area 1.85 | 1.11 | -0.74 |

<table>
<thead>
<tr>
<th>C. Loans with an initial rate fixation of 1-5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C.1 Consumer loans</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

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1 Interest rate at the end of the month.
2 Monthly average rate.
Sources: ECB and euro area NCBs.
sumer loans in December 2005, although the ECB raised its key interest rates by 25 basis points at the beginning of the month. In contrast, interest rates on new corporate loans rose or remained almost unchanged.

In greater detail, as regards interest rates on loans, the largest drop during 2005 (110 basis points) occurred in consumer loans with a defined maturity (December 2005: 8.26%). The average interest rate on consumer loans without a defined maturity (accounting for 52% of the outstanding balance of consumer loans) also fell (by 34 basis points) and stood at 13.07% in December. During the first two months of 2006, interest rates on the above two loan categories recorded an increase and in February they stood at 8.51% and 13.18%, respectively. A significant decrease (101 basis points) was recorded in the interest rate on consumer loans with an initial rate fixation of more than one and up to five years (which represent 41% of consumer loans with a defined maturity). This interest rate fluctuated until September and then fell, but in January-February 2006 it rose (February 2006: 8.72%).

The average interest rate on all new housing loans showed a relatively smaller drop (by 46 basis points) (December 2005: 3.91%). The decrease in the interest rate on the largest subcategory (90%) of new housing loans, i.e. loans with a floating interest rate or an initial rate fixation of up to one year, was even smaller (35 basis points) last year (December 2005: 3.86%, see Chart VI.7). However, interest rates on both these loan categories rose slightly in the January-February 2006 period.

The average interest rate on corporate loans without a defined maturity (accounting for about 33% of the balance of loans to enterprises) remained almost unchanged at 7.0% in December, as well as in February 2006. As regards corporate loans of a specific amount and with a floating rate or an initial rate fixation of up to one year, there was a significant rise (of 37 basis points) in interest rates on loans of up to one million euro, while the increase in loans over €1 million was smaller by (16 basis points). In December 2005, these interest rates were 5.41% and 3.93%, respectively. In the first two months of this year, a significant drop in interest rates on large loans (of more than €1 million) was observed, while the interest rates on smaller amounts (up to €1 million) rose marginally. The interest rate differential between loans to small enterprises and loans to large ones did not fluctuate substantially last year and was 148 basis points in Greece in December, compared with 76 basis points in the euro area. The bigger differential observed in Greece is attributable to the different size structure of Greek companies relative to other countries, com-

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1 In contrast, interest rates on open loans (which represent 1/3 of the balance of consumer loans without a defined maturity) rose by 36 basis points last year (December 2005: 12.01%) and remained almost at the same level in February 2006.

2 The interest rate on consumer loans with a floating rate or an initial rate fixation of up to one year, which represent almost 1/3 of consumer loans with a defined maturity, also fell (by 80 basis points) during 2005, but increased in February 2006.

3 These loans are granted mainly through credit lines, and their interest rate showed no significant change during 2005, remaining unchanged in February 2006. The second, but less important category of loans to enterprises without a defined maturity, are overdrafts from sight accounts.
bined with the lower negotiating capability of small companies, owing to higher risks, as reflected in the stricter credit standards usually applied by banks in such cases.

The difference between the average rate on all bank loans (to households and enterprises) and the corresponding rate on deposits shrank by 27 basis points during 2005 (December 2005: 4.57 percentage points, December 2004: 4.84 percentage points). This decrease was mainly due to the drop in the lending rate (December 2005: 5.84%, December 2004: 6.03%), as well as the rise in the deposit rate (December 2005: 1.27%, December 2004: 1.19%). The decrease in the average lending rate reflects a significant reduction in the interest rate on loans to households (mostly consumer loans), while the interest rate on loans to enterprises rose slightly. The narrowing of the margin between lending and deposit rates is largely linked to increased competition between banks, particularly in retail banking.
Interest rates on loans to households in the euro area remained at lower levels than in Greece, while in most cases they showed smaller changes during 2005, thereby narrowing their differential from Greek interest rates. In contrast, in some categories of corporate loans the interest rate differential increased, while in other categories it remained unchanged. It should be noted that lending rates in Greece, though higher than the corresponding average rates in the euro area, are not the highest among individual euro area countries (see Table VI.4). The lending rate differentials between individual euro area countries are attributed to the different ratios of collateral coverage, the characteristics of loan products, the size of banks and the relevant operating costs, the cost of doubtful loans, the legal framework for the liquidation of real estate serving as collateral, as well as the percentage of delays recorded in debt servicing (this percentage is higher in Greece).

Specifically, as regards consumer loans without a defined maturity, the interest rate differential is still high, although it dropped by 48 basis points (as the Greek interest rate in this category fell, while the corresponding euro area rate rose) (December 2005: 3.40 percentage points) and widened further in February this year. This differential is attributable to the fact that, contrary to other euro area countries, loans without a defined maturity in Greece are mostly loans through credit cards, and their interest rate is typically high (December 2005: 13.78%), as it covers the banks’ high management costs for this product. However, it should be noted that in December 2005 this interest rate was 51 basis points lower in Greece than in December 2004.1

Concerning new consumer loans with an initial rate fixation of more than one and up to five years, the differential between the Greek interest rate and the corresponding euro area rate narrowed in 2005 to 2.08 percentage points, from 2.85 percentage points in December 2004 (see Chart VI.8), as the Greek interest rate in this category fell more than the corresponding euro area rate. However, this differential increased slightly in the first two months of this year. It should be noted that consumer loans with a long maturity involve greater risks, which may be limited if banks obtain collateral or guarantees. High interest rates on these loans in Greece indicate their lower ratios of collateral coverage.2

Regarding housing loans with a floating rate or an initial rate fixation of up to one year, the differential fell to 37 basis points in December 2005, from 78 basis points in December 2004 (see Table VI.4), and kept falling in the first two months of 2006, as the interest rate on the same category of loans in the euro area rose. As mentioned in a previous report, high interest rates on housing loans3 are due to the fact that the time required for the liquidation of real property serving as loan collateral is longer in Greece.

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1 In other euro area countries, loans through credit cards are not the major type of borrowing (as regards consumer loans without a defined maturity), as the relevant amounts due are usually paid in full. An alternative type of borrowing is overdrafts from current accounts. In this case, interest rates decrease as the amount borrowed increases, so this type of consumer loans are preferred over consumer loans with a defined maturity.

2 In some euro area countries collateral can be in the form of a mortgage, thus limiting risks and lowering interest rates.

3 Lower interest rates on housing loans in certain euro area countries are attributed to the guarantee that may be provided by the government for such loans.
As mentioned earlier, interest rate differentials between Greece and the euro area increased last year in certain categories of corporate loans, while they remained unchanged in others. However, in the first two months of 2006 these differentials narrowed substantially. The corresponding differential of loans without a defined maturity rose slightly (to 1.88 percentage points in December 2005, from 1.71 percentage points in December 2004), as the interest rate on loans of this category fell in the euro area, while it did not change significantly in Greece. The collateral coverage ratio of these loans, which depends on the probability of default, differs among individual euro area countries and has an inversely proportional effect on interest rates. An increase was also recorded during 2005 in the differential between Greece and the euro area regarding interest rates.
on corporate loans of a specific amount and with a defined maturity, with a floating rate or an initial rate fixation of up to one year, for loans of up to €1 million (to 143 basis points in December 2005, from 107 basis points in December 2004, given that the Greek interest rate rose, while the corresponding euro area rate remained almost unchanged). The differential did not change significantly for loans over €1 million (December 2005: 71 basis points, December 2004: 72 basis points, as both the Greek and the euro area interest rates in this category changed equally). The level of interest rates on corporate loans also depends on the availability of alternative sources of funding, such as corporate bond issues (which mostly major corporations resort to). In contrast to other euro area countries, the market for this type of bonds is less developed in Greece, a fact conducive to higher interest rates. Moreover, higher interest rates on corporate loans reflect the relatively smaller size of companies in Greece, combined with the lower negotiating capability of small enterprises, owing to the higher risks they face, as reflected in the stricter credit standards usually applied by banks in such cases.
i. Introduction

During the three-year period 2003-2005, bank loans to households grew at a very high rate (almost 30%) and bank penetration into this sector of the economy increased significantly.¹ These developments have amplified concern that households may be borrowing excessively and that the credit risk taken by banks is high, although the outstanding balance of bank loans to households as a percentage of GDP remains lower in Greece than the euro area average, despite a significant increase in the above period (2005: Greece: 38.0%, including securitised loans or 36.3% excluding securitised loans; euro area: 52.6%).

Aggregate data provide an overview, but are not enough to assess the financial state of households, nor can they reveal how financial stress is distributed among them and which household groups face problems in meeting their loan obligations. Detailed data at household level are required for this purpose. In order to examine the degree of indebtedness of Greek households, especially the extent of their borrowing in relation to their income and wealth, as well as other important characteristics of their borrowing behaviour, the Bank of Greece repeated in 2005 the sampling survey conducted in 2002. The survey was commissioned to TNS-ICAP, i.e. the market research company that had carried out the previous survey.

ii. Description of the survey

The survey ran from 20 September to 20 December 2005 and covered 6,000 households in urban and semi-urban areas of Greece. A random sampling technique, stratified by geographical district, was used to ensure that the sample was representative of the surveyed population.

The questionnaire covered all household-borrowing categories and, for each type of loan, recorded the term, the initial amount and the outstanding balance of the loan, as well as the amount of the latest instalment paid. It then sought information about the household’s income and wealth. In the new survey, the questionnaire was enriched with questions about the difficulties encountered, in the correspondents’

¹ In the three-year period from 2003 to 2005, the number of bank housing loan accounts grew at an average annual rate of 16%, the number of credit cards at 8% and the number of other bank loan accounts to households at 27%.
opinion, in servicing properly their loan obligations, in conjunction with the payment
of other regular fixed expenses, as well as with questions about whether the re-
onducts had ease of access to bank lending.

Through the survey, full responses (i.e. from all adult members of the household)
were received from 3,210 households, thus bringing the average rate of response to 52%,
much higher than in 2002 (38.4%).

The rate of response of the originally selected households varies significantly
across geographical areas, as in the 2002 survey, but is overall much higher in all areas
compared with 2002\(^1\) (see Table VI.A1). Table VI.A2 shows that the rate of response
drops with the increase in the degree of urbanisation of the geographical area; it is rela-
tively limited in Athens and high in semi-urban areas, as in the previous survey. These data
show that, overall, people in major urban centres, especially Athens, are cautious of this
type of survey. In any event, differences in the response rate across geographical areas

<table>
<thead>
<tr>
<th>Table VI.A1</th>
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<tbody>
<tr>
<td>RATE OF HOUSEHOLD RESPONSE BY GEOGRAPHICAL AREA</td>
</tr>
<tr>
<td>(Household percentages)</td>
</tr>
<tr>
<td>2005</td>
</tr>
<tr>
<td>Attica</td>
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<tr>
<td>Sterea Ellada and Euboea</td>
</tr>
<tr>
<td>Peloponnese</td>
</tr>
<tr>
<td>Western Greece</td>
</tr>
<tr>
<td>Hepirus</td>
</tr>
<tr>
<td>Thessaly</td>
</tr>
<tr>
<td>Western Macedonia</td>
</tr>
<tr>
<td>Central Macedonia</td>
</tr>
<tr>
<td>Eastern Macedonia and Thrace</td>
</tr>
<tr>
<td>Crete</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Total responding households</td>
</tr>
</tbody>
</table>

affect the representativeness of the sample. Therefore, appropriate weights were applied
to the data in order to reflect the population structure by area and balance out the effects
of this factor. Moreover, the distribution of the sample household’s size was adjusted in
order to correspond to the distribution of the population according to the 2001 census.

These weights restore the representativeness of the sample to the extent that the
borrowing behaviour of the originally selected households that did not respond is the same
as that of the responding households. However, this cannot be verified directly (statisti-
cally) and, therefore, the survey results must be treated with some caution.

\(^1\) With the exception of Western Macedonia, where the rate of response, although lower than the very high level of 2002
(78.4%), was still much higher (61.5%) than the average (52%).
The survey conducted by the Bank of Greece in 2002 had covered only household members aged 25 and over (25+). The new survey covered all household members aged 18 and over (18+). In order to compare the results of the two surveys, the main parameters of household borrowing were assessed on the basis of both the responses of all household members that participated in the 2005 survey (i.e. the 18+ sample) and their members aged 25+.

Table VI.A3 shows that 46.9% of households reported some outstanding loan. For households in which only 25+ members have been taken into account, this percentage stands at 47.7%, i.e. a little lower than in 2002 (48.4%). This small difference is not statistically significant, but the fact that this percentage remained almost unchanged cannot be considered compatible with the high rate of increase in bank lending to households in 2003-2005.

It seems that some of the responding households did not report any outstanding loans, because households are generally cautious when it comes to sampling surveys or because of the very personal character of the questions, the complexity of the questionnaire or the volume of information requested about household borrowing. To the extent that these reasons apply, the behaviour of non-responding households can be considered similar to that of responding ones and, therefore, valid conclusions may be drawn about the borrowing behaviour of all households with outstanding loans. If, however, because of a specific borrowing behaviour (e.g. large number or excessive amount of loans or similar reasons directly associated with borrowing behaviour), households refrained from stating their loans or even participating in the survey, the representativeness of the sample is affected and the survey results will be biased and will not accurately reflect the characteristics of the entire population. However, when the survey data are compared with data submitted by banks to the Bank of Greece, the following points come to light: the average outstanding balance of housing loans per household, as recorded by the 2005 and 2002 surveys, increased at an average annual rate of 12.1%, while the corresponding balance per account, as calculated from the relevant bank data, increased at an average annual
<table>
<thead>
<tr>
<th>Loan category</th>
<th>Household percentage</th>
<th>Average debt (in euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without debt obligations</td>
<td>53.1</td>
<td>52.3</td>
</tr>
<tr>
<td>With debt obligations</td>
<td>46.9</td>
<td>100.0</td>
</tr>
<tr>
<td>House-related loans (“housing loans”)</td>
<td>37.3</td>
<td>38.0</td>
</tr>
<tr>
<td>—For house purchase</td>
<td>28.4</td>
<td>28.7</td>
</tr>
<tr>
<td>—For house repair</td>
<td>9.9</td>
<td>10.3</td>
</tr>
<tr>
<td>—For land purchase</td>
<td>0.9</td>
<td>1.0</td>
</tr>
<tr>
<td>Other loans</td>
<td>81.7</td>
<td>81.2</td>
</tr>
<tr>
<td>Other non-housing bank loans</td>
<td>77.8</td>
<td>77.2</td>
</tr>
<tr>
<td>—Credit cards</td>
<td>54.4</td>
<td>54.1</td>
</tr>
<tr>
<td>—Car purchase</td>
<td>20.8</td>
<td>20.1</td>
</tr>
<tr>
<td>—Other bank loans (personal, consumer etc.)</td>
<td>28.9</td>
<td>28.9</td>
</tr>
<tr>
<td>From retail stores</td>
<td>9.0</td>
<td>8.9</td>
</tr>
<tr>
<td>From other households</td>
<td>1.2</td>
<td>1.3</td>
</tr>
</tbody>
</table>
rate of 11.3% over the same period. In addition, the households’ average outstanding balance of credit card loans, as shown by the sampling surveys, rose at an average annual rate of 21.3% during 2003-2005, while the corresponding balance, as recorded by banks, increased at an average annual rate of 19.4% over the same period. Consequently, the annual growth rates of these two categories of loans, as calculated from bank and survey data, do not differ substantially. This corroborates the view that the borrowing behaviour of non-responding households is generally similar to that of responding households and, therefore, boosts the reliability of the survey results.

iii. Analysis of the results

As shown in Table VI.A3, the breakdown of households by category of loans remained almost unchanged in the period between the two surveys. The most common category is credit card loans, as 54.4% of households with outstanding loans in 2005 had debts to credit cards. The increased use of credit cards for payments and the easy access to such type of loans, within the limits of each card, explain why they are widespread, despite the fact that bank interest rates for these loans are the highest among all categories of loans. The second most common category is housing loans (37.3%), followed by unsecured bank loans (28.9%, being mainly personal loans and loans against supporting documents).

The percentages of households by category of loan do not differ substantially if the sample is limited to household members aged 25+ (see Table VI.A3). However, the comparison between the two distributions (2005: 18+ and 25+) shows that loans by household members aged 18 to 24 concern, at a much higher percentage than loans to household members aged 25+, loans for car purchase rather than housing loans.

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1 The outstanding balance of housing loans per account (according to bank data) stood at €34.9 thousand at end-2005 (including securitised loans), from €25.3 thousand at end-2002. Respectively, the outstanding balance of housing loans per household (according to the 2002 and 2005 surveys) rose to €41.7 thousand in 2005, from €29.6 thousand in 2002 (see Table VI.A3). Therefore, the outstanding balance of housing loans per account is lower than the average outstanding balance per household, indicating (as in the surveys) that a number of households have more than one housing loan. However, the relation between the two aggregates remained virtually unchanged, since the outstanding balance per account corresponded approximately to 85% of the outstanding balance per household, indicating that the number of accounts per household did not change substantially over this period.

2 Specifically, the outstanding balance of credit card loans, as recorded by banks, stood at €8,445.4 million at end-2005 (including securitised loans), compared with €4,957.2 million at end-2004. Respectively, the outstanding balance of credit card loans per household, as recorded by the sampling surveys, stood at €3,039 in 2005, compared with €1,701 in 2002. It should be noted that, if account is taken of the outstanding balance per household, the data are adjusted for the fact that the number of households is different in the two surveys, thus making the evolution of credit card loans comparable between banks and the surveys, given that the number of Greek households remained almost unchanged during 2003-2005.

3 At end-2005, two credit cards corresponded to every three persons aged 20 and over. Moreover, the data submitted by banks to the Bank of Greece show that in 2003-2004 the number of credit card transactions increased at an average annual rate of 15% and the value of transactions at 37%, reaching €5.4 billion in 2004 (2002: €2.9 billion).

4 At end-2005, the average interest rate on credit card loans was 13.78%, compared with an average of 8.26% for all consumer loans and an average of 3.91% for housing loans.

5 Specifically, 35.4% of household members aged 18-24 reported a car purchase loan and 9.2% a housing loan.
Moreover, as shown in Table VI.A3, the percentage of households with outstanding housing loans in 2005 is higher than in 2002. This is in line with the rapid increase in housing loans, since new housing loans are contracted, as a rule, by different households. The average outstanding balance of household housing loans amounts to €42,366. Specifically, for the 25+ sample, this balance comes to €41,701, increased by 41% compared with the corresponding figure of 2002. The amount of housing loans, as recorded in the 2005 survey, leads to the estimate that the total outstanding balance of this category of loans came to €26.2 billion, corresponding to about 70% of the outstanding balance of housing loans, as reported by banks. However, available information does not help to examine whether this significant deviation between the survey-estimated total indebtedness and the bank-recorded outstanding balance of housing loans is due to the fact that a relatively small percentage of households has reported some loan or whether it reflects the possibility that borrowing is more concentrated among households that refused to take part in the survey.

By contrast, the percentage of households reporting other loans, in addition to housing loans, declined in 2005 (81.2%) compared with 2002 (85.3%). This drop concerns all categories of loans and is particularly marked in the case of retail store credit. The sole exception is credit card loans, as the percentage of households with loans of this category has picked up slightly. The rising trend of the percentage of households with credit card loans, as established by both surveys, is in line with the fact that both the number of credit cards and the amount of credit card loans increased at high rates in the period between the two surveys (at an average annual rate of 8% and 19.4%, respectively). The increased use of credit cards and bank competition in this sector of retail banking seem to be directly associated with the significant decrease in the percentage of households with retail store loans between 2002 and 2005. Moreover, it is very likely that part of household loans from retail stores, especially those for purchases by instalments paid by credit card, was not properly recorded by the survey, since households perceive the amounts of this type of credit as loans from banks rather than retail stores or consider that they have no outstanding debt to the extent that they pay the entire balance of their credit card each month and not by instalments. Apart from housing loans, the average of other bank loans to households amounts to €6,552, or €6,447 for households with members aged 25+, i.e. it stands about 60% higher than in 2002. The total outstanding balance of this category of bank loans to households, estimated on the basis of survey data, amounts to €9 billion and corresponds to 40% of the outstanding balance of these loans, as recorded by banks. Therefore, the deviation between the two amounts is significantly higher for this category of loans than for housing loans. This result may reflect the fact that, apart from regular information sent to households by banks on the outstanding balance of their debt, the outstanding bal-

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1 As a rule, housing loans are paid in biannual instalments. In the period March-August 2005, i.e. six months before the survey, the average outstanding balance of housing loans, as recorded by banks (including securitised loans), amounted to €38.1 billion.
ance of housing loans changes less over time than in other categories of loans. As with housing loans, available information does not help to examine whether this significant deviation between the survey-estimated and bank-recorded outstanding balance of loans is due to the fact that the percentage of households reporting a loan is relatively small or whether it reflects the possibility that borrowing is more concentrated among households that refused to take part in the survey.\(^1\)

The borrowing level per household is increased in all geographical areas and, as established by the 2002 survey, there are differences between geographical areas as to both the borrowing level per household and the types of loans (see Table VI.A4). However, it is observed that the borrowing level per household is more evenly distributed among areas in 2005 than in 2002.

The breakdown of indebted households by category of loans shows that the percentage of households with a housing loan picked up in 2005, compared with 2002. To a large extent, this reflects the increased number of indebted households in the major urban areas of Athens and Thessaloniki, namely in areas where, according to National Statistical Service of Greece (NSSG) data, the owner-occupation percentage was lower than the country average,\(^2\) and therefore (at least potentially) there was higher demand for housing loans. At the same time, the degree of penetration of the banking system into these areas is higher. Unlike housing loans, the percentage of households reporting loans other than housing loans declined significantly in all areas, except “other urban areas”, where the decline is very small. As already mentioned, this reflects the fact that households borrow mainly from retail stores and, to a lesser extent, from friends. By contrast, the percentage of households that, in the 2005 survey, used the banking system to finance their needs increased or remained unchanged compared with 2002. Specifically, the percentage of households with credit card loans increased in all areas. In Athens, approximately two-thirds of indebted households reported credit card debts, while in Thessaloniki and the “other urban areas”, this percentage came close to 50%. The percentage of households with other bank loans (except housing and credit card loans) stands around 30%, with small deviations by geographical area and fluctuations between the two surveys. Specifically, the percentage of households with loans for car purchase declined in Athens and Thessaloniki in 2005 and increased significantly in “other urban” and semi-urban areas, where 25% of indebted households reported a loan of this category in 2005, i.e. a much higher percentage than in Athens (14.7%) or Thessaloniki (21.8%).

\(^1\) The deviation between the survey-estimated amount of loans and the amount recorded in the macroeconomic figures is a common phenomenon. For instance, in a relevant survey conducted in 2004 in the UK by the Bank of England, the estimated outstanding balance on the basis of survey data corresponded to 80% of the effectively recorded balance for housing loans and 32% for unsecured bank loans (mainly consumer loans). See May, Tudela and Young, “British household indebtedness and financial stress: a household-level picture”, Bank of England, Quarterly Bulletin, Winter, 2004, pp.414-28.

\(^2\) According to NSSG data, the owner-occupation percentage stands at 80.1% throughout the country and is distributed as follows: Athens: 70.9%, Thessaloniki: 78%, other urban areas: 76%, semi-urban areas: 87.6% and rural areas: 97%. See NSSG, “Household Budget Survey 2004/2005”.
### Table A4
DISTRIBUTION OF INDEBTED HOUSEHOLDS (25+) BY LOAN CATEGORY AND DEGREE OF URBANISATION
(Household percentages)

<table>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>House-related loans (&quot;housing loans&quot;)</td>
<td>36.1</td>
<td>35.2</td>
<td>42.6</td>
<td>34.9</td>
<td>39.7</td>
<td>41.8</td>
<td>38.5</td>
<td>37.2</td>
<td>38.0</td>
<td>37.2</td>
</tr>
<tr>
<td>Other loans</td>
<td>83.7</td>
<td>87.9</td>
<td>77.2</td>
<td>82.5</td>
<td>81.7</td>
<td>82.5</td>
<td>76.3</td>
<td>83.1</td>
<td>81.2</td>
<td>85.3</td>
</tr>
<tr>
<td>Other non-housing bank loans</td>
<td>79.5</td>
<td>80.0</td>
<td>74.3</td>
<td>72.2</td>
<td>76.3</td>
<td>75.0</td>
<td>73.0</td>
<td>67.6</td>
<td>77.2</td>
<td>75.5</td>
</tr>
<tr>
<td>— Credit cards</td>
<td>64.2</td>
<td>62.5</td>
<td>48.5</td>
<td>44.4</td>
<td>48.9</td>
<td>45.5</td>
<td>39.5</td>
<td>38.7</td>
<td>54.1</td>
<td>53.1</td>
</tr>
<tr>
<td>— Car purchase</td>
<td>14.7</td>
<td>20.4</td>
<td>21.8</td>
<td>26.4</td>
<td>26.0</td>
<td>19.9</td>
<td>24.9</td>
<td>19.9</td>
<td>20.1</td>
<td>20.9</td>
</tr>
<tr>
<td>— Other bank loans</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(personal, consumer etc.)</td>
<td>27.7</td>
<td>28.4</td>
<td>32.7</td>
<td>30.2</td>
<td>27.6</td>
<td>32.2</td>
<td>32.0</td>
<td>26.5</td>
<td>28.9</td>
<td>29.4</td>
</tr>
<tr>
<td>From retail stores</td>
<td>9.4</td>
<td>16.3</td>
<td>6.9</td>
<td>14.3</td>
<td>11.7</td>
<td>15.0</td>
<td>4.7</td>
<td>21.3</td>
<td>8.9</td>
<td>16.3</td>
</tr>
<tr>
<td>From other households</td>
<td>1.5</td>
<td>2.7</td>
<td>1.9</td>
<td>4.0</td>
<td>0.9</td>
<td>2.1</td>
<td>1.7</td>
<td>3.6</td>
<td>1.3</td>
<td>2.8</td>
</tr>
<tr>
<td>Average outstanding debt (in euro)</td>
<td>20,020</td>
<td>14,596</td>
<td>18,118</td>
<td>16,250</td>
<td>18,834</td>
<td>15,615</td>
<td>20,346</td>
<td>18,506</td>
<td>19,637</td>
<td>15,532</td>
</tr>
</tbody>
</table>

**Note:** Percentages do not add up to 100, because some households have received more than one type of loan (e.g. a housing loan and a consumer loan).
iv. Debt-to-income and debt-to-property ratios

As seen in the 2002 survey, households’ borrowing level is directly correlated with their income,\(^1\) since, as shown in Table VI.A5, the average indebtedness per income group increases as income increases, although this correlation is less marked in 2005.\(^2\) At the same time, the income distribution of households that reported some type of loan in the 2005 survey is different from the 2002 distribution. In 2005 there was a significant decrease in the percentage of households in the first income group\(^3\) (from 8.3% in 2002 to 5.4% in 2005) and a smaller decrease in the last income group, while percentages increased in other income groups, especially the fourth highest income group (from 16.3% in 2002 to 19% in 2005). For this reason, the distribution of the shares of each income group in total household debt in 2005 is substantially different from 2002. The contribution of the first income group remained very small in 2005 (2005: 3.4%, 2002: 3.5%), while the contributions of other income groups are more evenly distributed in 2005, since the contribution of the third highest income group decreased significantly in 2005 (from 32.8% in 2002 to 26.9% in 2005), mainly to the benefit of the fourth highest income group (from 19.6% in 2002 to 27.1% in 2005). These figures show that the access of low-income households to the banking system remains limited, while it seems that, in the framework of a more effective credit risk management, competition between banks for attracting customers is more focused now than in the past on households of the fourth highest income group, since not only the percentage of households of this level has increased, but also the outstanding balance of their loans recorded the highest average absolute increase. In any event, the vast acceleration of credit expansion to households in 2003-2005 resulted in a significant increase in the overall loan burden, as measured by the loan-to-income ratio. The median\(^4\) of the loan burden for all households rose to 33.5% in 2005, from 22.8% in 2002, mainly reflecting the evolution of the housing loan burden. It should be noted, however, that the loan burden of households in the first income group increased substantially compared with 2002 (2005: 61.2%, 2002: 25.7%) and is much higher than the average burden of all households.

The distribution of the loan-to-wealth ratio is similar to that of income. On average, the level of households’ loan burden increases in proportion to their wealth (household financial and real assets) and households in the higher wealth groups have generally higher outstanding loan balances. Indeed, this positive relationship between the level of

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\(^1\) The net income of each household member was reported in the questionnaire.

\(^2\) On average, the income of households with loans (€22,600) is higher than the average income of all households that took part in the survey (€18,100). It should also be noted that the average income of all households in the survey approaches, to a satisfactory extent, the average income of households in the country as a whole (€20,500), as established by the NSSG Household Budget Survey 2004/2005.

\(^3\) Income groups range from lowest to highest, the first group corresponding to the lowest income etc.

\(^4\) The median was chosen over the average on the basis of the observation that the distribution of the loan burden is characterised by a significant positive asymmetry, since there are few but important extreme values that affect the average disproportionally.
### TABLE VI.A5
**DISTRIBUTION OF INDEBTED HOUSEHOLDS BY INCOME GROUP (25+)**

<table>
<thead>
<tr>
<th>Income groups (in euro)</th>
<th>Distribution of indebted households (%)</th>
<th>Contribution to total outstanding debt of sample (%)</th>
<th>Average outstanding debt (in euro)</th>
<th>Median of outstanding debt as a percentage of income (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Total loans</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 7,500</td>
<td>5.4</td>
<td>8.3</td>
<td>3.4</td>
<td>3.5</td>
</tr>
<tr>
<td>7,501-15,000</td>
<td>28.2</td>
<td>27.8</td>
<td>22.5</td>
<td>19.0</td>
</tr>
<tr>
<td>15,001-25,000</td>
<td>34.5</td>
<td>33.5</td>
<td>26.9</td>
<td>32.8</td>
</tr>
<tr>
<td>25,001-35,000</td>
<td>19.0</td>
<td>16.3</td>
<td>27.1</td>
<td>19.6</td>
</tr>
<tr>
<td>35,001+</td>
<td>12.9</td>
<td>14.1</td>
<td>20.1</td>
<td>25.1</td>
</tr>
<tr>
<td>Total*</td>
<td>1,215</td>
<td>1,063</td>
<td>19,637</td>
<td>15,532</td>
</tr>
<tr>
<td>B. Housing loans</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 7,500</td>
<td>4.8</td>
<td>5.9</td>
<td>3.4</td>
<td>3.0</td>
</tr>
<tr>
<td>7,501-15,000</td>
<td>24.1</td>
<td>23.5</td>
<td>22.9</td>
<td>17.0</td>
</tr>
<tr>
<td>15,001-25,000</td>
<td>31.1</td>
<td>32.7</td>
<td>24.3</td>
<td>32.7</td>
</tr>
<tr>
<td>25,001-35,000</td>
<td>23.1</td>
<td>17.1</td>
<td>29.0</td>
<td>20.8</td>
</tr>
<tr>
<td>35,001+</td>
<td>16.9</td>
<td>20.8</td>
<td>20.4</td>
<td>26.6</td>
</tr>
<tr>
<td>Total*</td>
<td>422</td>
<td>409</td>
<td>41,701</td>
<td>29,557</td>
</tr>
<tr>
<td>C. Other loans</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 7,500</td>
<td>5.3</td>
<td>8.9</td>
<td>3.5</td>
<td>5.1</td>
</tr>
<tr>
<td>7,501-15,000</td>
<td>28.8</td>
<td>28.4</td>
<td>21.3</td>
<td>25.5</td>
</tr>
<tr>
<td>15,001-25,000</td>
<td>35.6</td>
<td>33.4</td>
<td>34.2</td>
<td>33.2</td>
</tr>
<tr>
<td>25,001-35,000</td>
<td>17.6</td>
<td>15.7</td>
<td>21.6</td>
<td>16.0</td>
</tr>
<tr>
<td>35,001+</td>
<td>12.7</td>
<td>13.6</td>
<td>19.5</td>
<td>20.3</td>
</tr>
<tr>
<td>Total*</td>
<td>998</td>
<td>889</td>
<td>6,275</td>
<td>4,246</td>
</tr>
</tbody>
</table>

* It refers to all indebted households and concerns, respectively, the number of households, their average outstanding debt and the median of outstanding debt to income.
### TABLE VI.A6
DISTRIBUTION OF INDEBTED HOUSEHOLDS BY WEALTH GROUP (25+)

<table>
<thead>
<tr>
<th>Income groups (in euro)</th>
<th>Distribution of indebted households (%)</th>
<th>Contribution to total outstanding debt of sample (%)</th>
<th>Average outstanding debt (in euro)</th>
<th>Median of outstanding debt as a percentage of income (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Total loans</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 10,000</td>
<td>17.4</td>
<td>16.8</td>
<td>4.7</td>
<td>5.2</td>
</tr>
<tr>
<td>10,001-50,000</td>
<td>18.6</td>
<td>11.6</td>
<td>8.5</td>
<td>5.2</td>
</tr>
<tr>
<td>50,001-100,000</td>
<td>23.5</td>
<td>22.4</td>
<td>21.4</td>
<td>18.7</td>
</tr>
<tr>
<td>100,001-200,000</td>
<td>25.3</td>
<td>26.8</td>
<td>30.5</td>
<td>35.3</td>
</tr>
<tr>
<td>200,001+</td>
<td>15.3</td>
<td>22</td>
<td>34.8</td>
<td>35.6</td>
</tr>
<tr>
<td>Total*</td>
<td>1131</td>
<td>978</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B. Housing loans</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 10,000**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10,001-50,000</td>
<td>12.1</td>
<td>6.2</td>
<td>4.2</td>
<td>2.7</td>
</tr>
<tr>
<td>50,001-100,000</td>
<td>27.5</td>
<td>26.4</td>
<td>21.5</td>
<td>18.1</td>
</tr>
<tr>
<td>100,001-200,000</td>
<td>33.1</td>
<td>35.2</td>
<td>33.4</td>
<td>40.8</td>
</tr>
<tr>
<td>200,001+</td>
<td>26.7</td>
<td>31.5</td>
<td>40.8</td>
<td>38.2</td>
</tr>
<tr>
<td><strong>Σύνολο</strong>*</td>
<td>363</td>
<td>328</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C. Other loans</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 10,000</td>
<td>20.6</td>
<td>19.8</td>
<td>15.5</td>
<td>18.1</td>
</tr>
<tr>
<td>10,001-50,000</td>
<td>19.7</td>
<td>12.8</td>
<td>18.8</td>
<td>11.5</td>
</tr>
<tr>
<td>50,001-100,000</td>
<td>22.1</td>
<td>21.7</td>
<td>21.3</td>
<td>20.3</td>
</tr>
<tr>
<td>100,001-200,000</td>
<td>23.7</td>
<td>24.8</td>
<td>23.8</td>
<td>21.3</td>
</tr>
<tr>
<td>200,001+</td>
<td>13.9</td>
<td>20.8</td>
<td>20.7</td>
<td>28.9</td>
</tr>
<tr>
<td><strong>Σύνολο</strong>*</td>
<td>953</td>
<td>823</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* It refers to all indebted households and concerns, respectively, the number of households, their average outstanding debt and the median of outstanding debt to income.
** The number of households in this group is too small to be statistically assessed.
loans and wealth became more pronounced in 2005 (see Table VI.A6). It should be noted that, despite the increase in the percentage of participation in the sample of households in the first wealth group in 2005 (2005: 17.4%, 2002: 16.8%), their contribution to total household debt dropped to 4.7% in 2005, from 5.2% in 2002. It should also be noted that, as in 2002, the contribution of households in the higher wealth groups to total debt is much bigger than their participation in the sample, indicating that these groups have generally larger loans. Indeed, the contribution of households in the top two wealth groups to total household debt was 65.3% in 2005, compared with 70.9% in 2002. This mainly reflects the distribution of housing loans, since taking a housing loan means that property is acquired. By contrast, the contribution of households of any wealth group in the aggregate of other loans (except housing loans) is relatively uniform, indicating that households do not need to own property to have access to other loans (except housing loans). For 50% of households, the ratio of their outstanding loan balance to their wealth, i.e. the median of this ratio, does not exceed the very low level of 10.7%, despite its increase from 5.1% in 2002. The median is relatively high (75.8%) only for households in the first wealth group and there is a number of households whose outstanding loan balance exceeds their wealth as regards non-housing loans. Certainly, this does not necessarily mean that these households are or will be insolvent, since the level of their income may provide adequate security that they will be able to service their loans properly.

v. Debt-service costs and income

Table VI.A7 and Chart VI.A1 show the distribution of the debt service cost ratio, which is defined as the ratio of monthly instalments to monthly income and constitutes a generally accepted indicator of the direct financial stress on a household. These figures show that, for 80% of households, debt-service costs do not exceed 32% of their income, while for 88% of households, they do not exceed 40% of their income. Therefore, for the vast majority of indebted households, the direct financial stress lies within limits that, according to international literature, are not thought to give rise to difficulties in the regular servicing of loans, although, for households with very low income and precisely because of this very low income, low debt-service costs are not necessarily an adequate criterion of their difficulty to repay their loans regularly. Households with relatively low debt-service costs are not evenly distributed in income groups, but their percentage increases in the higher income groups and, for this reason, the percentage of households with high financial costs is higher in lower income groups, as might be expected. In the lowest income group (households with income up to €7,500), only 53% of households has debt-service costs up to 32%, while in the highest income group, this percentage comes to 92% of households.

For the remaining 12% of households, this ratio is over 40%, while for a small percentage of households (1.6%) the cost ratio exceeds the household's monthly income, indicating that, at least in the short term, these households are under strong financial stress. The
distribution of the debt service cost ratio in 2002 shows that it did not exceed 32% for 75% of households and 40% for 83% of households, while it exceeded 100% for 4% of households. These figures indicate that the rapid increase in bank loans to households in the three-year period between the two surveys does not seem to be associated with the corresponding increase in financial stress. On the contrary, there was a remarkable decline in households’ financial stress. This result is undoubtedly associated with the decrease in bank lending rates to households. It should be noted that bank interest rates on the outstanding balances of the main categories of consumer and housing loans declined in 2003-2005 by 122 and 81 basis points, respectively.\(^1\) To some extent, however, this improvement should also be attributed to the fact that banks manage credit risk more effectively, especially as regards the

<table>
<thead>
<tr>
<th>Household percentiles(^*)</th>
<th>2005</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>5.6</td>
<td>3.7</td>
</tr>
<tr>
<td>20</td>
<td>8.3</td>
<td>6.7</td>
</tr>
<tr>
<td>30</td>
<td>11.0</td>
<td>10.4</td>
</tr>
<tr>
<td>40</td>
<td>13.6</td>
<td>13.4</td>
</tr>
<tr>
<td>50</td>
<td>16.2</td>
<td>17.3</td>
</tr>
<tr>
<td>60</td>
<td>19.7</td>
<td>22.1</td>
</tr>
<tr>
<td>70</td>
<td>24.0</td>
<td>27.3</td>
</tr>
<tr>
<td>75</td>
<td>27.6</td>
<td>32.0</td>
</tr>
<tr>
<td>80</td>
<td>31.3</td>
<td>36.3</td>
</tr>
<tr>
<td>85</td>
<td>37.6</td>
<td>42.1</td>
</tr>
<tr>
<td>90</td>
<td>44.3</td>
<td>52.4</td>
</tr>
<tr>
<td>95</td>
<td>64.9</td>
<td>79.3</td>
</tr>
<tr>
<td>99</td>
<td>122.8</td>
<td>189.1</td>
</tr>
</tbody>
</table>

\(^*\) Percentage of households with a debt service to income ratio less than or equal to the corresponding value shown in the table, e.g. for 20% of households the debt service to income ratio does not exceed 8.3% of their income in 2005.

process for the approval/granting of new loans and risk taking. This improvement is associated, \textit{inter alia}, with the guidelines of the Bank of Greece\(^2\) recommending the implementation of a longer-term and more forward-looking policy in this field than what competition forces banks to implement in order to preserve or increase their share in retail banking.

\(^1\) Consumer loans with a maturity of up to 1 year and housing loans with a maturity of over 5 years. For a €100,000 housing loan maturing in 15 years, the decrease in interest rates by 81 basis points has reduced the debt payment by €42.4 monthly.

\(^2\) It should be recalled that, by relatively recent Governor’s Acts, the Bank of Greece increased the provisioning ratios for all types of consumer loans in arrears for over one year or in permanent delay (Bank of Greece Governor’s Act 2557/26 January 2005). It also stipulated that the reduced capital requirements ratio (4%) for credit risk shall henceforth be applicable only for the part of the housing loan not exceeding 75% of the market value of mortgaged property, while an 8% ratio shall be applicable for the remaining 25% (Bank of Greece Governor’s Acts 2564/11 October 2005 and 2565/11 October 2005). At the same time, a Bank of Greece circular stipulated that debt payments should not exceed 30% to 40% of the income of indebted households, scaled according to the absolute level of the applicant’s disposable income.
Specifically, the Bank of Greece has underlined that, in order to contain the credit risk and prevent phenomena of excessive household borrowing, when banks assess loan applications, they should take into account the financial stress indicator, which should not, as a rule, exceed a reasonable ceiling (30% to 40%), scaled according to the absolute level of the applicant’s disposable income. It should be noted, however, that the share of debt of households with a cost ratio over 40% in the total debt of the sample’s households is relatively high and stands at 29.9% (the share of those with a cost ratio over 100% is 6.1%). Although a large percentage (over 80%) of the debt of households with a debt service ratio over 40% concerns housing loans, their relatively high share indicates that there is significant room for further improvement in credit risk management by banks.

vi. Loan servicing by households

As was mentioned above, the 2005 questionnaire included a number of questions about households' behaviour in relation to the regular servicing of their loans, as well as...
any difficulties encountered, in their opinion, in meeting their various obligations. The relevant responses show that 11.2% of households do not pay their loan servicing instalments regularly, but this percentage varies significantly across loan categories. The highest percentage is observed in consumer loans, where 14.9% of households reported that they do not pay the instalments for servicing these loans regularly, while the corresponding percentage for housing loans is reduced almost to half (8.6%). These percentages, though not entirely comparable with the percentages of corresponding bank loans that, according to data submitted by banks to the Bank of Greece, are not serviced for at least three months, lead to exactly the same conclusion, i.e. that consumer loans have an overall higher credit risk for banks than housing loans.

Table VI.A8 shows the percentages of households per income group reporting “difficulties in regularly servicing their obligations”, which are high. Overall, these percentages, although generally lower than those reported in the NSSG Household Budget Survey 2004/2005, seem to confirm its result, i.e. that 77.3% of households reported difficulties in meeting their needs. A general conclusion (see Table VI.A8) is that a very high percentage of households (over 50%), especially in low-income groups, has difficulties in servicing their obligations. To a large extent, this reflects the low level of income of these households and, therefore, the relatively high marginal utility they attribute to each unit of their income, given that the average costs of servicing their loans is relatively low, with the exception of households in the first income group. However, the high percentage of households reporting difficulties in servicing their loans gives rise to questions as to whether the information available to banks is adequate to assess properly the solvency of their customers, all the more so since these households mainly belong to low-income groups and, therefore, their financial position is more vulnerable to any rise in interest rates or change in economic conditions. It should be noted that the percentage of households in the two lowest income groups (84.4%) with non-housing loans (i.e. unsecured loans) is higher than for total households (81.2%). It is possible that the decision of banks to grant loans to this category of borrowers is based on the fact that they have regularly paid their obligations in the past. However, it cannot be ruled out that banks granted loans on the basis of inadequate information concerning the exact characteristics of these borrowers. In any event, increased competition between banks and the high availability of bank funds, proved by the rapid increase in non-housing loans during the past four years, seem to be directly associated with the relatively high percentage of consumer loans not serviced for at least three months, which, according to data submitted by banks to the Bank of Greece, stood at 7.8% of total loans in this category at end-2005, from 8.5% at end-2002. By contrast, in housing loans, where banks usually have better information as to

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1 See below.
2 Households responding to the relevant question that it is “difficult” or “rather difficult” to service their obligations.
3 This percentage is the sum of the percentages of households that, to the question of the NSSG Household Budget Survey 2004/2005 “how do you meet your needs?”, responded: with great difficulty (18.2%), with difficulty (23.8%) or with some difficulty (35.3%).
### Table VI.A8

**Household estimates about the degree of difficulty* in servicing their obligations, by income group, 25+**

(Household percentages)

<table>
<thead>
<tr>
<th>Difficulty in:</th>
<th>Total</th>
<th>Up to 7,500</th>
<th>7,501-15,000</th>
<th>15,001-25,000</th>
<th>25,001-35,000</th>
<th>&gt;35,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>paying housing loan instalments</td>
<td>53.8</td>
<td>83.3</td>
<td>61.3</td>
<td>58.7</td>
<td>48.9</td>
<td>32.8</td>
</tr>
<tr>
<td>paying credit card instalments</td>
<td>54.2</td>
<td>75.8</td>
<td>64.6</td>
<td>51.7</td>
<td>51.6</td>
<td>36.0</td>
</tr>
<tr>
<td>paying other bank loan instalments</td>
<td>67.0</td>
<td>87.5</td>
<td>78.7</td>
<td>63.6</td>
<td>66.7</td>
<td>50.0</td>
</tr>
<tr>
<td>paying instalments to retailers</td>
<td>53.5</td>
<td>85.7</td>
<td>47.6</td>
<td>50.0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>paying their rent</td>
<td>61.6</td>
<td>84.1</td>
<td>66.9</td>
<td>54.3</td>
<td>33.8</td>
<td>25.0</td>
</tr>
<tr>
<td>paying their public utility bills</td>
<td>50.0</td>
<td>71.0</td>
<td>56.1</td>
<td>45.2</td>
<td>35.5</td>
<td>22.7</td>
</tr>
</tbody>
</table>

Median of debt service to income ratio: 16.0 28.3 21.6 15.8 14.2 10.7

* Comprising the households which answered that it is “difficult” or “rather difficult” to meet their obligations.

– The number of households in these groups is too small to be statistically assessed.
the borrowers’ characteristics, the decline was more pronounced (almost reduced to half) over the same period and now stands at much lower levels (2005: 3.6%, 2002: 6.9%).

vii. Access to bank lending

According to the survey data, almost all (96%) households without any loans reported that they had no reason to borrow. A very small percentage (a mere 3%) reported that the borrowing process was not completed because the bank rejected the relevant application, a finding indicating that bank lending is very easy. However, the small percentage of rejections is in complete contrast with the data submitted by banks to the Bank of Greece, according to which the percentage of rejection at the final stage of customer assessment varies between 35% and 40% of loan applications.

Moreover, the responses of households concerning the transfer of outstanding loan balances from one bank to another show that a rather limited percentage of households changes credit institutions, despite intense competition between banks to attract customers and acquire a larger share in these segments of the retail banking market. The highest percentage of bank-changing households concerns consumer loans (6.4% of households with such a loan), as this is the loans category with the most attractive benefits for gathering all the loan accounts in one bank, where they are burdened with significantly lower interest rates.¹ A very small percentage of households (1.6%) reported the transfer of car purchase loan balances, while the percentage of households that reported the transfer of a housing loan balance is somewhat higher (3.2%).

viii. Conclusions

Certain basic conclusions are drawn from the above analysis concerning household borrowing, as reported in the 2005 and 2002 surveys.

1. Despite the large increase in bank loans to households in the three-year period between the two surveys and despite the significantly increased response of households to the 2005 survey, the percentage of indebted households remained virtually unchanged. This indicates that some households did not report any loans, possibly because they are generally cautious towards sampling surveys or because of the very personal character of the questions, the complexity of the questionnaire or the volume of information required about household borrowing. To the extent that such reasons are valid, the results of the survey may, within the limits of statistical error, be generalised and valid conclusions may be drawn about the borrowing behaviour of all households with loans. If, however,

¹ For transfers of credit card loan balances from one bank to another, certain banks offer zero interest rate for an initial six-month period.
because of a specific borrowing behaviour, households refrained from reporting their loans or even participating in the survey, the findings of the survey will be biased and will not be representative of the entire population. Naturally, this cannot be verified directly. All the same, the comparison of the results of the two surveys with the developments, as recorded by cumulative bank data, gives valid indications corroborating the view that a number of general conclusions may be drawn, especially concerning the trends established by the results of the two surveys.

2. The most common category of loans is credit card loans, followed by housing loans. In both cases, the percentage of indebted households that reported such type of loans was increased in the 2005 survey, but not to the extent indicated by cumulative bank data; as a result, total household indebtedness from credit cards and housing loans, as recorded in the surveys, falls very short of the corresponding figures reported by banks, especially for bank cards. However, the average indebtedness, both for cards and housing loans, of the households that took part in both surveys increased in the period 2003-2005 at an average annual rate almost equal to that of bank data. This provides a significant indication that the borrowing behaviour of non-responding households is generally similar to that of households that took part in the survey and, at least concerning this point, increases the reliability of its results.

3. As in 2002, the 2005 survey shows that the average household indebtedness grows together with income and wealth. This relationship is very strong in housing loans and much weaker in other loans as a whole. Specifically, the results of both surveys indicate that the access of low-income households to the bank system remains limited, while the percentage of indebted households in the fourth highest income group increased, as did its contribution in total debt of the sample. This may be attributed to the fact that banks have better information concerning the characteristics of their customers. It also seems to indicate a significant qualitative change in competition between banks, which, in the framework of more effective credit risk management, seem to concentrate more now than in the past on attracting customers from upper income groups. At the same time, rapid credit expansion has led to a higher debt-to-income ratio, i.e. the loan burden of households, in all income groups. The loan burden of households in the lowest income group, mainly originating from unsecured loans, is very increased, although the share of debt of these households in total household indebtedness is very limited.

4. The analysis of the results of both surveys shows that, for the vast majority of indebted households, the direct financial stress, as calculated by the debt-service costs, i.e. the instalment-to-income ratio, lies within limits considered acceptable, in the sense that this stress does not result in difficulties in the regular servicing of household loans. At the same time, in the period between the two surveys, financial stress declined significantly. Specifically, for 80% of households in the 2005 survey (compared with 75% in the 2002 survey), the debt-service costs did not exceed 32% of their income. Similarly, the percentage of households for which these costs do not exceed 40% of their income increased to 88% in 2005, from 85% in 2002. This improvement is associated with the decrease in bank
rates but, to some extent, it should also be attributed to more effective credit risk management by banks, in compliance with the guidelines of the Bank of Greece calling for the implementation of a longer-term and more forward-looking policy in this sector than what competition may force banks to implement in order to preserve or increase their share in retail banking. It should be noted, however, that the share in total household indebtedness of the remaining 12% of households, i.e. those with debt-service costs over 40%, is significant (29.9%) and, to a large extent, concerns non-housing loans, while for a small percentage of households (2005: 1.6%, 2002: 4%), debt-service costs exceed 100% of their income. These figures show that households themselves should assess more carefully their ability to service their loans regularly. At the same time, there seems to be considerable scope for further improvement in credit risk management and the selection of bank customers, so that the extreme household financial stress values can be gradually reduced and/or eliminated. The banks’ policy seems to be oriented in this direction, also in line with the rules imposed by the Bank of Greece. However, apart from the caution exhibited by households themselves in undertaking loan obligations, the information available to banks about the solvency of their customers must be improved, especially for credit card loans, as they represent a higher credit risk for banks. It should be noted that the percentage of households reporting difficulties in servicing their credit card loans, i.e. unsecured and easily accessed loans, is comparable, for all income groups, with the percentage of households reporting difficulties in servicing their housing loans or even exceeds this percentage. It is therefore likely that part of these loans has been granted because banks did not have a complete image of their customers’ characteristics, especially those relating to customers’ solvency and ability to repay their loans regularly. However, any one bank cannot satisfactorily measure or approach these customer characteristics if borrowers have relations with many other banks, as in the case of credit card loans. The expansion of the “Tiresias S.A.” database and the access of banks to a more adequate information system\(^1\) should lead to fewer bad debts and should make a significant contribution towards further improving the stability of the financial system, reduce the cost of capital, lay the foundations for more effective bank intermediation and support a higher rate of economic growth.

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1 It should be noted that, for credit card loans, the relevant information system of “Tiresias” had recorded 1,960,021 credit cards at end-2005, corresponding to loans totalling €1,792 million, compared with 5,771,585 cards which, according to banks’ data, were in circulation at end-2005 and a total outstanding balance of loans of €8,445 million (including securitised loans).
VII. THE CAPITAL MARKETS

1. INTRODUCTION

Falling long-term interest rates in government paper markets and a continued favourable conjuncture in the stock exchange were the main drivers of developments in Greek capital markets in 2005.

In more detail, the primary market for government paper was characterised by the fall in interest rates and in the amount of funds raised. Increased liquidity conditions in international money and capital markets, combined with strong (both foreign and domestic) demand for holdings in the secondary market for government paper, led to a drop in the yields of these securities, while transactions remained at high levels. By contrast, activity in the domestic market for corporate bonds was relatively subdued, despite a considerable increase in corporate financing through bond issuance.

Share prices and stock exchange transactions retained their upward course for the third consecutive year in 2005 and enterprises renewed their recourse to the stock exchange to raise funds. Finally, developments in the mutual funds market were negative, with extensive outflows offsetting the rise in unit prices and leading to a fall in the value of their assets.

2. THE MARKET FOR GOVERNMENT PAPER

2.1 The primary market

The primary market for government paper in 2005 was marked by a reduction of securities issued and of interest rates. These developments stemmed mainly from the decline in the government’s gross borrowing requirement, as well as the favourable conditions prevailing in international bond markets, especially in respect of long-term securities. Taking advantage of these conditions, the Greek government restructured its loan portfolio, thereby increasing its average maturity and reducing debt servicing costs.

The nominal value of securities issued in 2005 fell to €38.1 billion, from €43.4 billion in 2004 (see Table VII.1). Money was raised both through new issues and through the re-opening of past issues. New issues mostly concerned syndicated loans (e.g. the new 5-year and 10-year benchmark bonds) and, to a lesser extent, issues through auction proce-
dures (e.g. the new 3-year benchmark bond) and private placement (12-year bond).\(^1\) The re-opening of past issues concerned 3-year, 5-year and 10-year bonds and was carried out mainly through auctions in the domestic market, as well as a syndicated re-opening of the 23-year indexed bond.\(^2\) It is noted that the majority of these bonds were issued in the first half of the year, mainly because of the debit interest that had to be paid during that period and because the government chose to issue high liquidity benchmark bonds (3-year, 5-year and 10-year) from the beginning of the year.

In more detail, securities offered in 2005 were mostly bonds with a maturity of 3 to 32 years (no 1-year, 7-year, 15-year and 20-year bonds were issued), while Treasury bills\(^3\) maturing after 3, 6 and 12 months accounted for only a small percentage (5.7\%) of the total value of issues, same as in 2004 (see Table VII.1). Treasury bills issued were mainly 3-month bills (accounting for 43\% of the total value of Treasury bills issued).

The value of government bonds issued in 2005 was €35.9 billion, compared with €40.9 billion in 2004 and €34.8 billion in 2003. Their breakdown according to maturity (see table VII.1) shows that 43\% (69\% in 2004) of the total were bonds with a maturity of

<table>
<thead>
<tr>
<th>Type</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treasury bills</td>
<td>4.8</td>
<td>5.7</td>
<td>5.7</td>
</tr>
<tr>
<td>Bonds</td>
<td>95.2</td>
<td>94.3</td>
<td>94.3</td>
</tr>
<tr>
<td>1-year</td>
<td>7.4</td>
<td>17.5</td>
<td>–</td>
</tr>
<tr>
<td>3-year</td>
<td>22.5</td>
<td>21.2</td>
<td>19.4</td>
</tr>
<tr>
<td>5-year</td>
<td>25.9</td>
<td>30.3</td>
<td>23.9</td>
</tr>
<tr>
<td>7-year</td>
<td>0.5</td>
<td>0.2</td>
<td>–</td>
</tr>
<tr>
<td>10-year</td>
<td>28.0</td>
<td>23.7</td>
<td>26.7</td>
</tr>
<tr>
<td>12-year</td>
<td>–</td>
<td>0.9</td>
<td>9.7</td>
</tr>
<tr>
<td>15-year</td>
<td>1.9</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>20-year</td>
<td>10.2</td>
<td>0.7</td>
<td>–</td>
</tr>
<tr>
<td>23-year</td>
<td>3.6</td>
<td>5.5</td>
<td>6.2</td>
</tr>
<tr>
<td>32-year</td>
<td>–</td>
<td>–</td>
<td>14.1</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total value (million euro)</td>
<td>36,521</td>
<td>43,361</td>
<td>38,117</td>
</tr>
</tbody>
</table>

Note: By initial (not residual) maturity as regards the re-opening of past issues.
Source: Bank of Greece.

1 Four more long-term securities were issued through private placement, for the purpose of broadening the investment base and exploiting investment opportunities.
2 This bond (maturing on 25 July 2005) is indexed to euro area inflation (except tobacco) and has a coupon rate of 2.90\%.
3 The issuance of Treasury bills by the Greek government contributes to increasing the width of the yield curve to also cover short-term securities in the secondary market.
up to 7 years and 57% (30% in 2004) bonds with a maturity of over 10 years. It is obvious therefore that the government prefers longer-term issues that allow it to benefit from the historically low long-term interest rates prevalent in the international bond markets in 2005.\(^1\) In the framework of this policy, the first Greek 32-year bond was successfully launched,\(^2\) extending the range of the Greek yield curve beyond 30 years. The average weighted maturity of total Greek government securities issued in the year under review, therefore, increased considerably to 10.46 years, from 6.85 years in 2004, and the average weighted interest rate fell to 3.08% (2004: 3.40%).\(^3\)

Investors’ demand in the primary market for government paper remained strong in 2005. In particular, the amount of capital supplied by Greek and foreign investors participating in auctions for Treasury bills and bonds was quadruple the public sector’s demand. Syndicated issues of 5-year, 10-year and 32-year bonds were also more than covered. This highlights the conditions of high liquidity prevailing in the primary market during the year.

2.2 The secondary market

The key features of the Electronic Secondary Securities Market (HDAT) in 2005 were the increase in the yields of short-term and medium-term securities at end-2005 against end-2004 (with the yields of long-term securities standing lower), the slight decrease in the value of transactions relative to 2004 and the improvement in the electronic transaction system’s operation.\(^4\)

In more detail, Greek government bond yields, in step with developments in corresponding euro area securities,\(^5\) followed a steep downward path between mid-2004 and end-September 2005 and reached historically low levels (see Chart VII.1). This stemmed from investor concerns about the possibility of high oil prices negatively affecting euro area economic growth and by the excess liquidity maintained both in Greek and international capital markets.

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1 The Greek government also proceeded with active public debt management techniques aiming at the reduction of interest rate risk.

2 This bond (amounting to €5 billion), which was launched in the beginning of March 2005 with a coupon rate of 4.50% and matures on 20 September 2037, was oversubscribed almost twice and absorbed mainly by foreign institutional investors. Due to the historically low long-term interest rates, many countries in 2005 issued bonds with a maturity of over 30 years, in order to achieve low debt servicing cost for long periods. France and the United Kingdom, for example, issued for the first time 50-year bonds, for which pension funds and insurance corporations seeking to cover their long-term liabilities showed strong demand.

3 End-October 2005 data.

4 By the joint decision 2/72451/0023/29.12.2004 of the Minister of Economy and Finance and the Governor of the Bank of Greece, as of 1 January 2005 the group of Primary Dealers in the Greek government bond market consists of 5 Greek and 16 international financial institutions, of which 14 participate in HDAT from abroad. Moreover, on 27 June 2005 the new settlement platform for government paper, which operates on the HDAT platform, was launched, allowing real-time final settlement, participants’ direct access to information regarding their transactions, as well as greater potential for managing a larger volume of transactions and their related operating risks.

5 See Chapter V.6 for developments in euro area bond markets.
Long-term bond yields declined the most during this period, which is attributed, besides the abovementioned factors, to the increased global demand for long-term securities by pension funds and insurance corporations, which apply asset-liability management techniques for the purpose of achieving duration matching.¹

In the last three months of 2005, government paper yields increased, creating a trend that continued until the end of March 2006. This was connected with the improved estimates of the course of the euro area economy and with investor expectations that the ECB, in order to keep inflation at low levels in the medium to long term, would proceed to increase its key interest rates.² The recovery of yields was more pronounced in short-term and medium-term government securities, as investors did not steer away from their long-term expectations for moderate growth rates in the euro area economy. Despite the reversal of the downward trend of yields from end-September onwards, yield volatil-

² On 1 December 2005, the ECB decided to increase (by 25 basis points) its key interest rates, which had been kept unchanged since June 2003. The same increase was also decided on 2 March 2006.
CHART VII.2

A. AVERAGE DAILY VALUE OF TRANSACTIONS IN HDAT
(MILLION EURO)

B. AVERAGE DAILY VALUE OF TRANSACTIONS IN GREEK GOVERNMENT PAPER IN THE BOOK-ENTRY SECURITIES SYSTEM
(MILLION EURO)

Source: Bank of Greece.
Volatility in the Greek government paper market (HDAT) is measured by the standard deviation of the daily yield on the Greek 10-year benchmark bond.
### Table VII.2

VALUE AND STRUCTURE OF TRANSACTIONS IN GOVERNMENT SECURITIES IN HDAT

<table>
<thead>
<tr>
<th>Years/months</th>
<th>Average daily value of total transactions (million euro)</th>
<th>Percentage share in the total value of transactions&lt;sup&gt;1&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Treasury bills</td>
<td>3-year</td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan.</td>
<td>3,999.9</td>
<td>0.2</td>
</tr>
<tr>
<td>Feb.</td>
<td>2,994.3</td>
<td>0.5</td>
</tr>
<tr>
<td>March</td>
<td>2,669.3</td>
<td>–&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>Apr.</td>
<td>2,341.4</td>
<td>0.6</td>
</tr>
<tr>
<td>May</td>
<td>2,155.1</td>
<td>0.3</td>
</tr>
<tr>
<td>June</td>
<td>2,933.7</td>
<td>0.2</td>
</tr>
<tr>
<td>July</td>
<td>2,498.8</td>
<td>–&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Aug.</td>
<td>2,525.6</td>
<td>0.2</td>
</tr>
<tr>
<td>Sept.</td>
<td>3,578.6</td>
<td>0.3</td>
</tr>
<tr>
<td>Oct.</td>
<td>3,822.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Nov.</td>
<td>3,394.4</td>
<td>0.1</td>
</tr>
<tr>
<td>Dec.</td>
<td>1,993.8</td>
<td>0.1</td>
</tr>
<tr>
<td>Jan.–Dec.</td>
<td>2,908.9</td>
<td>0.2</td>
</tr>
</tbody>
</table>

| 2006         |               |        |        |        |         |         |         |         |         |         |         |
| Jan.         | 2,615.5       | 0.2    | 3.3    | 7.8    | 0.3     | 68.4    | –<sup>3</sup> | 8.5     | 4.2     | 0.1     | 7.2     |
| Feb.         | 3,245.5       | –<sup>2</sup> | 2.9    | 6.4    | 0.1     | 72.6    | –       | 6.8     | 5.1     | 0.1     | 6.0     |
| March        | 2,927.3       | 0.2    | 5.0    | 6.4    | –       | 72.1    | 0.2     | 4.8     | 4.9     | –<sup>4</sup> | 6.4     |

<sup>1</sup> As per initial maturity.

<sup>2</sup> The average daily value of transactions in Treasury bills amounted to €0.48 million in March 2005, €0.95 million in July 2005 and €2.2 million in February 2006.

<sup>3</sup> The average daily value of transactions in 12-year bonds amounted to €0.5 million in August 2005, €0.5 million in October 2005, €1.4 million for 2005 as a whole and €1.2 million in January 2006.

<sup>4</sup> The average daily value of transactions in the 23-year bond amounted to €0.8 million in January 2005, €0.8 million in February 2005, €1.2 million in March 2005, €1.2 million in July 2005, €0.5 million in August 2005, €0.5 million in December 2005 and €1.3 million in March 2006.

Source: Bank of Greece.
in 2004. According to balance of payments statistics, net foreign investment in Greek government paper stood at €20.7 billion in 2005, against €21.6 billion in 2004. This amount includes investment in the new 32-year bond, of which four fifths were foreign investment.

3. THE STOCK MARKET

The recovery of the composite share price index that had started in 2003 continued in 2005 at a robust pace that ranked second among the key stock market indices of euro area countries. Moreover, the value of transactions and of total funds raised through the stock market was particularly high.

The Greek stock market in 2005 was favourably affected mainly by domestic factors, as well as the positive developments in international stock markets, especially in the euro area, due to the maintenance of liquidity at high levels in 2005 and the relatively low returns on alternative forms of investment. The profitability of firms listed in the Athens Exchange (Athex) rose at a high rate (38%), having risen by 12% in 2004 and 35% in 2003. Part of these firms’ profitability now comes from the international activities in which some of them are engaged. At the same time, important business initiatives undertaken by companies from various sectors were announced and a positive influence was exerted by attempts that were made towards the restructuring of firms affiliated with the public sector and by the improvement in the institutional framework governing the stock market.

In 2005 Law 3340/2005 against insider trading and market manipulation and Law 3371/2005 on securities admitted to trading in Athex were passed. At end-November 2005 the new Athens Exchange Regulation was put into effect. According to this Regulation, the markets that operated up to 25 November 2005 (main, parallel, new market and EAGAK) as well as the “special liquidity” category and the “supervision” (which includes companies placed under surveillance) category were replaced by a new market consisting of four categories (“large capitalisation”, “medium and small capitalisation”, “special stock exchange characteristics” and “supervision”).

As regards the evolution of indices, the Athex composite share price index has been rising since August 2004 (excluding March and April 2005), to reach a peak in the last two months of 2005 (see Chart VII.3A) and continue thereafter for the first three months of 2006. A trough (2,828.33 points) was recorded at the beginning of the year (5 January) and a peak (3,663.90) at its end (30 December). Overall, the Athex composite share price index rose by 31.5% at end-December 2005 compared with end-

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1 The outstanding balance of foreign investment in Greek government paper at the end of 2005 reached almost 63% of the total outstanding amount.
2 See also footnote 2 on page 229.
3 In 2005 Greek firms drew up their financial statements according to international accounting standards for the first time. After-tax profits were particularly improved due to the cut in tax rates (2005: 32%, 2004: 35%). It is noted, however, that if the results of financial corporations were excluded, this increase would be limited to 4.6%.
CHART VII.3

A. SHARE PRICE INDICES OF THE ATHENS EXCHANGE

BANKS (30 DEC. 05 = 5,000)
COMPOSITE INDEX (1980=100)

B. AVERAGE DAILY VALUE OF TRANSACTIONS
(MILLION EURO)

TOTAL
BANK SHARES

C. MONTHLY MARKETABILITY OF SHARES
(PERCENTAGES)

TOTAL
BANKS

Sources: Athens Exchange and Bank of Greece.
December 2004.\(^1\) A performance higher than that of the composite index was recorded by the medium (47.1\%) and the small capitalisation index (33.3\%), with the high capitalisation index\(^2\) performing somewhat lower (30.5\%). Moreover, the rise in the composite index,\(^3\) which ranked third after its Austrian equivalent (42.7\%) as far as the euro area is concerned and the Japanese Nikkei 225 (40.2\%),\(^4\) was considerably higher than that of the Dow Jones EURO STOXX broad index in the euro area (23\%)\(^5\) and of the Standard & Poor’s 500 in the USA (3\%).\(^6\)

The participation of foreign investors in the share capital of Athex-listed companies increased. Foreign investor behaviour has contributed to positive developments in the Greek stock exchange market during the past few years. According to balance of payments statistics, net foreign capital inflow for holdings in Athex-listed shares in 2005 amounted to €5,118 million, i.e. increased by 50\% compared with 2004. This inflow was particularly strong during the second half of the year and continued during the first quarter of 2006. Besides, based on Central Securities Depository data, at end-December 2005 foreign investors\(^7\) accounted for 40.3\% (2004: 36\%) of the market capitalisation of Athex-listed shares. Out of this, 28\% (2004: 24\%) related to institutional investors.

Based on these developments, the after-tax P/E ratio for the composite index shares was approximately 20 at the end of the year. By contrast, the corresponding ratio (16) for the Dow Jones EURO STOXX broad index stood at 2004 levels, i.e. lower than that of the Athex composite share price index. Besides, both the dividends of total Athex shares, based on end-2005 prices, and the distributable dividends for the fiscal year 2005 remained at 2004 levels (2.3\%), similar to the levels of the Dow Jones EURO STOXX broad index.\(^8\)

The average daily value of transactions in 2005 was €209 million, 48.6\% higher than in 2004 (see Chart VII.3B and Table VII.3). The total value of transactions in shares in the stock market was €52,543.7 million in 2005, up from €35,623 million in 2004 (see Table VII.4). About 3/4 of total transactions related to large capitalisation shares. A significant increase in share transactions was recorded in the commercial-industrial and banking sectors, raising their contribution to the total value of transactions, while the contribution of the telecommunications sector fell (see Table VII.4).

Following a path similar to that of the average daily value of transactions, average annual share marketability\(^9\) increased to 4.3\% in 2005, from 3.6\% in 2004 (see Chart VII.3C).

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\(^1\) The increase in the average level of the composite index was slightly lower (29.4\%) in 2005 compared with 2004.
\(^2\) This relates to the high capitalisation index FTSE ASE 20 and not the large capitalisation category.
\(^3\) The correlation between Greek stock market returns and developed international stock market returns remained low in 2005 as well.
\(^4\) 41.2\% change, in euro terms.
\(^5\) See Chapter V.7 for a more detailed analysis of euro area stock market developments.
\(^6\) Its rate of change, in euro terms, was 18\%.
\(^7\) 61\% of institutional investors came from EU countries and 20\% from the USA.
\(^8\) Source: Bloomberg.
\(^9\) Ratio of the number of traded shares to the total number of listed shares.
### TABLE VII.3
STOCK MARKET AGGREGATES

<table>
<thead>
<tr>
<th>Year</th>
<th>Share price indices¹</th>
<th>Average daily value of transactions ² (million euro)</th>
<th>Market capitalisation ¹ (million euro)</th>
<th>Market capitalisation (percentage of GDP)</th>
<th>Funds raised through the Athens Exchange (ATHEX)⁴ (million euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Composite (1980=100)</td>
<td>Banks (30 Dec. 05=5,000)</td>
<td>Shares</td>
<td>Loans ³</td>
<td>Total</td>
</tr>
<tr>
<td>2002</td>
<td>1,748.4</td>
<td>1,700.6</td>
<td>100.2</td>
<td>65,760</td>
<td>114,570</td>
</tr>
<tr>
<td>2003</td>
<td>2,263.6</td>
<td>2,686.5</td>
<td>141.1</td>
<td>84,547</td>
<td>135,219</td>
</tr>
<tr>
<td>2004</td>
<td>2,786.2</td>
<td>3,877.1</td>
<td>140.8</td>
<td>92,140</td>
<td>157,905</td>
</tr>
<tr>
<td>2005</td>
<td>3,663.9</td>
<td>5,000.0</td>
<td>209.3</td>
<td>123,033</td>
<td>178,925</td>
</tr>
</tbody>
</table>

¹ At year-end.
² In shares. Excluding transactions in existing shares.
³ Comprising Greek Treasury bills and government bonds, bank bonds and corporate bonds.
⁴ Through capital increase and issuance of new shares. Subscriptions to new capital are entered on the last day of the subscription period.

Sources: Athens, Bank of Greece calculations and (for GDP) Ministry of Economy and Finance.
| TABLE VII.4 |
| VALUE AND STRUCTURE OF STOCK MARKET TRANSACTIONS |
| (Million euro) |

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005¹</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value of transactions</td>
<td>Percentage of total</td>
<td>Value of transactions</td>
<td>Percentage of total</td>
</tr>
<tr>
<td>Shares</td>
<td>24,759.1</td>
<td>99.9</td>
<td>34,853.1</td>
<td>99.8</td>
</tr>
<tr>
<td>– Banks</td>
<td>3,274.1</td>
<td>13.2</td>
<td>6,450.2</td>
<td>18.5</td>
</tr>
<tr>
<td>– Leasing</td>
<td>22.6</td>
<td>0.1</td>
<td>41.4</td>
<td>0.1</td>
</tr>
<tr>
<td>– Insurance</td>
<td>119.6</td>
<td>0.5</td>
<td>183.4</td>
<td>0.5</td>
</tr>
<tr>
<td>– Investment</td>
<td>268.2</td>
<td>1.1</td>
<td>338.1</td>
<td>1.0</td>
</tr>
<tr>
<td>– Construction</td>
<td>1,449.6</td>
<td>5.8</td>
<td>1,908.0</td>
<td>4.3</td>
</tr>
<tr>
<td>– Commercial/industrial</td>
<td>3,503.8</td>
<td>14.1</td>
<td>5,200.0</td>
<td>14.9</td>
</tr>
<tr>
<td>– Telecommunications</td>
<td>4,230.6</td>
<td>17.5</td>
<td>5,152.0</td>
<td>14.7</td>
</tr>
<tr>
<td>– Holding</td>
<td>1,903.5</td>
<td>7.7</td>
<td>2,400.8</td>
<td>6.9</td>
</tr>
<tr>
<td>– Other</td>
<td>4,575.4</td>
<td>18.5</td>
<td>8,264.5</td>
<td>23.7</td>
</tr>
<tr>
<td>Main market</td>
<td>19,447.4</td>
<td>78.5</td>
<td>29,588.4</td>
<td>84.6</td>
</tr>
<tr>
<td>Parallel market</td>
<td>5,084.6</td>
<td>20.5</td>
<td>4,975.2</td>
<td>14.2</td>
</tr>
<tr>
<td>New stock market</td>
<td>227.1</td>
<td>0.9</td>
<td>319.5</td>
<td>0.9</td>
</tr>
<tr>
<td>Emerging capital markets within the Greek market (EAGAK)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>0.0</td>
</tr>
<tr>
<td>Sale of existing shares</td>
<td>11.9</td>
<td>0.0</td>
<td>33.3</td>
<td>0.1</td>
</tr>
<tr>
<td>Large capitalisation category</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Medium and small capitalisation category</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Special stock market characteristics category</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Supervision category</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Bonds²</td>
<td>13.0</td>
<td>0.1</td>
<td>49.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Total</td>
<td>24,784.0</td>
<td>100.0</td>
<td>34,935.5</td>
<td>100.0</td>
</tr>
</tbody>
</table>

¹ According to the new Athens Exchange regulation, which came into force on 28 November 2005, the stock market is divided into four categories: large capitalisation, medium and small capitalisation, special stock market characteristics, and supervision. Therefore, data on the main, the parallel, and the new market and EAGAK concern the period 1 January 2005–27 November 2005, while data on the categories of large capitalisation, medium and small capitalisation, special stock market characteristics and supervision concern the period 28 November 2005–31 December 2005. The other data are on an annual basis.

² Comprising Greek government bonds and Treasury bills, bank bonds, corporate bonds and bonds issued by international organisations, as well as national loans in foreign currency, fiscal consolidation loans, expropriation loans, premium loans and loans by legal persons and firms.

Source: Athex.
The market capitalisation of Athex-listed shares rose to €123,033 million or 68% of GDP at end-2005, from €92,140 million or 55% of GDP at end-2004 (see Table VII.3). This rise stemmed mainly from large capitalisation shares, although the prices of 3/5 of total shares increased in 2005, compared with 1/4 in 2004. The impact of newly listed companies on market capitalisation remained limited in 2005.

Total funds raised through the stock market in 2005 increased considerably compared with 2004 and corresponded to 42.5% of the average funds raised during the three-year period 1998-2000. In particular, total funds raised in 2005 amounted to €2,967 million against €476 million in 2004, although a much smaller number of companies (2005: 23, 2004: 43) was involved. Out of these companies, six (2004: 10 companies) were newly-listed and raised €61 million (2004: €79.4 million). Significantly higher, for the second consecutive year, was the percentage participation (65%) of banks in total funds raised (2004: 39%, 2003: 28%). Industrial firms raised a mere 1.7% of total funds (2004: 21.5%).

Between end-2004 and end-2005, the banking sector index rose by 28.9%, i.e. slightly lower than the Athex composite share index. At the end of 2005, however, the banking sector accounted for 37.3% of total market capitalisation, against 34.5% at end-2004. The average daily value of transactions in bank shares was higher than in 2004 (2005: €73 million, 2004: €44 million), as well as their marketability (2005: 3.8%, 2004: 2.6%).

The rise in bank share prices at a considerably lower rate than profits led to a drop in the after-tax P/E ratio, which stood at 18.7 at end-December 2005 compared with 28.5 at end-December 2004. Banks’ dividend yield is estimated to have increased slightly in 2005 (2.5%). These developments reflect the sustained, in 2005 as well, investor interest in shares of the banking sector, both due to the improvement in the banks’ operating profitability and to the positive expectations generated by the extension of their activity to the Balkan markets. In more detail, the operating revenue of Athex-listed Greek banks2 rose by 14.4% (15.1% for banking groups), while earnings before provisions and taxes rose by 48.5% (45.5% at banking group level). This increase is mainly due to interest income, which grew because of continued credit expansion, and to the containment of banks’ operating expenses.3

Among the remaining sectoral share price indices, an increase (63.8%) that was almost twice as big as that of the composite index was recorded by the oil refineries index, followed by the IT index (50.9%) and the insurance index (50.6%). Moreover, a higher performance than that of the composite index was recorded by the individual sectoral indices of insurance, wholesale trade, cement production companies, industrial companies, portfolio investment companies, holding companies and telecommunication companies. Other indices performed lower than the composite index, whereas the publishing-printing sector index recorded a decrease.

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1 The funds that were raised by the Agricultural Bank in June (€1,248.9 million) and Emporiki Bank in November (€397.1 million) contributed significantly to this increase. Moreover, an amount of €2,100 million was raised in 2005 by the sale of already existing OPAP and OTE shares.
2 Excluding the Bank of Greece.
3 See Chapter X for a detailed presentation of banks’ profitability.
Mutual fund activity decreased considerably in 2005, since the value of their assets fell by €4.5 billion or 14.4% relative to 2004 and stood at €27.1 billion (see Chart VII.4 and Table VII.5). This was due to the reduction of the number of mutual fund units in circulation owing to increased capital outflows, which more than offset the rise in unit prices recorded in all mutual fund categories.

In more detail, the number of mutual fund units in circulation fell significantly (64%) in 2005 for money market funds and to a lesser extent for balanced-type (28%) and equity mutual funds (14.3%), while showing an impressive increase (82.1%) for bond-type mutual funds. The prices of equity-type and balanced-type mutual fund units rose considerably (27.5% and 11.7% respectively), while money market and bond-type mutual fund units rose only slightly (1.9% and 1.8% respectively).

As regards individual categories, the assets of money market mutual funds declined significantly (68%), mainly due to the conversion of some of them into bond-type mutual funds and, to a lesser extent, due to the increased capital outflows (see Chart...
VII.5), which were attributed, as aforementioned, to low yields, mainly because of the low interest rates prevailing in money markets. A smaller increase (38.1%) was recorded in balanced-type mutual funds’ assets, mainly owing to the conversion of one of these into a bond-type mutual fund. Following these developments, bond-type mutual funds recorded a significant increase (74%). An increase of 15.9% was seen in the assets of equity-type mutual funds. Furthermore, the assets of “funds of funds” followed an upward path in the second half of 2005, although their operation started in mid-2005.

The sharp increase in the assets of bond-type mutual funds doubled their share in the total value of assets of all mutual funds to 48.9%. It is noted that in 2005 the assets of foreign bond-type mutual funds covered almost 2/3 of all bond-type mutual funds, while in 2004 it was domestic bond-type mutual funds that accounted for this percentage (see Table VII.5). A rise was recorded in the share of equity-type mutual funds (2005: 22%,

<table>
<thead>
<tr>
<th>Type of mutual fund</th>
<th>2004</th>
<th>2005</th>
<th>Percentage change in value compared with previous year</th>
<th>Percentage of total assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money-market type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic</td>
<td>39</td>
<td>15,435</td>
<td>32</td>
<td>4,938</td>
</tr>
<tr>
<td>Foreign</td>
<td>–</td>
<td>–</td>
<td>6</td>
<td>2,274</td>
</tr>
<tr>
<td>International</td>
<td>4</td>
<td>286</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Bond type</td>
<td>62</td>
<td>7,620</td>
<td>66</td>
<td>13,257</td>
</tr>
<tr>
<td>Domestic</td>
<td>32</td>
<td>5,358</td>
<td>32</td>
<td>4,665</td>
</tr>
<tr>
<td>Foreign</td>
<td>15</td>
<td>1,059</td>
<td>34</td>
<td>8,592</td>
</tr>
<tr>
<td>International</td>
<td>15</td>
<td>1,203</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Equity type</td>
<td>116</td>
<td>5,147</td>
<td>105</td>
<td>5,965</td>
</tr>
<tr>
<td>Domestic</td>
<td>68</td>
<td>4,313</td>
<td>61</td>
<td>4,981</td>
</tr>
<tr>
<td>Foreign</td>
<td>38</td>
<td>800</td>
<td>44</td>
<td>1,012</td>
</tr>
<tr>
<td>International</td>
<td>10</td>
<td>34</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Balanced type</td>
<td>45</td>
<td>3,426</td>
<td>44</td>
<td>2,120</td>
</tr>
<tr>
<td>Domestic</td>
<td>26</td>
<td>2,860</td>
<td>26</td>
<td>786</td>
</tr>
<tr>
<td>Foreign</td>
<td>4</td>
<td>92</td>
<td>18</td>
<td>1,334</td>
</tr>
<tr>
<td>International</td>
<td>15</td>
<td>474</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Funds of funds</td>
<td></td>
<td></td>
<td>11</td>
<td>809</td>
</tr>
<tr>
<td>Equity type</td>
<td>–</td>
<td>–</td>
<td>6</td>
<td>265</td>
</tr>
<tr>
<td>Balanced type</td>
<td>–</td>
<td>–</td>
<td>5</td>
<td>544</td>
</tr>
<tr>
<td>Total</td>
<td>262</td>
<td>31,628</td>
<td>258</td>
<td>27,089</td>
</tr>
</tbody>
</table>

1 At year end.
Source: Bank of Greece.
2004: 16.3%), the largest part of which related to domestic equity-type mutual funds. By contrast, the share of money market mutual funds fell considerably (2005: 18.2%, 2004: 48.8%) and that of balanced-type mutual funds also dropped (2005: 7.8%, 2004: 10.8%). Lastly, the share of the funds of funds category was 3%.

Foreign mutual fund units, especially of the bond-type, sold more in 2005, in contrast to domestic mutual funds (see Tables VII.5 and VII.6). An exception to this were domestic equity-type mutual funds, whose assets increased only due to the significant rise in the prices of Athex shares. However, increased share prices led to the liquidation of this category’s units and the transfer of part of their capital to foreign equity-type mutual funds.

In 2005, demand for mutual funds was met mainly by the sale of units of mutual funds already operating at end-2004. The total number of mutual funds fell to 258 in 2005, from 262 in 2004 and 265 in 2003 (see Chart VII.4). This was partly due to the fact that the number (22) of newly launched mutual funds (10 funds of funds, 4 bond-type, 4 balanced-type, 3 equity-type and 1 money market mutual fund), whose asset value amounted to €2.8 billion at the end of 2005, was smaller compared with the number (26) of mutual

![Chart VII.5: Mutual Fund Net Inflows (2005)](chart.jpg)

Source: Association of Greek Institutional Investors.
funds that withdrew from the market (15 equity-type, 7 money market, 2 bond-type and 2 balanced-type mutual funds). Moreover, a mutual funds management company (société anonyme) was absorbed by its parent bank, thereby reducing the number of these companies to 25 in 2005.

The main feature of mutual funds' investing behaviour during 2005 was the increased holdings mainly in foreign bond markets and, to a lesser extent, in domestic and foreign stock markets. In more detail, mutual funds' assets decreased by €4.5 billion between end-2004 and end-2005 because of a significant decline in holdings of repos, synthetic currency swaps and government paper. By contrast, a rise was recorded in holdings of foreign bonds, Athex-listed shares and shares listed in foreign stock markets (see Table VII.6).

In contrast to the Greek mutual funds market, the European market was particularly active in 2005. The assets of European mutual funds rose by 23.3% in 2005, (2004:

### TABLE VII.6

<table>
<thead>
<tr>
<th>Portfolio Structure of Mutual Funds</th>
<th>2004</th>
<th>2005</th>
<th>Change</th>
<th>Percentage change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Domestic investment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Greek government bonds and Treasury bills</td>
<td>16,971</td>
<td>12,834</td>
<td>-4,137</td>
<td>-24.4</td>
</tr>
<tr>
<td>– Other bonds</td>
<td>5,396</td>
<td>3,713</td>
<td>-1,683</td>
<td>-31.2</td>
</tr>
<tr>
<td>– Shares listed on the Athex</td>
<td>303</td>
<td>230</td>
<td>-73</td>
<td>-24.1</td>
</tr>
<tr>
<td>– Repos</td>
<td>4,241</td>
<td>5,024</td>
<td>783</td>
<td>18.5</td>
</tr>
<tr>
<td>– Synthetic currency swaps</td>
<td>3,008</td>
<td>637</td>
<td>-2,371</td>
<td>-78.8</td>
</tr>
<tr>
<td>– Mutual fund shares/units</td>
<td>4,023</td>
<td>2,583</td>
<td>-1,440</td>
<td>-35.8</td>
</tr>
<tr>
<td><strong>Foreign investment</strong></td>
<td></td>
<td></td>
<td>223</td>
<td>1.7</td>
</tr>
<tr>
<td>– Government bonds</td>
<td>377</td>
<td>883</td>
<td>506</td>
<td>134.2</td>
</tr>
<tr>
<td>– Other bonds</td>
<td>6,347</td>
<td>8999</td>
<td>2,652</td>
<td>41.8</td>
</tr>
<tr>
<td>– Shares listed on organised stock markets</td>
<td>923</td>
<td>1,463</td>
<td>540</td>
<td>58.5</td>
</tr>
<tr>
<td>– Repos</td>
<td>2,358</td>
<td>1,278</td>
<td>-1,080</td>
<td>-45.8</td>
</tr>
<tr>
<td>– Synthetic currency swaps</td>
<td>3,152</td>
<td>611</td>
<td>-2,541</td>
<td>-80.6</td>
</tr>
<tr>
<td>– Mutual fund shares/units</td>
<td>3</td>
<td>149</td>
<td>146</td>
<td>4,706.5</td>
</tr>
<tr>
<td><strong>Other investment</strong></td>
<td>1,497</td>
<td>872</td>
<td>-625</td>
<td>-41.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>31,628</td>
<td>27,089</td>
<td>-4,539</td>
<td>-14.4</td>
</tr>
</tbody>
</table>

1 At year-end.

Source: Bank of Greece.

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1 In compliance with the Capital Market Committee Decision No. 1/317/11 November 2004, the subcategory of “international” mutual funds was abolished in 2005 and the mutual funds that came under this category now fall under foreign mutual funds. For more details, see Bank of Greece, Annual Report 2004, Box VII.1, April 2005.
11%), reaching €5.2 trillion. Equity-type mutual funds weighed heavily in this development. Their assets grew by 35.3% owing to the rise in share prices and the consequent net inflows. In the European mutual funds market, the share of equity-type mutual funds came to 39% of the assets of total mutual funds in 2005, against 25% for bond-type mutual funds, 18% for money market, 13% for balanced-type and 5% for funds of funds. Greek mutual funds rank 16th, in terms of assets, among the mutual funds of 23 European countries and hold a share of 0.5% in total assets. This share is equivalent to that of Portugal (0.5%) and slightly lower than Finland’s (0.7%) and Norway’s (0.7%). Lastly, the three European countries with the highest mutual fund assets are Luxembourg (€1.4 trillion), France (€1.1 trillion) and the United Kingdom (€0.5 trillion).

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1 According to European Fund and Asset Management Association (EFAMA) data. During the same period, the increase in mutual fund assets was smaller in the USA (9.8%), but total assets were almost twice as much (9 trillion US dollars, source: Investment Company Institute).
VIII. PUBLIC FINANCE

1. THE PUBLIC SECTOR BORROWING REQUIREMENT AND ITS FINANCING

Greece made particular efforts in 2005 to reduce its excessive deficit and to meet its EU obligations. According to the latest provisional data notified to the European Commission under the Excessive Deficit Procedure, the general government deficit, as a percentage of GDP, shrank to 4.5% in 2005, from 6.9% in 2004 (see Table VIII.1). This considerable fiscal adjustment, which was achieved despite a small economic slowdown and a shortfall in revenue, satisfies the requirements imposed on Greece for 2005 and should allow Greece to bring its deficit down further in 2006 to below the reference value of 3% of GDP set forth in the Maastricht Treaty.

<table>
<thead>
<tr>
<th>Year</th>
<th>General government deficit</th>
<th>Central government deficit</th>
<th>Social security organisations and local authorities</th>
<th>Central government deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>-4.9</td>
<td>-6.6</td>
<td>1.7</td>
<td>-3.9</td>
</tr>
<tr>
<td>2002</td>
<td>-4.9</td>
<td>-7.8</td>
<td>2.9</td>
<td>-3.7</td>
</tr>
<tr>
<td>2003</td>
<td>-5.8</td>
<td>-8.6</td>
<td>2.8</td>
<td>-6.3</td>
</tr>
<tr>
<td>2004</td>
<td>-6.9</td>
<td>-9.6</td>
<td>2.7</td>
<td>-7.6</td>
</tr>
<tr>
<td>2005*</td>
<td>-4.5</td>
<td>-6.3</td>
<td>1.8</td>
<td>-6.2*</td>
</tr>
</tbody>
</table>

Table VIII.1 GENERAL AND CENTRAL GOVERNMENT DEFICITS (As a percentage of GDP)

1 Ministry of Economy and Finance data, notified to the European Commission under the Excessive Deficit Procedure.
2 General Accounting Office data published in the state budget.
3 Including expenditure of €675 million that was not taken into account in the 2005 estimates published in the Introductory Report on the 2006 Budget.
4 Bank of Greece data. They only concern the borrowing requirement of central government on a cash basis. The borrowing requirement of public entities is calculated by the NSSG on the basis of detailed data collected directly from these entities through a special quarterly survey regarding their financial results (revenue-expenditure) and their financial position (borrowing, investment in securities, deposits, etc.), since the banking system's data are no longer adequate for reliable estimates.

Sources: Bank of Greece, Ministry of Economy and Finance, NSSG.

Several other EU countries saw a modest fiscal improvement, leading to a decrease in the average general government deficit in both the euro area from 2.8% of GDP in 2004 to 2.4% in 2005 and the EU-25 from 2.6% of GDP in 2004 to 2.3% of GDP in 2005. Whereas in most euro area countries the improved fiscal performance was driven by an upturn in revenue, Greece’s considerable deficit reduction was due to a curb on spending, in particular for public investment.
The strengthening of Greece’s public finances is further reflected in the narrowing of the central government deficit\(^1\) (on an administrative basis), which fell by 1.4 percentage points to 6.2% of GDP (see Table VIII.1). State budget developments are analysed in detail in Section 2 below.

Finally, the central government borrowing requirement, based on central government and OPEKEPE\(^2\) cash flows, also declined, from 9.3% of GDP in 2004 to 8.0% in 2005. Because of the exclusion of social security organisations and local authorities from central government data (both on a cash and an administrative basis), the latter are only comparable with central government data on a national accounts basis, not with general government data. The discrepancy between the central government deficit (6.3% of GDP) on a national accounts basis and the central government borrowing requirement (8.0% of GDP) is mainly due to the fact that a number of central government transactions, though not counted in the national accounts balance, are included in the calculation of the borrowing requirement on a cash basis. Moreover, while cash data record total cash flows over the year, national accounts data (as per the methodology of the European System of Accounts 1995 – ESA 95) are compiled on an accrual basis, i.e. according to when a liability arises or an asset is created and regardless of when the relevant amount is actually paid or received. This explains why there usually is a discrepancy between the borrowing requirement and the respective national accounts figure. In fact, the two items sometimes even evolve in opposite directions.

\textit{The central government borrowing requirement}

According to available provisional data, the central government borrowing requirement fell from 9.3% of GDP in 2004 to 8.0% of GDP in 2005 (see Table VIII.2). However, this drop was less than the drop of 3.3 percentage points of GDP in the central government deficit on a national accounts basis. This can be explained by the fact that the cash deficit was affected by a series of factors that are not taken into account when measuring the deficit using the national accounts methodology. In greater detail, the 2005 cash deficit was affected upwards by payments totalling €2,586 million for the settlement of overdue liabilities to public hospital suppliers\(^3\) and by the disbursement of €1,055 million as government participation in the share capital increase of the Agricultural Bank of Greece. On the other hand, the proceeds (€1,916 million) from the sale of 16.4% of

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1 According to state budget data.
2 The Payment and Control Agency for Guidance and Guarantee Community Aid (OPEKEPE) manages Common Agricultural Policy (CAP) subsidies to farmers and its account is essentially balanced. Any deficit (or surplus) is attributable to the time lag between the payment of the subsidies to the farmers and their collection from the EU, as well as to interest payments.
3 These particular payments affected the national accounts deficits for the years 2001 to 2004, during which the relevant obligation arose.
OPAP (the Greek soccer pools organisation) shares and 10% of OTE (Hellenic Telecommunications Organisation) shares contributed to the narrowing of the cash deficit. These extraordinary payments and receipts pushed the cash deficit up by €1,725 million. A deduction of this amount would lower the 2005 cash deficit further by almost one percentage point to 7.0% of GDP, i.e. close to the level of the deficit on a national accounts and an administrative basis.

The narrowing of the cash deficit is largely attributed to the public investment budget, the deficit of which decreased to €4,760 million or 2.6% of GDP in 2005, from €6,536 million or 3.9% of GDP in 2004. Underlying the drop in the public investment budget deficit was a 21.0% cutback over the previous year in investment expenditure, following the completion of the projects related to the Olympic Games. This cutback more than offset the 7.4% decline in receipts under the public investment budget.

The ordinary budget cash deficit1 came to €10,033 million or 5.5% of GDP, compared with €8,841 or 5.2% of GDP in 2004, and was also affected upwards by the extra-

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1 This deficit also includes changes in central government accounts with the Bank of Greece, which are excluded from administrative data.
ordinary transactions mentioned earlier. Properly adjusted for these transactions, the ordinary budget deficit for 2005 falls to 4.6% of GDP.

Finally, OPEKEPE posted a surplus of €369 million or 0.2% of GDP, against a deficit of €228 million in 2004.

It should be noted that, because of the lack of complete data for the estimation of the cash results of public entities, the Bank of Greece has stopped calculating the general government borrowing requirement since 2003. The relevant national accounts data are drawn from a special quarterly survey by the NSSG, which collects raw data on the financial results and position of these entities.

The financing of central government borrowing requirement, which was smaller than in 2004, went smoothly in 2005, while long-term interest rates declined slightly further. As in previous years, the financing was largely effected through the issuance of medium- and long-term bonds (see Table VIII.3), a significant proportion of which was purchased by non-residents. By contrast, short-term borrowing (Treasury bills) decreased slightly. Part of the central government borrowing requirement was financed by domestic investors and through external borrowing, while a decline was observed in

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1 Social security organisations, local authorities and other legal persons in public law.
central government liabilities to domestic financial institutions. It should be clarified that non-resident holdings of domestic euro bonds are not included in “external borrowing”. Also, the average weighted interest rate on Greek government bonds purchased in 2005 decreased further to 3.1%, from 3.4% in 2004, reflecting a broader downward trend in euro area interest rates.

2. FISCAL AGGREGATES

2.1 The state budget

The drastic change in the stance of fiscal policy in 2005 is also visible in the state budget, which saw its deficit narrow from €12,861 million or 7.6% of GDP in 2004 to €11,275 million or 6.2% of GDP in 2005 (see Table VIII.9). Nonetheless, the state budget deficit still exceeded the amount budgeted for 2005 (€8,517 million) by €2,758 million or 1.5% of GDP. This overrun stems entirely from the ordinary budget deficit, which was roughly 70% higher than forecast (see Table II.1). Thus, all of the fiscal adjustment came from the reduction in the public investment budget deficit.

The overrun of the budgeted figure for the ordinary budget deficit was caused by slippages on both the revenue and the expenditure side and, more specifically, by a revenue shortfall of €1,550 million combined with an expenditure overrun of €1,105 million. These developments are partly related to trends in revenue and expenditure that began to emerge in the early 2000s and were not reined in in time. However, the variance between actual and budgeted figures was less pronounced in 2005 than in 2004, especially on the expenditure side.

The improvement in the state budget deficit is also reflected in the shrinking of the primary deficit, from 2.0% of GDP in 2004 to 0.8% in 2005 (see Chart VIII.1).

Revenue

Ordinary budget revenue rose by 6.4% in 2005, after increasing by 5.5% in 2004, and reached €44,760 million (see Table VIII.4). Given that nominal GDP growth was 7.5% in 2005, the income elasticity of revenue is estimated at 0.85. For the fourth straight year, revenue fell short of budget projections (by a total €1,550 million or almost 0.9% of GDP).

---

1 The state budget is drawn up on an administrative basis by the General Accounting Office.
2 Including a total of €675 million in payments that were not taken into account in the 2005 estimates published in the Introductory Report on the 2006 Budget.
3 Due to constant changes in taxation and the difficulties in estimating their effect on revenue, this measure refers to the overall change in revenue (“buoyancy”) in relation to the change in GDP.
This shortfall was exclusively due to the poor performance of revenue from indirect taxes (€1,656 million). By contrast, receipts from direct taxes and non-tax revenue exceeded budget projections by €39 million and €67 million respectively. Moreover, revenue was considerably boosted in 2005 by the impact of a number of extraordinary measures introduced after the budget was compiled, the most important of which are as follows:

(a) the measures introduced on 29 March 2005\(^1\) within the framework of the revised Updated Stability and Growth Programme 2004-2007;

(b) the decision to increase “objective” real estate prices (i.e. set for tax purposes) and to impose (as of 1 January 2006) VAT on real estate;\(^2\) which expedited real estate transfers in the second half of 2005; and

(c) the intensification of fiscal audits in the second half of the year, which boosted VAT receipts from September onwards.

---

\(^1\) With the tax measures introduced on 29 March: (i) the standard VAT rate was raised from 18% to 19%, the reduced rate from 8% to 9% and the special reduced rate from 4% to 4.5%, (ii) the special consumption tax on alcoholic beverages (other than wine and beer) was increased by 20% and (iii) a “minimum excise duty” was imposed on cigarettes whose retail price was lower than the price category most in demand in 2004.

\(^2\) Although newly constructed buildings (to be completed in 2006) are exempt from this measure, yet the confusion over the matter was enough to influence a lot of prospective buyers in their decisions.
The foregoing measures sparked a sharp acceleration in revenue growth, especially in the final quarter of 2005, thereby improving overall revenue performance. Otherwise, the shortfall in revenue would have been even greater.

Direct tax revenue grew by 10.3% in 2005, compared with 7.1% in 2004 and 3.9% in 2003 (see Table VIII.4). Underlying this pickup were a number of extraordinary factors: (a) the expediting of gifts and parental donations;\(^1\) (b) the one-off taxation of the adjusted value of fixed corporate assets;\(^2\) (c) the one-off taxation of the accumulated balance of business provisions for doubtful debts;\(^3\) and (d) a surge in receipts as a result of the settlement of pending tax cases.\(^4\) By contrast, corporate tax revenue remained unchanged, while a relatively small upturn was seen in revenue from personal income tax.

In greater detail, receipts from personal income tax increased by 6.5% (compared with an increase of 11.7% in 2004) to €8,292 million, exclusively as a result of an 8.4% rise in revenue from personal income tax withheld at source. Considering that Greece’s incomes policy was tighter in 2005 than in 2004, this rise in revenue from personal income tax withheld at source is probably attributable to the adoption of Law 3296/2004 on income tax. Specifically, the combined effect of the new tax scale, the abolition of the tax deduction for family expenses and the lowering of the tax discount granted for the timely payment of tax, on the one hand, and the 2005 wage increases, on the other,\(^5\) caused the tax burden on wage earners and pensioners with a spouse without income and two children to fall for those on a low income (up to €13,072), while it increased for those whose taxable income was in excess of this figure.

Receipts from corporate tax stood at roughly the same level as in 2004 (2005: €4,731 million, 2004: €4,724 million). They were minimally\(^6\) affected by the 3 percentage point cut in the respective tax rate (from 35% to 32%) in effect as of 1 January 2005, as this cut on receipts will not be perceptible before 2006, when corporate returns are submitted and settled.

Proceeds from tax on interest income (from deposits, bonds, etc.) rose by a marginal 0.7%, as a result of the lowering of the respective tax rate from 15% to 10% as of 1 January 2005. The 2005 total for the item entitled “special categories of income tax” includes €160 million in receipts from the one-off taxation (at a rate of 25%) of the accumulated balance of business provisions for doubtful debts (Article 9 of Law 3296/2004).

Receipts from tax on parental donations, gifts and inheritances expanded by 11.3% to €259 million, owing to the expediting of gifts and parental donations in anticipation of

---

1 In anticipation of the rise in objective prices as of 1 January 2006.
2 Minister of Economy and Finance Decision 1121/17 November 2004.
3 Law 3296/2004, Article 9.
4 The set of measures announced in July 2004 concerned the settlement of tax cases pending from 1998-2003 and the collection of tax arrears. They also gave taxpayers the possibility to submit overdue tax returns without incurring a fine. The submission deadlines were repeatedly extended, to finally expire in September 2005.
5 Income growth relative to 2004 was assumed to be 3.5%.
6 Only the compensation received by members of Board of Directors was taxed at the reduced rate in 2005 (tax withheld at source).
### Table VIII.4

#### ORDINARY BUDGET REVENUE

(Million euro)

<table>
<thead>
<tr>
<th></th>
<th>Annual data</th>
<th>Percentage changes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2002</td>
<td>2003</td>
</tr>
<tr>
<td>I. DIRECT TAXES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Income tax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Personal</td>
<td>11,685</td>
<td>12,141</td>
</tr>
<tr>
<td>– Corporate</td>
<td>6,595</td>
<td>6,969</td>
</tr>
<tr>
<td>– Special categories of income tax (tax on shipping)</td>
<td>4,191</td>
<td>4,341</td>
</tr>
<tr>
<td>– Special categories of income tax (tax on interest income from bonds, deposits, etc.)</td>
<td>899</td>
<td>831</td>
</tr>
<tr>
<td>2. Wealth taxes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Direct taxes collected on behalf of third parties</td>
<td>542</td>
<td>436</td>
</tr>
<tr>
<td>4. Tax arrears</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Extraordinary and other direct taxes</td>
<td>975</td>
<td>1,148</td>
</tr>
<tr>
<td>II. INDIRECT TAXES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Customs duties and special contributions on imports-exports</td>
<td>203</td>
<td>222</td>
</tr>
<tr>
<td>2. Consumption taxes on imports</td>
<td>2,049</td>
<td>2,257</td>
</tr>
<tr>
<td>– VAT</td>
<td>1,348</td>
<td>1,485</td>
</tr>
<tr>
<td>– Cars</td>
<td>659</td>
<td>726</td>
</tr>
<tr>
<td>– Special consumption tax</td>
<td>42</td>
<td>46</td>
</tr>
<tr>
<td>3. Consumption taxes on domestic products</td>
<td>16,439</td>
<td>16,856</td>
</tr>
<tr>
<td>– Turnover tax</td>
<td>221</td>
<td>245</td>
</tr>
<tr>
<td>– VAT</td>
<td>10,638</td>
<td>10,848</td>
</tr>
<tr>
<td>– Fuel</td>
<td>2,319</td>
<td>2,432</td>
</tr>
<tr>
<td>– Tobacco</td>
<td>2,125</td>
<td>2,248</td>
</tr>
<tr>
<td>– Road duties</td>
<td>629</td>
<td>554</td>
</tr>
<tr>
<td>– Special levies and contributions on cars</td>
<td>128</td>
<td>134</td>
</tr>
<tr>
<td>– Other*</td>
<td>379</td>
<td>395</td>
</tr>
<tr>
<td>4. Transaction taxes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Capital transfers</td>
<td>1,440</td>
<td>1,490</td>
</tr>
<tr>
<td>– Stamp duties</td>
<td>735</td>
<td>816</td>
</tr>
<tr>
<td>– Banking transactions</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>– Licence fees for gambling</td>
<td>87</td>
<td>82</td>
</tr>
<tr>
<td>5. Other indirect taxes</td>
<td>858</td>
<td>659</td>
</tr>
</tbody>
</table>

III. TOTAL TAX REVENUE

|                      | 35,802      | 36,881  | 39,484  | 42,123  | 3.0     | 7.1     | 6.7      |

Non-tax revenue

|                      | 3,246       | 3,000   | 2,571   | 2,637   | –7.6    | –14.3   | 2.6      |

IV. TOTAL ORDINARY BUDGET REVENUE

|                      | 39,048      | 39,881  | 42,055  | 44,760  | 2.1     | 5.5     | 6.4      |

---

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

Source: General Accounting Office.
the rise in objective real estate prices as of 1 January 2006. Revenue from large real property tax (which is aggregated with the preceding item of this paragraph under the same category of Table VIII.4) soared by 53.0% to €289 million. It should be noted, however, that the revenue reported for 2005 includes the one-off taxation of the adjusted value of fixed corporate assets.1

The measures adopted in July 2004 regarding the settlement of pending tax cases and the collection of tax arrears yielded substantial income in 2005, as the submission deadlines were repeatedly extended, to finally expire in September 2005. Specifically, revenue from direct tax arrears surged by 41.6% to €2,222 million, up from €1,569 million in the previous year.

Receipts from indirect taxation increased by 4.1% (2004: 7.1%) to €23,939 million, but were €1,656 million lower than budgeted, as a result of a shortfall in VAT receipts and, to a limited extent, in revenue from other categories of indirect taxes.

More specifically, receipts from VAT on imports from non-EU countries edged up by 3.2% to €1,771 million, after having increased by 15.6% in 2004. This slowdown was triggered by a 6.6% drop in the value of imports from non-EU countries in 2005, which in turn translated into a 1.7% fall in revenue from duties.

Receipts from car registration fees fell by 2.3% to €833 million, reflecting a 3% decline in imports of new passenger cars in 2005.

Receipts from VAT on domestic goods and services grew by 2.8% to €12,360 million, falling 12.8% short of the budgeted target. The latter had been rather over-optimistic, given that the respective figure for 2004 included receipts in the order of €250 million carried forward from 2003. The fact that revenue from VAT on domestic goods and services has been favourably affected by the rise in VAT rates (effective 1 April 2005), higher oil prices2 and a rise of 6.3% in the value of retail sales implies that its subdued growth is probably due to increased tax evasion, notably in the first half of the year.

Revenue from the special consumption tax on liquid fuels edged up by a mere 0.7% to €2,474 million, partly reflecting a weakening in diesel oil consumption despite buoyant economic growth.3 In contrast, petrol consumption rose by 3.7%.

Revenue from tobacco tax rose by a slight 0.7% to €2,257 million. Given the imposition (as of 1 April 2005) of a “minimum excise duty” on cigarettes whose retail price was lower than the price category most in demand in 2004, the stagnancy of this item is probably due to a 2.3% decline in cigarette consumption in the course of 2005.

Revenue from real property transfer tax surged by 56.2% to €1,076 million, as a result of real property transfers expedited in anticipation of the increased objective prices

---

1 Buildings were taxed at 8% and land at 5%.
2 In contrast with other VAT receipts, receipts from VAT on fuels surged by 27.1% in 2005. Excluding this amount, the rate of increase in VAT receipts from domestic goods and services in 2005 falls from 2.8% to 0.45%.
3 The inconsistency between developments in oil consumption and economic activity is probably due to extensive fuel smuggling and to the substitution of heating oil for diesel (the former is cheaper than the latter).
and the imposition of VAT\(^1\) on newly built real estate from 1 January 2006. In contrast, proceeds from tax on stock exchange transactions (which are aggregated with the preceding item of this paragraph under the category “capital transfers” of Table VIII.4) were pushed down by 26.2% due to the cut (as of 1 January 2005) in the relevant tax rate (from 3% to 1.5%), despite the beneficial effect of the 45.2% surge in the value of stock exchange transactions in 2005.

Revenue from indirect tax arrears picked up by 25.8% to €365 million, underpinned by the July 2004 measures. An improvement of 9.1% to €681 million was also noted in proceeds from stamp duties.

Lastly, non-tax revenue, after steadily declining over the previous three years, grew by 2.6% to €2,637 million in 2005, underpinned by a sharp rise in revenue from Postal Savings Bank dividends (about 48%), state lotteries (30.7%) and coin seignorage (76.7%). An additional €48 million were collected from the 3rd-generation UMTS licences allocated in 2001. Most of the proceeds from this last transaction had been collected in 2001, but, under the terms of the allocation agreement, two further instalments (of €48 million each) were still due, in 2005 and 2006 respectively.

**Expenditure**

The great efforts made in 2005 to cut back on expenditure brought the growth rate of spending down to 6.2% in 2005, from 12.0% in 2004 and 9.4% in 2003 (see Table VIII.5). Ordinary budget expenditure, as a percentage of GDP, was contained at 28.3%, compared with 28.7% in 2004, but still exceeded the levels of 2002 (27.5%) and 2003 (27.7%).

Despite its weakening, the growth rate of ordinary budget expenditure was stronger than the forecast 3.9%. As a result, ordinary budget expenditure exceeded the budgeted amount of €50,177 million and came to a total of €51,282 million.\(^2\) As in 2004, the overrun in ordinary budget expenditure was entirely due to primary expenditure, whereas interest payments were marginally lower than budget forecasts.

Due to the tight incomes policy pursued in 2005, personnel outlays\(^3\) grew at a slower pace than in 2004 and 2003 (2005: 3.4%, 2004: 13.5% and 2003: 7.6%) and came to €19,399 million. This was €126 million higher than budgeted (see Chart VIII.3). The share of personnel outlays in total expenditure edged down to 37.8%, from 38.8% in the previous year (see Chart VIII.2). Apart from the restrictive incomes policy, the moderation in personnel outlays was also due to base effects associated with the fact that their

---

1 As mentioned earlier, the imposition of VAT does not concern newly constructed buildings to be transferred by end-2006, but nonetheless influenced prospective buyers.
3 Including central government expenditure for pensions and health care.
## TABLE VIII.5
OUTLAYS UNDER THE ORDINARY BUDGET AND THE PUBLIC INVESTMENT BUDGET
(Million euro)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Personnel outlays</td>
<td>15,353</td>
<td>16,526</td>
<td>18,758</td>
<td>19,399</td>
<td>7.6</td>
<td>13.5</td>
<td>3.4</td>
</tr>
<tr>
<td>2. Interest payments</td>
<td>9,134</td>
<td>9,416</td>
<td>9,464</td>
<td>9,774</td>
<td>3.1</td>
<td>0.5</td>
<td>3.3</td>
</tr>
<tr>
<td>(of which: related to the national defence debt)</td>
<td>(393)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>3. Payments to the European Union</td>
<td>1,426</td>
<td>1,542</td>
<td>2,030</td>
<td>2,220</td>
<td>8.1</td>
<td>31.6</td>
<td>9.4</td>
</tr>
<tr>
<td>4. Payment of revenue collected on behalf of third parties</td>
<td>3,051</td>
<td>3,512</td>
<td>3,736</td>
<td>4,039</td>
<td>15.1</td>
<td>6.4</td>
<td>8.1</td>
</tr>
<tr>
<td>5. Tax refunds</td>
<td>1,967</td>
<td>2,381</td>
<td>2,799</td>
<td>2,554</td>
<td>21.0</td>
<td>17.6</td>
<td>~8.8</td>
</tr>
<tr>
<td>6. Interest rate subsidies</td>
<td>—</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>7. Subsidies to farmers</td>
<td>457</td>
<td>479</td>
<td>555</td>
<td>637</td>
<td>4.8</td>
<td>15.9</td>
<td>14.8</td>
</tr>
<tr>
<td>8. Grants</td>
<td>5,612</td>
<td>6,862</td>
<td>8,471</td>
<td>9,941</td>
<td>22.3</td>
<td>23.4</td>
<td>17.4</td>
</tr>
<tr>
<td>9. Guarantees and foreign exchange valuation differences</td>
<td>4</td>
<td>1</td>
<td>6</td>
<td>4</td>
<td>~75.0</td>
<td>500.0</td>
<td>~33.3</td>
</tr>
<tr>
<td>10. Other</td>
<td>2,394</td>
<td>2,396</td>
<td>2,469</td>
<td>2,714</td>
<td>0.1</td>
<td>3.0</td>
<td>9.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. OUTLAYS UNDER THE PUBLIC INVESTMENT BUDGET</th>
<th>7,014</th>
<th>8,435</th>
<th>9,522</th>
<th>7,518</th>
<th>20.3</th>
<th>12.9</th>
<th>~21.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Project implementation</td>
<td>2,874</td>
<td>3,222</td>
<td>3,633</td>
<td>...</td>
<td>12.1</td>
<td>12.8</td>
<td>...</td>
</tr>
<tr>
<td>2. Grants</td>
<td>4,072</td>
<td>5,159</td>
<td>5,821</td>
<td>...</td>
<td>26.7</td>
<td>12.8</td>
<td>...</td>
</tr>
<tr>
<td>3. Administration</td>
<td>68</td>
<td>55</td>
<td>68</td>
<td>...</td>
<td>~19.1</td>
<td>23.6</td>
<td>...</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III. TOTAL I + II</th>
<th>46,412</th>
<th>51,551</th>
<th>57,810</th>
<th>58,800</th>
<th>11.1</th>
<th>12.1</th>
<th>1.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary expenditure under the government budget</td>
<td>37,278</td>
<td>42,135</td>
<td>48,346</td>
<td>49,026</td>
<td>13.0</td>
<td>14.7</td>
<td>1.4</td>
</tr>
<tr>
<td>Primary expenditure under the ordinary budget</td>
<td>30,264</td>
<td>33,700</td>
<td>38,824</td>
<td>41,508</td>
<td>11.4</td>
<td>15.2</td>
<td>6.9</td>
</tr>
<tr>
<td>Amortisation payments (amortisation payments related to the national defence debt)</td>
<td>20,860</td>
<td>21,615</td>
<td>20,356</td>
<td>20,738</td>
<td>3.6</td>
<td>~5.8</td>
<td>1.9</td>
</tr>
<tr>
<td>Ministry of National Defence programmes for the procurement of military equipment</td>
<td>(425)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>—</td>
<td>987</td>
<td>1,792</td>
<td>1,400</td>
<td>—</td>
<td>81.6</td>
<td>~21.9</td>
<td></td>
</tr>
</tbody>
</table>

1 Excluding amortisation payments. For 2003-2006, excluding additional expenditure for the implementation of Ministry of National Defence programmes for the procurement of military equipment.
2 Including expenditure (of €675 million) that was not taken into account in the 2005 estimates published in the Introductory Report on the 2006 Budget.
3 Including “other expenditure” for public debt servicing.
4 For 2002 only interest and amortisation payments effected by the Ministry of National Defence are included. Interest and amortisation payments related to the national defence debt and taken over by the Ministry of Economy and Finance are included in the main categories of the corresponding items. From 2003 onwards, interest and amortisation payments effected by the Ministry of National Defence are recorded in the off-budget item “Ministry of National Defence programmes for the procurement of military equipment”. These payments affect the deficit on a national accounts basis.
5 Including social security subsidies.
* Provisional data.
Source: General Accounting Office.
level in 2004 had been inflated by significant wage increases, retroactive payments and extraordinary payments related to the Olympic Games.

Interest payments rose by 3.3% over 2005 (compared with an increase of 0.5% in 2004) and totalled €9,774 million, which was €26 million lower than the level originally budgeted for 2005. Given the faster growth of other expenditure items, the share of interest payments in total ordinary budget expenditure edged slightly downwards, from 19.6% in 2004 to 19.1% in 2005 (see Chart VIII.2). As a percentage of GDP, they pursued their downward course, falling from 5.6% to 5.4% (see Chart VIII.4). This moder-

![Chart VIII.2](chart.jpg)

**CHART VIII.2**

**COMPOSITION OF OUTLAYS**

*Under the ordinary budget*

<table>
<thead>
<tr>
<th>Year 2005*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsidies (1.2%)</td>
</tr>
<tr>
<td>Grants (19.4%)</td>
</tr>
<tr>
<td>Tax refunds (5.0%)</td>
</tr>
<tr>
<td>Restitution of revenue to third parties (7.3%)</td>
</tr>
<tr>
<td>Payments to the EU (4.3%)</td>
</tr>
<tr>
<td>Interest payments (19.1%)</td>
</tr>
<tr>
<td>Personnel outlays (37.8%)</td>
</tr>
<tr>
<td>Other outlays (5.3%)</td>
</tr>
</tbody>
</table>

1 Excluding amortisation payments.
* Provisional data.
Source: General Accounting Office.

1 The revised Updated Stability and Growth Programme (March 2005) states (p.12) that the resulting saving on interest payments amounts to 0.24% of GDP, which was roughly equivalent to €425 million at the time.
Payments to the EU totalled €2,220 million, rising by 9.4% over 2004. The large increases seen in this item during the past few years can be explained by the introduction of a new method for determining Member State contributions to the Community budget.\(^1\)

Restitution of revenue to third parties (mainly municipalities and prefectures) picked up by 8.1% over the previous year and attained €4,039 million, i.e. €112 million less than the corresponding appropriation in the 2005 Budget.

Tax refunds contracted by 8.8% to €2,554 million in 2005, compared with €2,799 million in 2004. This was a positive development, considering that this item had surged by 107.3%, 21.0% and 17.6% in 2002, 2003 and 2004, respectively, owing to the settlement of overdue liabilities.

Outlays for government grants (primarily to social security organisations), the second largest item of ordinary budget expenditure with a share of 19.4% (see Chart VIII.2)

\(^1\) As mentioned in the Introductory Report on the 2005 Budget (p. 85), a new method has been used since 2002 to determine “own resources”. This method lowers EU receipts from customs duties under the Common Customs Tariff (CCT), agricultural levies and VAT-based contributions, but recoups lost revenue by increasing GDP-based contributions. Given that the growth of the Greek economy has been faster than the Community average during the last few years, this change in the method of determining Member State contributions is an important reason for Greece’s rising payments to the Community Budget.
grew by 17.4% in 2005 and exceeded the budgeted target by €832 million. The difficulty in containing this item is principally associated with the already assumed obligations for grants to social security organisations, but also reflects a long-run rising trend in social security expenditure. In any case, the growth of grants in 2005, though appreciable, was clearly weaker than in the two preceding years (2004: 23.4%, 2003: 22.3%).

Lastly, 2005 saw “other expenditure” pick up (by 9.9%) to €2,714 million. As in 2004, the reported figure includes extraordinary payments, totalling €345 million (2004: €148 million). Properly adjusted for these payments, the “other expenditure” growth rate falls to 2.1%.

The public investment budget

The bulk of fiscal adjustment in 2005 was achieved by cutting down on public investment spending. Specifically, payments under the investment programme were reduced by 21.0% from the previous year to €7.518 million (see Tables VIII.5 and VIII.9), which was €532 million less than the budgeted amount. This improvement is partly linked to the completion of necessary projects for the Olympic Games but was also the result of a broader effort to curb spending after the massive upsurges of 2003 and 2004.
Receipts under the public investment budget, which essentially correspond to inflows from the EU Structural Funds, edged down by 4.5% from the previous year to €2,765 million, falling €635 million short of the budgeted amount.

The foregoing developments pushed the public investment budget deficit down to €4,753 million or 2.6% of GDP, from €6,628 million or 3.9% of GDP in 2004, thus playing a crucial role in the overall narrowing of the general government deficit by 2.4 percentage points of GDP.

2.2 Social security and welfare organisations

Based on data from the Introductory Report on the 2006 Budget, in conjunction with analytical data from the Ministry of Economy and Finance, the provisional financial results of the six major social security and welfare organisations deteriorated further in 2005, compared with the previous year, even though expenditure under both the operating and the capital account was contained to below forecast levels (see Table VIII.6). Underlying this deterioration was a €725 million rise in the operating account deficit, which is responsible for 82% of the widening of the total operating and capital account deficit.

These organisations saw their total receipts increase by 10.8% to €13,432 million in 2005, compared with 9.0% in 2004. However, this result was €691 million or 4.9% short of the budgeted €14,123 million. Strong increases were recorded in the receipts of IKA (12.8%), NAT (15.2%) and, to a lesser degree, OGA.

Total operating expenditure expanded by 11.5% to €19,633 million in 2005, but nonetheless came to less than the forecast €20,109 million. Payments by OGA, NAT, and OEE grew by a strong 19.6%, 12.2% and 10.9%, respectively. The smallest increase (8.0%) was in payments by IKA.

Capital account expenditure went up by 26.6% in 2005, against 20.5% in 2004, and, at €1,182 million, also remained below the budget forecast of €1,501 million. The rise in this item was mainly accounted for by a 37.3% surge in investment expenditure.

The 26.6% increase in capital account expenditure, combined with the widening of the operating deficit, caused the total consolidated operating and capital account deficit of the above organisations to rise by €883 million, from €5,900 million (or 3.5% of GDP) in 2004 to €6,783 million (or 3.7% of GDP) in 2005.

Of this deficit, 90.9% was financed through grants from the state budget, which were a substantial 16.4% higher than one year earlier. Specifically, ordinary budget grants

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1 Compiled on an administrative basis and published in Chapter 5 thereof.
2 Social Insurance Institute (IKA), Seamen’s Insurance Fund (NAT-KAAN), Farmers’ Insurance Fund (OGA), Manpower Employment Organisation (OAED), Workers’ Housing Organisation (OEK) and Workers’ Social Benefits Organisation (OEE).
### TABLE VIII.6
FINANCIAL RESULTS AND FINANCING OF SOCIAL SECURITY
AND WELFARE ORGANISATIONS¹
(Million euro)

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005*</th>
<th>2006 budget</th>
<th>Percentage changes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Operating account</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2004/03</td>
</tr>
<tr>
<td>1. Revenue</td>
<td>11,125</td>
<td>12,125</td>
<td>13,432</td>
<td>14,321</td>
<td>9.0</td>
</tr>
<tr>
<td>2. Expenditure</td>
<td>15,044</td>
<td>17,601</td>
<td>19,633</td>
<td>20,855</td>
<td>17.0</td>
</tr>
<tr>
<td>3. Result (1 – 2)</td>
<td>−3,919</td>
<td>−5,476</td>
<td>−6,201</td>
<td>−6,534</td>
<td>39.7</td>
</tr>
<tr>
<td><strong>B. Capital account</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>255</td>
</tr>
<tr>
<td>4. Revenue</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. Expenditure</td>
<td>775</td>
<td>934</td>
<td>1,182</td>
<td>1,297</td>
<td>20.5</td>
</tr>
<tr>
<td>(Investment)</td>
<td>(220)</td>
<td>(424)</td>
<td>(582)</td>
<td>(600)</td>
<td>(92.7)</td>
</tr>
<tr>
<td>(Working capital)</td>
<td>(479)</td>
<td>(−100.0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Other)</td>
<td>(76)</td>
<td>(510)</td>
<td>(600)</td>
<td>(697)</td>
<td>(571.1)</td>
</tr>
<tr>
<td>6. Result (4 – 5)</td>
<td>−775</td>
<td>−934</td>
<td>−1,182</td>
<td>−1,297</td>
<td>20.5</td>
</tr>
<tr>
<td>7. Special resources</td>
<td>446</td>
<td>510</td>
<td>600</td>
<td>697</td>
<td>14.3</td>
</tr>
<tr>
<td>TOTAL RESULT (3+6+7)</td>
<td>−4,248</td>
<td>−5,900</td>
<td>−6,783</td>
<td>−7,134</td>
<td>38.9</td>
</tr>
<tr>
<td>Percentage of GDP</td>
<td>2.7</td>
<td>3.5</td>
<td>3.7</td>
<td>3.7</td>
<td></td>
</tr>
</tbody>
</table>

**FINANCING**

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005*</th>
<th>2006 budget</th>
<th>Percentage changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Grants</td>
<td>4,387</td>
<td>5,300</td>
<td>6,168</td>
<td>6,597</td>
</tr>
<tr>
<td>(Ordinary budget)</td>
<td>(4,124)</td>
<td>(5,088)</td>
<td>(5,815)</td>
<td>(6,222)</td>
</tr>
<tr>
<td>(Public investment budget, EU, etc.)</td>
<td>(263)</td>
<td>(212)</td>
<td>(353)</td>
<td>(375)</td>
</tr>
<tr>
<td>9. Depreciation</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>10. Net borrowing requirement</td>
<td>−141</td>
<td>598</td>
<td>613</td>
<td>535</td>
</tr>
<tr>
<td>TOTAL FINANCING</td>
<td>4,248</td>
<td>5,900</td>
<td>6,783</td>
<td>7,134</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005*</th>
<th>2006 budget</th>
<th>Percentage changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Amortisation payments</td>
<td>. .</td>
<td>. .</td>
<td>132</td>
<td>167</td>
</tr>
<tr>
<td>12. New suppliers’ credit</td>
<td>. .</td>
<td>. .</td>
<td>. .</td>
<td>. .</td>
</tr>
<tr>
<td>13. Gross borrowing requirement (10+11−12)</td>
<td>−141</td>
<td>598</td>
<td>745</td>
<td>702</td>
</tr>
</tbody>
</table>

¹ The six social security and welfare organisations referred to in footnote 2 on the previous page.
* Estimates.
Source: Ministry of Economy and Finance.
totalled €5,815 million, against €5,088 million in 2004, while those from the investment budget and the EU budget combined rose to €353 million, from €212 million in 2004.

The considerable rise in grants from the state budget explains why recourse to borrowing remained virtually unchanged year on year (2005: €613 million, 2004: €598 million).

In conclusion, the financial results of the major social security and welfare organisations deteriorated further for the third consecutive year, as reflected in their pre-grant deficit level, which rose from 2.7% of GDP (or €4,248 million) in 2003 to 3.7% of GDP (or €6,783 million) in 2005. A similar percentage is expected for 2006 (see Table VIII.6).

2.3 Public enterprises

Based on data from the Introductory Report on the 2006 Budget, as well as analytical data from the Ministry of Economy and Finance, public enterprises' posted an operating deficit of €512 million, against a surplus of €255 million in 2004. Their consolidated operating and capital account deficit also widened to €2,778 million, from €2,099 million in the previous year, rising as a percentage of GDP from 1.2% in 2004 to 1.5% in 2005 (see Table VIII.7).

The total operating revenue of public enterprises, which had increased by 13.4% in 2004, decreased by 8.0% in 2005 to €15,646 million (2004: €17,011 million), falling 7.7% short of the budget target of €16,953 million. This can mainly be explained by the fact that OPAP (the Greek soccer pools organisation) is no longer included in public enterprises since its privatisation in 2005. As for the remaining organisations, solid revenue increases were recorded for the Public Gas Corporation SA – DEPA (41.1%), Hellenic Petroleum – ELPE (23.2%), the Thessaloniki Port Authority – OLTTH (7.3%), the Athens Water Supply and Sewerage Company – EYDAP (6.1%) and the Public Power Corporation – DEH (6.1%). In contrast, a sharp decline in revenue was recorded for the Hellenic Railways Organisation – OSE (6.4%), the Hellenic Aerospace Industry – EAB (9.0%), the Water Supply and Sewerage Company of Thessaloniki – EYATH (5.9%) and the Piraeus Port Authority – OLP (4.1%).

Operating expenditure, after rising by 12.8% in 2004, dropped by 3.6% to €16,158 million in 2005, again because OPAP is no longer included in public enterprises. The largest increases in current expenditure were recorded for DEPA (38.3%), ELPE (20.5%), DEH (13.3%), the Athens Urban Transport Organisation – OASA (7.1%) and ELTA (6.1%).

Capital account expenditure declined by 14.4% in 2005, against a zero growth in 2004, to a total of €3,353 million, which can be attributed to a 22.7% and 36.7% plunge

---

1 No longer included (since 2002) in Table VIII.7 data are: Olympic Airlines, Olympic Aviation, the Thessaloniki Central Market Organisation (KATH) and the Attiko Metro Operations Company S.A. (AMEL), while OPAP is also excluded therefrom as of 2005.
### TABLE VIII.7
FINANCIAL RESULTS AND FINANCING OF PUBLIC ENTERPRISES

(Million euro)

<table>
<thead>
<tr>
<th>A. Operating account</th>
<th>2003</th>
<th>2004</th>
<th>2005*</th>
<th>Budget for 2006</th>
<th>2004/03</th>
<th>2005*/04</th>
<th>2006/05*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Revenue</td>
<td>15,003</td>
<td>17,011</td>
<td>15,646</td>
<td>15,171</td>
<td>13.4</td>
<td>–8.0</td>
<td>–3.0</td>
</tr>
<tr>
<td>2. Expenditure</td>
<td>14,861</td>
<td>16,756</td>
<td>16,158</td>
<td>16,047</td>
<td>12.8</td>
<td>–3.6</td>
<td>–0.7</td>
</tr>
<tr>
<td>3. Result (1 – 2)</td>
<td>142</td>
<td>255</td>
<td>–512</td>
<td>–876</td>
<td>79.6</td>
<td>71.1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Capital account</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Revenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Investment)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Working capital)</td>
<td>(134)</td>
<td>(220)</td>
<td>(2,168)</td>
<td>(184)</td>
<td>20.3</td>
<td>–22.7</td>
<td>26.4</td>
</tr>
<tr>
<td>(Other)</td>
<td>(1,342)</td>
<td>(1,215)</td>
<td>(609)</td>
<td>(95.5)</td>
<td>(26.7)</td>
<td>(20.8)</td>
<td></td>
</tr>
<tr>
<td>6. Result (4 – 5)</td>
<td>–3,917</td>
<td>–3,918</td>
<td>–3,353</td>
<td>–3,293</td>
<td>0.0</td>
<td>–14.4</td>
<td>–1.8</td>
</tr>
<tr>
<td>7. Special resources</td>
<td>1,721</td>
<td>1,564</td>
<td>1,087</td>
<td>796</td>
<td>–9.1</td>
<td>–30.5</td>
<td>–26.8</td>
</tr>
<tr>
<td>TOTAL RESULT (3+6+7)</td>
<td>–2,054</td>
<td>–2,099</td>
<td>–2,778</td>
<td>–3,373</td>
<td>2.2</td>
<td>32.3</td>
<td>21.4</td>
</tr>
<tr>
<td>Percentage of GDP</td>
<td>1.3</td>
<td>1.2</td>
<td>1.5</td>
<td>1.7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TOTAL FINANCING

| 8. Ordinary budget grants | 211 | 222 | 238 | 252 | 5.2 | 7.2 | 5.9 |
| 9. Depreciation           | 1,171 | 986 | 908 | 945 | –15.8 | –7.9 | 4.1 |
| 10. Net borrowing requirement | 672 | 891 | 1,632 | 2,176 | 32.6 | 83.2 | 33.3 |
| TOTAL FINANCING           | 2,054 | 2,099 | 2,778 | 3,373 | 2.2 | 32.3 | 21.4 |

| 11. Amortisation payments | 1,312 | 1,377 | 1,110 | 758 | 5.0 | –19.4 | –31.7 |
| 12. Repayment of credit  | 49 | 51 | 42 | 29 | 4.1 | –17.6 | –31.0 |
| 13. New suppliers’ credit | 128 | 49 | 30 | 2 | –61.7 | –38.8 | –93.3 |
| 14. Gross borrowing requirement | 1,905 | 2,270 | 2,754 | 2,961 | 19.2 | 21.3 | 7.5 |
| (10+11+12–13)            | 1,905 | 2,270 | 2,754 | 2,961 | 19.2 | 21.3 | 7.5 |

---

2 Advances and participations by Public Power Corporation (DEH) consumers, lump-sum payments by Hellenic Telecommunications Organisation (OTE) subscribers, private sector participation in Water Supply and Sewerage Company (EYDAP) projects, and own assets (from surpluses) of certain public enterprises. From 1997 onwards, grants through the public investment budget and the EU have gradually taken the form of equity capital increases, leading to their gradual reclassification as “special resources” instead of “grants”.
3 Grants from the ordinary budget to the public enterprises which ran a deficit, minus collection of the surpluses of the other public enterprises.
4 Due to lack of data, the breakdown of the sum of amortisation payments and repayment of credit is an estimate.

* Estimates.

Source: Ministry of Economy and Finance.
in investment outlays and “other expenditure” respectively. Receipts from “special resources” also decreased by 30.5%.

Of the total deficit (€2,778 million) of public enterprises in 2005, 32.7% was financed through depreciation allowances, 8.6% through grants from the ordinary budget, while the remaining 58.7% was covered by borrowing, which jumped by 83.2% to €1,632 million in 2005 (2004: €891 million).

As a result of the sharp increase in public enterprise borrowing, the outstanding balance of state-guaranteed loans surged by €1,364 million to an estimated €15,800 million (Introductory Report on the 2006 Budget) or 9.0% of GDP in 2005, from €14,436 million in 2004. The forfeiture of these guarantees has caused the general government debt to build up and persist at high levels for years.

2.4 Public debt

The ratio of general government debt to GDP fell by one percentage point to 107.5% in 2005, from 108.5% at the end of 2004 (see Table VIII.8). This drop in the debt ratio was the result of (i) a restrictive fiscal policy, leading to an, albeit modest, primary surplus in the order of 0.5% of GDP after two consecutive years of primary deficits and (ii) a combination of robust economic growth and low interest rates (see Table II.2).

Despite this modest improvement, the debt remains particularly high and is perhaps Greece’s most severe macroeconomic imbalance, especially in the light of the country’s obligation to reduce its debt-to-GDP ratio to below 60% and in anticipation of the particularly heavy burdening of public finances (from around 2015 onwards) with population ageing costs. Indicative of the seriousness of the problem is the fact that the consolidated general government debt has persisted, on average, at 110% of GDP for more than a decade, even though the conditions prevailing from the late 1990s through 2005 were particularly favourable for its reduction (primary surpluses, significantly lower interest rates, buoyant economic growth and inflows of privatisation proceeds).

Furthermore, while the recent pickup in interest rates has not, for the time being, affected medium-term interest rates, it underlines the risks and uncertainty posed by high public debt levels to fiscal developments and the achievement of sustainable fiscal adjustment.

For these reasons and given the substantial fiscal adjustment needed to reduce the deficit to below 3% of GDP, bring the Excessive Deficit Procedure to an end and meet the Stability and Growth Pact requirement of a budgetary position close to balance or in surplus over the medium term, Greece must lower its deficit considerably in the next decade and, if possible, bring it down to the reference value of 60% of GDP set forth in the

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1 Page 122.
2 Consolidated debt of general government, as defined in the Maastricht Treaty.
Maastricht Treaty. For this goal to be attained by 2015, and considering the modest primary surpluses anticipated in the Updated Stability and Growth Programme 2005-2008 for the period until 2008 inclusive, the primary surpluses to be achieved thereafter will have to exceed 5% of GDP.

The systematic efforts made since the late 1990s to extend average debt maturity, coupled with the more stable macroeconomic environment resulting from Greece’s participation in the euro area, have led to a strong rise in long-term debt. Specifically, while, because of the severe macroeconomic imbalances and heightened uncertainty, around 45% of general government debt in 1990 was in the form of Treasury bills, i.e. securities with up to one year maturity, at the end of 2001 the outstanding amount of total short-term liabilities did not exceed 1.5% of the debt. At the end of 2005, short-term liabilities diminished further to 0.7% of total general government debt, meaning that medium and long-term liabilities (bonds, loans and coin) accounted for 99.3% (see Table VIII.8).

Aside from the maturity, the negotiability of general government debt has also increased. Specifically, while at the end of 2001 roughly 83% of the total debt was nego-

<table>
<thead>
<tr>
<th align="left">TABLE VIII.8</th>
<th>CONSOLIDATED DEBT OF GENERAL GOVERNMENT¹</th>
</tr>
</thead>
<tbody>
<tr>
<td align="left">(Million euro)</td>
<td>2000</td>
</tr>
<tr>
<td align="left">Short-term liabilities</td>
<td>4,491</td>
</tr>
<tr>
<td align="left">– securities</td>
<td>1,767</td>
</tr>
<tr>
<td align="left">– loans</td>
<td>2,724</td>
</tr>
<tr>
<td align="left">Medium- and long-term liabilities</td>
<td>136,302</td>
</tr>
<tr>
<td align="left">– securities</td>
<td>114,219</td>
</tr>
<tr>
<td align="left">– loans</td>
<td>22,082</td>
</tr>
<tr>
<td align="left">Coin</td>
<td>178</td>
</tr>
<tr>
<td align="left">Total</td>
<td>140,971</td>
</tr>
<tr>
<td align="left">Percentage of GDP</td>
<td>113.3</td>
</tr>
<tr>
<td align="left">– domestic debt¹</td>
<td>107,643</td>
</tr>
<tr>
<td align="left">(of which:</td>
<td></td>
</tr>
<tr>
<td align="left">debt to the Bank of Greece)</td>
<td>(12,472)</td>
</tr>
<tr>
<td align="left">– external debt¹</td>
<td>33,328</td>
</tr>
</tbody>
</table>

1 According to its definition in the Maastricht Treaty.
2 For 2000, domestic debt includes euro-denominated securities held by non-residents, as well as Bank of Greece loans with a foreign currency clause. From 2001 onwards, domestic debt covers all liabilities in euro.

Sources: General Accounting Office and Bank of Greece.

1 Although it is theoretically impossible to determine an optimal debt-to-GDP ratio, many countries have been making efforts in recent years to keep their debt below 40% of GDP.
tiable, at the end of 2005 negotiable securities (mostly medium- and long-term bonds) made up 88.4% of the debt, the remainder consisting of loans not directly negotiable on the secondary market.

3. THE BUDGET FOR 2006

3.1 The state budget

As in 2005, fiscal policy for 2006 is once again committed to reducing the general government deficit to below the Maastricht Treaty reference value (3% of GDP), in an effort to put an end to the Excessive Deficit Procedure that the Greek economy has been subject to since July 2004. In this connection, the Budget for 2006 forecasts that the state budget deficit will decrease to 4.4% of GDP, which corresponds to a general government deficit of 2.6% of GDP\(^1\) (see Tables II.1 and VIII.9).

The Budget for 2006 anticipates that the reduction in the deficit will chiefly come from a pickup in receipts combined with a curb on spending. Specifically, state budget receipts are forecast\(^2\) to expand by 9.9%, after rising by 5.7% in 2005 (see Table VIII.9). State budget expenditure is expected to grow by 3.4%, compared with 1.7% in 2005, driven by a strong 11.7% increase in investment spending. In contrast, outlays under the ordinary budget\(^3\) are predicted to increase by a mere 2.2%, down from 6.2% in 2005.

Turning to the individual components of ordinary budget expenditure, personnel outlays are projected to pick up by 6.1% to €20,589 million, in spite of the prudent incomes policy, inter alia because of changes in seniority benefits (due to advancement, etc.). Spending on grants is expected to grow by 4.7% to €10,412 million, while interest payments are projected to decline by 1.8% against 2005. Tax refunds are forecast to plummet by 13.9% over 2004. Overall, as the budgeted amounts for all categories of expenditure have been drastically squeezed, the possibility of spending overruns, as in 2005, cannot be ruled out.

On the revenue side, the Budget for 2006 anticipates that ordinary budget receipts will grow by 8.9%, compared with 6.4% in 2005, boosted, inter alia, by €1,100 million of extraordinary non-tax revenue, which was recorded in the budget after the idea of revenue securitisation was abandoned. An additional boost in revenue will also come from: (a) the measures introduced on 29 March 2005 (the first 12-month proceeds from these measures will be seen in 2006), (b) the scheduled increase in the special consumption tax rates on liquid fuel, (c) the non-indexation of the tax scale, (d) the increase in objective real estate prices, and (e) renewed efforts to curb tax evasion since the second half of 2005.

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1 The reported figures for the state budget deficit are on an administrative basis, while those for the general government deficit are on a national accounts basis.
2 These change rates were calculated using more recent data on the 2005 revenue and expenditure than the data initially available at the time of the 2006 Budget's compilation.
3 Including tax refunds.
**TABLE VIII.9**

Revenue, expenditure and deficit under the state budget

(Million euro)

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005*</th>
<th>Budget for 2006</th>
<th>2003/02</th>
<th>2004/03</th>
<th>2005*/04</th>
<th>Budget for 2006/05*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Ordinary budget</td>
<td>41,051</td>
<td>41,704</td>
<td>44,949</td>
<td>47,525</td>
<td>52,240</td>
<td>1.6</td>
<td>7.8</td>
<td>5.7</td>
<td>9.9</td>
</tr>
<tr>
<td>1.1 Direct taxes</td>
<td>39,048</td>
<td>39,881</td>
<td>42,055</td>
<td>44,760</td>
<td>48,750</td>
<td>2.1</td>
<td>5.5</td>
<td>6.4</td>
<td>8.9</td>
</tr>
<tr>
<td>1.2 Indirect taxes</td>
<td>14,813</td>
<td>15,397</td>
<td>16,484</td>
<td>18,184</td>
<td>19,065</td>
<td>3.9</td>
<td>7.1</td>
<td>10.3</td>
<td>4.8</td>
</tr>
<tr>
<td>1.3 Other revenue</td>
<td>20,989</td>
<td>21,484</td>
<td>23,000</td>
<td>23,939</td>
<td>25,540</td>
<td>2.4</td>
<td>7.1</td>
<td>4.1</td>
<td>6.7</td>
</tr>
<tr>
<td>2. Public investment budget</td>
<td>3,246</td>
<td>3,000</td>
<td>2,571</td>
<td>2,637</td>
<td>(4,145)</td>
<td>–7.6</td>
<td>–14.3</td>
<td>2.6</td>
<td>57.2</td>
</tr>
<tr>
<td><strong>Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Ordinary budget</td>
<td>46,412</td>
<td>51,551</td>
<td>57,810</td>
<td>58,800</td>
<td>60,790</td>
<td>11.1</td>
<td>12.1</td>
<td>1.7</td>
<td>3.4</td>
</tr>
<tr>
<td>1.1 Interest payments</td>
<td>(9,134)</td>
<td>(9,416)</td>
<td>(9,464)</td>
<td>(9,774)</td>
<td>(9,600)</td>
<td>3.1</td>
<td>0.5</td>
<td>3.3</td>
<td>–1.8</td>
</tr>
<tr>
<td>1.2 Primary ordinary budget expenditure</td>
<td>30,264</td>
<td>33,700</td>
<td>38,824</td>
<td>41,908</td>
<td>42,790</td>
<td>11.4</td>
<td>15.2</td>
<td>6.9</td>
<td>3.1</td>
</tr>
<tr>
<td>2. Public investment budget</td>
<td>7,014</td>
<td>8,435</td>
<td>9,522</td>
<td>7,518</td>
<td>8,400</td>
<td>20.3</td>
<td>12.9</td>
<td>–21.0</td>
<td>11.7</td>
</tr>
<tr>
<td><strong>Net deficit (-)/surplus (+)</strong></td>
<td>–5,361</td>
<td>–9,847</td>
<td>–12,861</td>
<td>–11,275</td>
<td>–8,550</td>
<td>–3.7</td>
<td>–6.3</td>
<td>–7.6</td>
<td>–4.4</td>
</tr>
<tr>
<td><strong>Percentage of GDP</strong></td>
<td>–3.7</td>
<td>–6.3</td>
<td>–7.6</td>
<td>–6.2</td>
<td>–4.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Public investment budget</td>
<td>–5,011</td>
<td>–6,612</td>
<td>–6,628</td>
<td>–4,753</td>
<td>–4,910</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Primary deficit (-)/surplus (+)</strong></td>
<td>3,773</td>
<td>–431</td>
<td>–3,397</td>
<td>–1,501</td>
<td>1,050</td>
<td>2.6</td>
<td>–0.3</td>
<td>–2.0</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Percentage of GDP</strong></td>
<td>2.6</td>
<td>–0.3</td>
<td>–2.0</td>
<td>–0.8</td>
<td>0.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELEGEP (Revenue = expenditure)</td>
<td>2,460</td>
<td>2,634</td>
<td>2,647</td>
<td>2,718</td>
<td>2,730</td>
<td>7.1</td>
<td>0.5</td>
<td>2.7</td>
<td>0.4</td>
</tr>
<tr>
<td>Amortisation payments</td>
<td>20,860</td>
<td>21,615</td>
<td>20,356</td>
<td>20,738</td>
<td>18,136</td>
<td>3.6</td>
<td>–5.8</td>
<td>1.9</td>
<td>–12.5</td>
</tr>
<tr>
<td>Ministry of National Defence programmes for the procurement of military equipment</td>
<td>987</td>
<td>1,792</td>
<td>1,400</td>
<td>1,500</td>
<td>81.6</td>
<td>81.6</td>
<td>–21.9</td>
<td>7.1</td>
<td></td>
</tr>
</tbody>
</table>

1 For comparability purposes, tax refunds have been recorded in expenditure and not been deducted from revenue.
2 For 2002 including interest and amortisation payments effected by the Ministry of National Defence. From 2003 onwards, these payments are recorded in the off-budget item "Ministry of National Defence programmes for the procurement of military equipment."
3 Including expenditure of € 675 million that was not taken into account in the 2005 estimates published in the Introductory Report on the 2006 Budget.
4 Including grants to the OTE’s personnel insurance fund (TAP-OTE).
5 Including extraordinary revenue of € 1,100 million from dividends, the sale of concession rights and the clearance of revenue from fines and licences.
6 Provisional data.

Source: General Accounting Office.
<table>
<thead>
<tr>
<th>Annual aggregates</th>
<th>Percentage changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>2003</td>
</tr>
<tr>
<td>A. Receipts from the European Union</td>
<td></td>
</tr>
<tr>
<td>5,309</td>
<td>4,605</td>
</tr>
<tr>
<td>1. 10% refund to cover cost of collecting the Union’s “own resources”</td>
<td>45</td>
</tr>
<tr>
<td>2. Social Fund</td>
<td>361</td>
</tr>
<tr>
<td>3. EAGGF - Guidance Section</td>
<td>100</td>
</tr>
<tr>
<td>4. Regional Fund</td>
<td>1,598</td>
</tr>
<tr>
<td>5. EAGGF - Guarantee Section</td>
<td>2,634</td>
</tr>
<tr>
<td>6. Other receipts</td>
<td>9</td>
</tr>
<tr>
<td>7. Cohesion Fund</td>
<td>549</td>
</tr>
<tr>
<td>8. Receipts from EFTA countries</td>
<td>13</td>
</tr>
<tr>
<td>9. Fisheries Fund</td>
<td>0</td>
</tr>
<tr>
<td>B. Payments to the European Union</td>
<td>1,425</td>
</tr>
<tr>
<td>1. Agricultural levies and duties</td>
<td>12</td>
</tr>
<tr>
<td>2. Sugar levies</td>
<td>11</td>
</tr>
<tr>
<td>3. Customs duties under the Common External Tariffs provision</td>
<td>173</td>
</tr>
<tr>
<td>4. Contribution on the basis of revenue from VAT</td>
<td>553</td>
</tr>
<tr>
<td>5. Contribution on the basis of GDP</td>
<td>581</td>
</tr>
<tr>
<td>6. Other contributions</td>
<td>44</td>
</tr>
<tr>
<td>7. Contribution to the European Development Fund</td>
<td>19</td>
</tr>
<tr>
<td>Net receipts from the European Union (A-B)</td>
<td>3,881</td>
</tr>
</tbody>
</table>

* Provisional data and estimates.

Source: General Accounting Office.
In addition, after the Budget for 2006 was passed and the Stability and Growth Programme 2005-2008 was submitted to the European Commission, in January 2006 a new package of measures was announced to increase revenue. The corporate income tax prepayment rate that applies to sociétés anonymes and limited companies was raised from 55% to 65% (and from 60% to 80% for banks). This measure is expected to generate an extra €450 million in revenue in 2006. An additional €50-100 million should come from the adjustment of the net profit coefficients that apply to several categories of small enterprises and professionals. Finally, it was also announced that the ordinary budget will receive a further €400 million from the reduction of the Postal Savings Bank’s share capital, as was the case in December 2003.

Regarding Greece’s financial transactions with the EU, net receipts dropped by 10.8% to €3,228 million in 2005 (see Table VIII.10), owing to a 12.0% and 10.6% reduction in receipts from the Regional Fund and the Cohesion Fund respectively. However, this outturn also reflects the stagnancy, for the third year in a row, of farmer subsidisation under the Common Agricultural Policy – CAP (European Agricultural Guidance and Guarantee Fund-EAGGF, Guarantee Section).

Overall, net inflows from the EU are expected to grow by 25.9% in 2006, given that receipts from the EU are projected to rise by 16.0%, while payments thereto should rise by only 1.6%. The substantial pickup in receipts from the EU is expected to come from an anticipated 53.0% and 18.3% surge in receipts from the Regional Fund and the Cohesion Fund, respectively (see Table VIII.10).

3.2 The budgets of social security and welfare organisations and of public enterprises

According to data published in the Introductory Report on the 2006 Budget, the financial results of the six major social security and welfare organisations, as reflected in their consolidated operating and capital account deficit, are expected to deteriorate further in 2006. Specifically, the consolidated operating and capital account deficit of these organisations is forecast to widen by €351 million to €7,134 million (see Table VIII.6), owing to a 5.4% and a 9.7% rise in their operating account deficit and capital account deficit respectively. As a percentage of GDP, however, the total deficit will remain broadly unchanged at 3.7%. As in previous years, the bulk of this deficit (92.5%) will be covered by increased state budget grants.

The total consolidated operating and capital account deficit of public enterprises is anticipated to expand further in 2006, from 1.5% to 1.7% of GDP. In absolute terms, it is expected to grow by 21.4% to €3,373 million, up from €2,778 million in 2005 (see Table VIII.7).

The operating revenue of public enterprises is forecast to decline by 3.0% against the previous year. This, coupled with the respective yet smaller decrease (of 0.7%) in operating outlays, will push up the operating deficit to €876 million (2005: €512 million).
By contrast, total capital account expenditure is predicted to shrink by 1.8%, which, combined with the anticipated €876 million operating account deficit and a projected considerable decline (of 26.8%) in special resources will bring the total deficit of public enterprises to €3,373 million or 1.7% of GDP.

Of this deficit, 7.5% will be financed through ordinary budget and public investment budget grants, 28.0% through depreciation allowances, while the remaining 64.5% will be covered by net borrowing, which is thus expected to grow by a further 33.3% in 2006, having already increased by 83.2% in 2005 and 32.6% in 2004.

While the steep rise in public enterprise borrowing (primarily state-guaranteed borrowing) over the last few years to a significant degree finances investment outlays, still it cannot be denied that it represents a setback to efforts to curtail general government debt.
APPENDIX TO CHAPTER VIII

TAX POLICY MEASURES

The tax measures adopted in 2005 were in line with the key objective of fiscal policy to reduce the general government deficit to below 3% of GDP by 2006. These measures thus aimed to boost revenue mainly by curtailing tax evasion and, to a lesser extent, by imposing new taxes. Furthermore, the imposition of VAT on newly built real estate, apart from reducing tax evasion, was also geared to rationalising real estate taxation.

The revenue-enhancing tax measures introduced on 29 March 2005 within the framework of the submission of the Updated Stability and Growth Programme for 2004-2007 were enacted into Law 3336/20 April 2005.

Since its operation in June 2005, the Special Investigations Service (formerly the Body for the Prosecution of Economic Crime – SDOE), began to intensify its audits on firms, goods trade and service provision and launched special investigations to uncover false invoicing schemes, thereby contributing to the upswing in revenue recorded in the second half of the year. Meanwhile, the General Secretariat of Information Systems (GSIS), based on data and information contained in tax returns, has intensified its electronic crosschecking of invoices and is now in a position to carry out eight different kinds of invoice crosschecking.

As revenue growth was judged unsatisfactory in the first half of the year, Law 3371/14 July 2005 was enacted in order to create the appropriate legal framework for the securitisation of central government tax arrears so as to accelerate their collection. It had initially been anticipated that the securitisation of these tax arrears would yield revenue in the amount of €1,800 million in 2005 and €2,000 million in 2006. However, this idea of securitisation was abandoned in autumn 2005 and the envisaged revenue was substituted for by recording extraordinary non-tax proceeds in the 2006 Budget.

In an effort to combat tax evasion on petroleum products and in view of the upcoming seasonal demand for heating oil, it was decided last autumn that the retail receipts issued by fuel suppliers would have to state the buyer’s tax payer identification number (ITIN). Fuel suppliers would also have to submit aggregate sale statements to the Public Revenue Office indicating these buyers’ ITINs. By verifying and crosschecking these data, the competent units of the Public Revenue Office will now be able to detect suspected tax evasion.

Substantial changes to real estate taxation were introduced with Law 3427/27 December 2005, which stipulates that newly constructed buildings whose construction per-

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1 These measures are detailed in Bank of Greece, Annual Report 2004, p. 234. Also, see footnote 1 on p. 250.
2 Minister of Economy and Finance Decision 1121/15 September 2005.
mit was issued after 1 January 2006 shall be subject to VAT at a rate of 19% on the date of their delivery. The purchase of a first residence remains exempt from VAT and, instead, will be taxed under the regime applying to real property transfers. The VAT will be levied on a value approximating the actual market value—and not the value as per the objective prices—of the real estate. The imposition of VAT on newly built real estate is not expected to cause an immediate increase in receipts in 2006, and in fact not before the second half of 2007. It should however make a crucial contribution to the curtailment of tax evasion in the construction sector, which is apparently a fairly common practice.

The foregoing law also provides for a capital gain tax to be imposed on all transfers (subsequent to the first) of real property from 1 January 2006 onwards. The new tax will be levied on the value of real property as per the objective prices and at rates inversely proportional to the length of time the property to be transferred has remained in the possession of the transferor (20% for up to 5 years, 10% for 5 to 15 years, 5% for 15 to 25 years and 0% for over 25 years). These tax rates have been structured so that the heaviest burden falls on short-term capital gains, as a way of discouraging speculation. This tax should only be expected to yield revenue in the medium term, given that, as of 1 January 2006, the initial transfer of real estate will be subject either to VAT (in the case of newly constructed buildings) or to the real property transfer tax (in the case of older buildings), while the capital gain tax will only be levied from the second transfer onwards. Hence, it appears that the real property transfer tax will eventually be limited to the purchase of a first residence, which is exempt from the VAT on newly built real property, as well as to land.

The same law also introduces a 1% transfer duty on the objective value of the real estate to be transferred, payable by the prospective buyer.

In addition, Law 3453/7 April 2006 raises the rates of the large real property tax by 18%. Although the increased rates will become effective on 1 January 2006, the value of the real property they are levied upon will be calculated based on the objective prices of real property of 2005.

All of the foregoing provisions make for a complex tax regime for real property, with transfers being subject, depending on the case, to up to four different taxes (VAT, capital gain tax, real property transfer tax and transfer duty), while the amount payable will, once again depending on the case, be calculated on the basis of two different prices for the same real estate. In addition, the rates of the real property tax and the real property duty—both of which remain in effect—have been increased. It should be noted that these high taxes on real property transfers are, at least partly, to blame for the workforce’s

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1 Under the regime in effect until 31 December 2005, first residences were granted a substantial exemption from the real property transfer tax. If the value of the real estate was in excess of the tax-free limit, the excess amount was taxed at a rate of 9% or 11%. Under the new law this tax-free limit is raised by 15%.
2 Minister of Economy and Finance Decision 1054/27 March 2006.
3 A similar tax had been introduced in Greece twice in the past (in 1965 and in 1990), but both times it was abolished after a short while.
lack of geographical mobility and the labour market’s sluggish adjustment to changes in economic conditions.

Law 3453/7 April 2006 also introduces appreciable tax reliefs on inheritances, gifts and parental donations. As of 1 January 2006, the tax allowance for inheritances or parental donations is raised from €20,000 to €80,000. In addition, the grandchildren of an inherited person, who until now were more heavily taxed than the children of the deceased, will now be taxed at the same rate as the deceased’s children and the deadline for paying (in instalments) the relevant tax is extended from two years to four. Moreover, the amount of parental donation which is subject to a reduced tax rate is raised from €90,000 to €100,000. Similarly, the tax allowance for the gratuitous acquisition of a first residence is also increased.

At the end of 2005, the objective prices of real property, which had remained unchanged since 2001, were raised by an estimated 30% on average (effective from 1 January 2006).

In January 2006, new measures were taken to raise additional revenue for the budget. The corporate tax prepayment rate for legal entities (sociétés anonymes, limited companies, etc.) against next year’s tax obligations was increased from 55% to 65% of the amount of tax to be paid this year. In the specific case of financial institutions, it was increased from 60% to 80%. The net profit coefficients – used to calculate (on a non-accounting basis) the taxable income of significant categories of taxpayers (businessmen and professionals) were also increased. The new coefficients will apply to income earned in 2005 and subject to taxation in 2006. Therefore, both measures are expected to yield revenue within 2006.

Finally, the Budget for 2006 will be further strengthened by €400 million in proceeds, to be derived from the reduction of the Postal Savings Bank’s share capital, as was also the case in December 2003.

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1 Minister of Economy and Finance Decision 1158/30 December 2005.
2 Law 3453/7 April 2006 re: “Adjustments to the taxation system of subsidiaries and other provisions”.
3 Minister of Economy and Finance Decision 1004/19 January 2006.
IX. BALANCE OF PAYMENTS

1. CURRENT ACCOUNT

1.1 New presentation of the balance of payments and methodology changes

According to the new presentation of the statistical data of the balance of payments, the transfers balance is now divided into two parts: the current transfers balance, which is classified under the current account, and the capital transfers balance, which is a separate section. The new current account balance now includes the trade balance, the services balance, the income account balance and the current transfers balance, while the capital transfers balance is an independent part of the balance of payments. Therefore, in this new presentation of the balance of payments, the algebraic sum of the current account balance and the capital transfers balance corresponds to the current account balance as presented for data up to June 2005.1

Moreover, the Bank of Greece, in the context of its full harmonisation with the relevant international methodology, calculated and incorporated into the balance of payments, as from January 2006, the data concerning reinvested (undistributed) profits from non-residents’ direct investment in Greece and residents’ direct investment abroad. Specifically, reinvested (undistributed) profits from non-residents’ direct investment in Greece are recorded in the income account as an outflow (payment) of income from direct investment and, at the same time, in the financial account as an inflow (increase) in non-residents’ direct investment in Greece. Correspondingly, reinvested (undistributed) earnings from residents’ direct investment abroad are recorded in the income account as an inflow (receipt) of income from direct investment and, at the same time, in the financial account as an outflow (increase) in residents’ direct investment abroad. Reinvested (undistributed) profits from direct investment are calculated on the basis of data collected by the Bank of Greece directly from firms that operate in Greece and either make direct investments abroad or accept direct investments from abroad. The data are collected on an annual basis and the resulting total of reinvested (undistributed) profits is allocated equally across the months of the year. To ensure comparability, reinvested (undistributed) profits were also calculated for the years 2003, 2004 and 2005 and the relevant figures of the balance of payments were adjusted accordingly. The data for the years 2003 and 2004 are final, while those for the years 2005 and 2006 are provisional and are based on the assumption that both the profitability and the dividend policy of firms in 2004 will be maintained in 2005 and 2006. In October of each year the data of the previous year are finalised.2

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TABLE IX.1
BALANCE OF PAYMENTS
(Million euro)

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. CURRENT ACCOUNT BALANCE (I.A+I.B+I.C+I.D)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oil trade balance</td>
<td>–22,643.5</td>
<td>–25,435.8</td>
<td>–27,546.9</td>
</tr>
<tr>
<td>Non-oil trade balance</td>
<td>–18,607.7</td>
<td>–20,924.7</td>
<td>–20,917.7</td>
</tr>
<tr>
<td>Trade balance excl. fuel and ships</td>
<td>–18,744.0</td>
<td>–21,060.3</td>
<td>–20,195.4</td>
</tr>
<tr>
<td><strong>I.A.1 Exports of goods</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel</td>
<td>1,260.7</td>
<td>1,544.7</td>
<td>2,257.7</td>
</tr>
<tr>
<td>Ships (receipts)</td>
<td>136.3</td>
<td>135.6</td>
<td>131.0</td>
</tr>
<tr>
<td>Other goods</td>
<td>9,572.4</td>
<td>9,817.2</td>
<td>10,341.0</td>
</tr>
<tr>
<td><strong>I.A.2 Imports of goods</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel</td>
<td>5,316.5</td>
<td>6,053.8</td>
<td>8,886.9</td>
</tr>
<tr>
<td>Ships (payments)</td>
<td>124.2</td>
<td>1,155.8</td>
<td>2,324.4</td>
</tr>
<tr>
<td>Other goods</td>
<td>28,316.4</td>
<td>30,877.4</td>
<td>30,353.5</td>
</tr>
<tr>
<td><strong>I.B SERVICES BALANCE (I.B.1–I.B.2)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>I.B.1 Receipts</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel</td>
<td>21,430.3</td>
<td>26,742.5</td>
<td>27,560.5</td>
</tr>
<tr>
<td>Transport</td>
<td>9,495.3</td>
<td>10,347.8</td>
<td>11,036.5</td>
</tr>
<tr>
<td>Other services</td>
<td>2,365.3</td>
<td>3,087.7</td>
<td>2,656.3</td>
</tr>
<tr>
<td><strong>I.B.2 Payments</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel</td>
<td>9,923.9</td>
<td>11,275.5</td>
<td>11,862.4</td>
</tr>
<tr>
<td>Transport</td>
<td>2,136.0</td>
<td>2,310.4</td>
<td>2,445.7</td>
</tr>
<tr>
<td>Other services</td>
<td>2,864.3</td>
<td>3,256.9</td>
<td>3,179.0</td>
</tr>
<tr>
<td><strong>I.C INCOME BALANCE (I.C.1–I.C.2)</strong></td>
<td>–3,975.8</td>
<td>–4,377.4</td>
<td>–5,676.1</td>
</tr>
<tr>
<td><strong>I.C.1 Receipts</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wages, salaries</td>
<td>2,588.8</td>
<td>2,810.6</td>
<td>2,273.5</td>
</tr>
<tr>
<td>Interest, dividends, profits</td>
<td>337.2</td>
<td>280.0</td>
<td>287.1</td>
</tr>
<tr>
<td><strong>I.C.2 Payments</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wages, salaries</td>
<td>6,556.6</td>
<td>7,188.0</td>
<td>8,949.6</td>
</tr>
<tr>
<td>Interest, dividends, profits</td>
<td>169.9</td>
<td>188.9</td>
<td>194.9</td>
</tr>
<tr>
<td><strong>I.D CURRENT TRANSFERS BALANCE (I.D.1–I.D.2)</strong></td>
<td>3,848.7</td>
<td>3,829.0</td>
<td>3,177.4</td>
</tr>
<tr>
<td><strong>I.D.1 Receipts</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General government (receipts from the EU)</td>
<td>4,147.6</td>
<td>4,080.3</td>
<td>4,615.5</td>
</tr>
<tr>
<td>Other sectors (emigrants' remittances)</td>
<td>2,277.3</td>
<td>2,275.7</td>
<td>2,261.0</td>
</tr>
<tr>
<td><strong>I.D.2 Payments</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General government (mainly payments to the EU)</td>
<td>2,153.8</td>
<td>2,168.0</td>
<td>2,021.4</td>
</tr>
<tr>
<td>Other sectors (emigrants' remittances)</td>
<td>422.4</td>
<td>510.3</td>
<td>777.6</td>
</tr>
<tr>
<td><strong>II. CAPITAL TRANSFERS BALANCE (II.1–II.2)</strong></td>
<td>1,239.4</td>
<td>2,386.1</td>
<td>2,048.6</td>
</tr>
<tr>
<td><strong>II.1 Receipts</strong></td>
<td>1,392.5</td>
<td>2,618.3</td>
<td>2,239.9</td>
</tr>
<tr>
<td>General government (mainly receipts from the EU)</td>
<td>1,227.4</td>
<td>2,463.9</td>
<td>2,137.1</td>
</tr>
<tr>
<td>Other sectors</td>
<td>165.1</td>
<td>154.4</td>
<td>187.8</td>
</tr>
<tr>
<td><strong>II.2 Payments</strong></td>
<td>153.1</td>
<td>232.2</td>
<td>276.3</td>
</tr>
<tr>
<td>General government (mainly payments to the EU)</td>
<td>15.5</td>
<td>69.8</td>
<td>22.9</td>
</tr>
<tr>
<td>Other sectors</td>
<td>137.6</td>
<td>162.4</td>
<td>253.4</td>
</tr>
<tr>
<td><strong>III. CURRENT ACCOUNT AND CAPITAL TRANSFERS BALANCE (I+II)</strong></td>
<td>–10,024.7</td>
<td>–8,331.0</td>
<td>–12,298.9</td>
</tr>
<tr>
<td><strong>IV. FINANCIAL ACCOUNT BALANCE (IV.A+IV.B+IV.C+IV.D)</strong></td>
<td>9,883.7</td>
<td>8,098.0</td>
<td>12,606.6</td>
</tr>
<tr>
<td><strong>IV.A DIRECT INVESTMENT</strong></td>
<td>764.7</td>
<td>863.6</td>
<td>–679.0</td>
</tr>
<tr>
<td>By residents abroad</td>
<td>–367.2</td>
<td>–828.8</td>
<td>–1,169.7</td>
</tr>
<tr>
<td>By non-residents in Greece</td>
<td>1,129.9</td>
<td>1,692.4</td>
<td>487.7</td>
</tr>
<tr>
<td><strong>IV.B PORTFOLIO INVESTMENT</strong></td>
<td>12,334.0</td>
<td>13,272.5</td>
<td>7,042.6</td>
</tr>
<tr>
<td>Assets</td>
<td>–3,737.9</td>
<td>–11,489.4</td>
<td>–1,829.7</td>
</tr>
<tr>
<td>Liabilities</td>
<td>21,071.8</td>
<td>25,216.9</td>
<td>25,782.3</td>
</tr>
<tr>
<td><strong>IV.C OTHER INVESTMENT</strong></td>
<td>–7,623.9</td>
<td>–9,104.1</td>
<td>5,914.0</td>
</tr>
<tr>
<td>Assets</td>
<td>–5,316.5</td>
<td>–6,215.7</td>
<td>–6,301.0</td>
</tr>
<tr>
<td>Liabilities</td>
<td>–3,589.4</td>
<td>–2,888.4</td>
<td>12,215.5</td>
</tr>
<tr>
<td>(General government loans)</td>
<td>–2,618.4</td>
<td>–1,027.4</td>
<td>–447.0</td>
</tr>
<tr>
<td><strong>IV.D CHANGE IN RESERVE ASSETS</strong></td>
<td>4,409.0</td>
<td>2,611.0</td>
<td>49.0</td>
</tr>
<tr>
<td><strong>V. ERRORS AND OMISSIONS</strong></td>
<td>141.0</td>
<td>233.0</td>
<td>–307.7</td>
</tr>
<tr>
<td><strong>RESERVE ASSETS</strong></td>
<td>4,605.0</td>
<td>1,994.0</td>
<td>1,945.0</td>
</tr>
</tbody>
</table>

1 (+) net inflow, (-) net outflow.
2 (+) decrease, (-) increase.
* Provisional data.
Source: Bank of Greece.
It should be pointed out that, as from April 2005, there is a change in the methodology of recording interest on bonds in the balance of payments statistics. From then on, interest payments are recorded in the balance of payments statistics on an accrual basis, instead of interest actually paid (as was done until March 2005), in order to attain more accuracy. For comparability purposes, the relevant data for the previous months up to and including January 2003 were revised.\(^1\)

1.2 Summary of developments

In 2005, the current account deficit (according to the new presentation) increased considerably by €3,630 million over 2004 and reached €14,347 million (see Table IX.1). Excluding imports and exports of ships, the current account deficit organically linked to current production increased by €2,773 million over 2004 to €13,625 million. Finally, the combined current account and capital transfers balances showed a deficit of €12,299 million, compared with €8,331 million in 2004.

The widening of the current account deficit is mainly attributable to the increase in the net oil import bill due to the rise in the price of crude oil on the world markets, and, secondarily, to the fact that the ships’ balance showed a deficit (in contrast to the surplus recorded in 2004), due to the considerable increase in payments for the purchase of new sea-going vessels. It is also attributable to the increase in net interest payments and to the fall in the current transfers surplus on account of both the increase in general government gross payments to the EU and the decline in net receipts of other sectors (mainly emigrants’ remittances). These negative developments were only partly offset by the change in the trade balance excluding oil and ships (the deficit of which narrowed, because exports excluding oil and ships increased, while the corresponding import bill recorded a slight decline from its particularly high level in 2004). As a result, the current account deficit reached 7.9% of GDP, compared with 6.4% in 2004 and 7.3% in 2003.

1.3 Trade balance

In 2005, the trade deficit increased by €2,111 million over 2004. This reflects the increase (€2,118 million) in the net oil import bill, which reached 24% of the overall trade deficit (compared with approximately 18% in 2004 and in 2003). As already mentioned, this development is attributable to the significant rise in the price of crude oil on the world markets.\(^2\)

---

2 The oil import bill grew by 46.8%, while the average crude oil price in euro terms rose by around 46.2% year-on-year in 2005. These data imply that the volume of oil imports remained unchanged.
The trade balance was burdened with €858 million owing to purchases and sales of ships,\(^1\), which led to a €722 million deficit in the ships' balance in 2005, compared with a surplus of €136 million in 2004. In recent years, however, sales of “second-hand” ships by shipping companies resident in Greece and purchases of new ships have both boosted

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\(^1\) Sales of “second-hand” ships amounted to 13.4% of export receipts excluding oil (2004: 11.6%) and purchases of ships stood at 7% of the non-oil import bill (2004: 3.6%).

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**TABLE IX.2**

**BREAKDOWN OF GREECE’S EXTERNAL TRADE BY PRODUCT CATEGORY**

(Excl. fuel and ships)

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage share in total export receipts</th>
<th>Percentage change in export receipts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural products</td>
<td>22.6</td>
<td>19.5</td>
</tr>
<tr>
<td>Chemicals, plastics</td>
<td>12.8</td>
<td>13.4</td>
</tr>
<tr>
<td>Metallurgy</td>
<td>8.1</td>
<td>11.0</td>
</tr>
<tr>
<td>Machinery, appliances</td>
<td>7.5</td>
<td>6.2</td>
</tr>
<tr>
<td>Means of transport excl. ships</td>
<td>0.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Other manufacturing industries(^2)</td>
<td>20.7</td>
<td>20.0</td>
</tr>
<tr>
<td>Unclassified goods(^2)</td>
<td>27.7</td>
<td>28.5</td>
</tr>
<tr>
<td>Total (excl. fuel and ships)</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

---

**TABLE IX.3**

**BREAKDOWN OF GREECE’S EXTERNAL TRADE BY PRODUCT CATEGORY**

(Excl. fuel and ships)

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage share in total import bill</th>
<th>Percentage change in import bill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural products</td>
<td>14.4</td>
<td>14.2</td>
</tr>
<tr>
<td>Chemicals, plastics</td>
<td>15.9</td>
<td>15.2</td>
</tr>
<tr>
<td>Metallurgy</td>
<td>8.8</td>
<td>9.5</td>
</tr>
<tr>
<td>Machinery, appliances</td>
<td>21.3</td>
<td>20.7</td>
</tr>
<tr>
<td>Consumer durables</td>
<td>3.6</td>
<td>2.9</td>
</tr>
<tr>
<td>Capital goods</td>
<td>13.3</td>
<td>13.7</td>
</tr>
<tr>
<td>PCs</td>
<td>1.9</td>
<td>2.0</td>
</tr>
<tr>
<td>Fixed-voice and mobile telephony</td>
<td>2.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Means of transport excl. ships</td>
<td>14.2</td>
<td>14.5</td>
</tr>
<tr>
<td>Passenger cars</td>
<td>7.2</td>
<td>7.3</td>
</tr>
<tr>
<td>Other manufacturing industries(^2)</td>
<td>22.0</td>
<td>21.5</td>
</tr>
<tr>
<td>Other goods</td>
<td>0.3</td>
<td>0.4</td>
</tr>
<tr>
<td>Unclassified goods(^2)</td>
<td>3.0</td>
<td>3.6</td>
</tr>
<tr>
<td>Total (excl. fuel and ships)</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

---

\(^1\) Including raw materials used.
\(^2\) Products for which no code number has been reported.
\(*\) Provisional data.

Source: Bank of Greece.
the transport capacity and lowered the average age of the Greek-owned merchant fleet.
In increased purchases of ships, particularly in 2005, largely reflect the positive assessment
of Greek-based shipping firms about the medium-term prospects of sea transport world-
wide, owing to continued strong world trade growth.\(^1\) Thus, favourable conditions are cre-
ated for higher sea transport receipts and hence an improvement in the current account
balance over the medium term.

The trade deficit (excluding oil and ships) decreased by €865 million owing to an
increase of €524 million in export receipts and a €341 million decrease in the import bill.\(^2\)
According to detailed Bank of Greece data on the breakdown of exports and imports
excluding oil and ships, export receipts recorded an increase in most product categories. A
significant contribution to this increase was made by agriculture and metallurgy. By con-
trast, a small drop was recorded in export receipts from “other manufacturing industries”
mainly on account of the decline in textiles and clothing exports (see Box IX.1). A decrease
was also observed in receipts from exports of products that cannot be classified, which are,
nonetheless, an appreciable percentage of total receipts (24%).\(^3\) As regards imports exclud-
ing oil and ships, there was a decrease in payments for capital goods, which was expected,
since this category had increased markedly in 2004 owing to the completion of the Olympic
projects. Finally, the agricultural products import bill recorded a slight decline, while pay-
ments for imports of other product categories picked up compared with 2004.

1 It is worth noting the considerable recourse of Greek shipping firms to US stock markets – NASDAQ, New York Stock
Exchange (NYSE) and American Exchange (AMEX)– which was supported by the favourable environment in world
freight markets at the end of 2004. Specifically, in 2005, Greek-owned shipping firms raised approximately $1,500 mil-
lion from US stock markets, through either initial public offerings or secondary capital increases.
2 According to provisional NSSG data, in 2005 the value of total exports increased by 13.1%, that of exports excluding
ships rose by 12.3% and the value of exports excluding oil products and ships increased by 9.1%, while the value of total
imports grew by 3.5%, that of imports excluding ships increased by 5.2% and the value of imports excluding oil prod-
ucts and ships fell by 1.1%. It should be recalled that the differences between Bank of Greece and NSSG trade statistics
are due to several reasons, the chief one being that the former relate to receipts and payments mainly through the
domestic banking system, while the latter are based on customs data (for transactions with non-EU countries) or tax
data (INTRASTAT) (for intra-EU transactions) and remain “provisional” for a long time.
3 This is so because commercial banks, in submitting data to the Bank of Greece for the compilation of balance of pay-
ments statistics, do not give a code number for these products. Since unclassifiable products have an appreciable share
in total exports, growth rates for the other categories may not accurately reflect developments in those categories.

**BOX IX.1**

The liberalisation of global trade in textiles and clothing and its implications for economic
activity, employment and prices in Greece

In January 2005 the remaining quotas on global textiles and clothing trade were lifted,
marking the end of an era when this trade was subject to a regime of tariffs and quantitative
restrictions. These restrictions, aiming in their majority to protect the textile industry of import-
ing countries, were negotiated bilaterally and were governed by the rules of the Multifibre
In 1995 the Multifibre Arrangement was replaced by the World Trade Organisation Agreement on Textiles and Clothing (ATC) 1995-2004, which envisaged a transition period of ten years, so that the relevant sectors could adjust to the rules of the General Agreement on Tariffs and Trade (GATT), leading ultimately to the full liberalisation of international trade in textiles by 2004. This was preceded by a phasing out period, whereby quotas were removed in three stages starting in 1995, 1998 and 2002, respectively. Still, only 51% of the volume of textiles trade had been liberalised by the end of 2004. In the long run, full liberalisation is expected to bring about multiple benefits, such as: larger export markets for the products of developing countries, whose output and employment are highly dependent on textiles; lower consumer prices; more rational and less costly production. However, in the short and medium term, liberalisation would entail considerable adjustment costs, since a timely shift of resources to alternative activities is not always possible.

The entry of China into the international marketplace (2001) coincided with these developments, and concerns about the consequences of massive inflows of low-cost textiles in international markets proved reasonable enough. Indeed, following the abolition of restrictions there was a dramatic increase in imports from China, which triggered bilateral negotiations between the EU and China. This led to the EU-China Textile Agreement of 10 July 2005, whose purpose was to limit the annual growth of imports from China. The agreement imposed quantitative restrictions on 10 of the 35 categories of EU imports of textile and clothing products originating in China. In early August 2005 the agreed import limits were exceeded and as a result huge quantities of Chinese products were blocked at EU borders. Following negotiations between the EU and China, a new agreement was signed in 5 September 2005, and clearance through customs was finally allowed, while part of the non-imported quantities was carried over and added to the agreed import levels for the next year.

### THE VALUE OF GREEK TEXTILE AND CLOTHING IMPORTS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-15</td>
<td>1,182</td>
<td>1,360</td>
<td>1,181</td>
<td>1,466</td>
<td>1,511</td>
</tr>
<tr>
<td></td>
<td>(76.5)</td>
<td>(69.7)</td>
<td>(65.0)</td>
<td>(71.3)</td>
<td>(65.2)</td>
</tr>
<tr>
<td>China</td>
<td>37</td>
<td>73</td>
<td>162</td>
<td>235</td>
<td>258</td>
</tr>
<tr>
<td></td>
<td>(2.4)</td>
<td>(3.7)</td>
<td>(8.9)</td>
<td>(11.4)</td>
<td>(11.1)</td>
</tr>
<tr>
<td>India</td>
<td>20</td>
<td>26</td>
<td>47</td>
<td>62</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>(1.3)</td>
<td>(1.3)</td>
<td>(2.6)</td>
<td>(3.0)</td>
<td>(3.0)</td>
</tr>
<tr>
<td>Other countries</td>
<td>306</td>
<td>491</td>
<td>426</td>
<td>293</td>
<td>480</td>
</tr>
<tr>
<td></td>
<td>(19.8)</td>
<td>(25.2)</td>
<td>(23.5)</td>
<td>(14.3)</td>
<td>(20.7)</td>
</tr>
<tr>
<td>Total</td>
<td>1,545</td>
<td>1,950</td>
<td>1,816</td>
<td>2,056</td>
<td>2,318</td>
</tr>
</tbody>
</table>

* Provisional data.

**Note:** The share of each place of origin in total exports appears in parentheses.

**Source:** NSSG.

The entry of China into the international marketplace (2001) coincided with these developments, and concerns about the consequences of massive inflows of low-cost textiles in international markets proved reasonable enough. Indeed, following the abolition of restrictions there was a dramatic increase in imports from China, which triggered bilateral negotiations between the EU and China. This led to the EU-China Textile Agreement of 10 July 2005, whose purpose was to limit the annual growth of imports from China. The agreement imposed quantitative restrictions on 10 of the 35 categories of EU imports of textile and clothing products originating in China. In early August 2005 the agreed import limits were exceeded and as a result huge quantities of Chinese products were blocked at EU borders. Following negotiations between the EU and China, a new agreement was signed in 5 September 2005, and clearance through customs was finally allowed, while part of the non-imported quantities was carried over and added to the agreed import levels for the next year.
The entry of Chinese and Indian textiles into the global market has to date added little to the problems faced by the textile industry of Greece. Imports from these two countries have increased drastically in value terms over the last decade, but their share is relatively small compared with that of imports from the EU, which account for more than 60% of total imports of textiles and clothing (see table in this box).

Against this background, the prospects of the Greek textile industry appear gloomy, as pointed out in the latest sectoral survey conducted by the IOBE,\(^1\) given that liberalisation found the majority of Greek enterprises unprepared to respond to competitive pressures. Specifically, in the crucial period 1995-2004 the sector shrank considerably, although it maintained an important share in total manufacturing (see Chart A). As pointed out in the same survey, it is not too late for taking action in rescue of the sector. However, this action can no longer rely on protectionist measures but should instead seek to enhance the sector’s international competitiveness, with particular emphasis on improving the quality of products and on exploiting new markets.

The sector of textiles and clothing, which had evolved into one of the most important industries of Greek manufacturing, started to face increasingly stronger competition once

\(^1\) IOBE, *Sectoral Study on Textiles*, January 2006 (in Greek).
Greece joined the EEC and the tariff and quota regime had to be harmonised with that of the Community. Competition now comes not only from the other Member States, but also from non-EU low-cost countries. However, the indirect protection that the Greek textile industry enjoyed under the various development programmes seems to have enabled the survival of enterprises which would otherwise have exited from the market. Nevertheless, in the 1990s and particularly from the mid-1990s onwards, the sector came under growing international competitive pressures.

During the past ten years the production indicators of the textile and clothing industries have been declining, and so has employment in the sector (see Chart B). It should be noted in this regard that the textile and clothing sector is labour intensive and therefore plays a key role in employment creation. Declining output and employment reflects, on the one hand, the fact that the less profitable enterprises have exited from the market and, on the other hand, extensive delocation of activities to low labour cost countries, notably the Balkans. This trend, which grew to larger proportions from early 2000 onwards, was deemed necessary for the survival of enterprises and for retaining jobs in Greece – insofar as administrative, planning activities or human capital intensive activities continue to be carried out domestically.1

---

1 See Box III.2 in Chapter III.
Turning to prices, the clothing sub-index, with a weight of 7.6% in the CPI basket, demonstrated a clear downward trend until 2000 (see Chart C), before picking up slightly in 2000-2001 and 2004-2005, partly reflecting higher demand in a context of strong consumer credit expansion.

Developments in global markets could not but affect Greek exports of textiles and clothing: between 1995 and 2004 the sector’s share in total manufacturing exports dropped to half in comparison with 1995 (see Chart D). This decline concerned mainly the exports of made-up garments, while the share of textiles (such as yarn and fabrics) was smaller throughout 1995-2004 and fell at a slower pace. However, as early as in the 1980s a major change in the relative shares of textiles and clothing in total exports of manufacturing products was observed.\(^1\) In terms of imports, the reduction in the share of textiles in total imports of manufacturing products seems to be associated with the dwindling output of the domestic clothing sector, to which they largely serve as inputs. By contrast, the import share of made-up garments did not show any significant change for most of the period under review.

\(^1\) Specifically, in 1981 these shares were 20% and 16% respectively, while in 1990 they were 11% and 37%.
Regarding the geographical breakdown of exports (including oil and ships), detailed NSSG data for 2005 point to a slight drop in the share of exports to the EU-25, as well as to the Balkans, which is a major destination of Greek products. With respect to imports, the share of imports from the EU-25 and other OECD countries dropped, while the share of imports from non-EU countries (particularly from the Commonwealth of Independent States and the Middle East) grew, mainly because of higher crude oil prices in the world market.

### TABLE IX.3

**BREAKDOWN OF GREECE'S EXTERNAL TRADE BY GEOGRAPHICAL AREA**

#### A. Exports

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>EU-15</td>
<td>48.8</td>
<td>47.4</td>
<td>45.2</td>
<td>0.2</td>
<td>8.0</td>
</tr>
<tr>
<td>Euro area</td>
<td>39.5</td>
<td>38.0</td>
<td>36.6</td>
<td>-0.8</td>
<td>9.1</td>
</tr>
<tr>
<td>New Member States</td>
<td>7.7</td>
<td>7.5</td>
<td>7.6</td>
<td>0.3</td>
<td>14.1</td>
</tr>
<tr>
<td>OECD2</td>
<td>13.3</td>
<td>13.4</td>
<td>13.7</td>
<td>3.6</td>
<td>15.9</td>
</tr>
<tr>
<td>USA</td>
<td>5.6</td>
<td>5.5</td>
<td>5.3</td>
<td>-3.3</td>
<td>12.8</td>
</tr>
<tr>
<td>Balkan countries1</td>
<td>16.1</td>
<td>17.0</td>
<td>15.3</td>
<td>8.6</td>
<td>2.3</td>
</tr>
<tr>
<td>Commonwealth of Independent States</td>
<td>3.3</td>
<td>3.0</td>
<td>2.8</td>
<td>-5.8</td>
<td>6.7</td>
</tr>
<tr>
<td>Northern Africa &amp; Middle East countries4</td>
<td>5.4</td>
<td>6.5</td>
<td>7.7</td>
<td>24.2</td>
<td>34.2</td>
</tr>
<tr>
<td>China and Southeastern Asia5</td>
<td>1.5</td>
<td>1.9</td>
<td>2.3</td>
<td>27.3</td>
<td>39.2</td>
</tr>
<tr>
<td>Other countries</td>
<td>3.7</td>
<td>3.3</td>
<td>5.2</td>
<td>-7.7</td>
<td>77.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>3.2</td>
<td>13.1</td>
</tr>
</tbody>
</table>

#### B. Imports

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-15</td>
<td>54.8</td>
<td>55.8</td>
<td>53.7</td>
<td>7.8</td>
<td>-0.4</td>
</tr>
<tr>
<td>Euro area</td>
<td>48.4</td>
<td>49.2</td>
<td>47.8</td>
<td>7.5</td>
<td>0.5</td>
</tr>
<tr>
<td>New Member States</td>
<td>1.9</td>
<td>2.1</td>
<td>2.4</td>
<td>16.9</td>
<td>18.2</td>
</tr>
<tr>
<td>OECD2</td>
<td>20.3</td>
<td>15.9</td>
<td>12.5</td>
<td>-16.7</td>
<td>-18.8</td>
</tr>
<tr>
<td>USA</td>
<td>6.4</td>
<td>4.5</td>
<td>3.4</td>
<td>-26.5</td>
<td>-20.8</td>
</tr>
<tr>
<td>Balkan countries1</td>
<td>2.7</td>
<td>3.1</td>
<td>3.3</td>
<td>23.7</td>
<td>9.2</td>
</tr>
<tr>
<td>Commonwealth of Independent States</td>
<td>7.0</td>
<td>6.4</td>
<td>9.2</td>
<td>-3.9</td>
<td>48.2</td>
</tr>
<tr>
<td>Northern Africa &amp; Middle East countries4</td>
<td>7.1</td>
<td>7.9</td>
<td>10.2</td>
<td>16.6</td>
<td>34.6</td>
</tr>
<tr>
<td>China and Southeastern Asia5</td>
<td>4.7</td>
<td>5.1</td>
<td>5.5</td>
<td>16.3</td>
<td>11.2</td>
</tr>
<tr>
<td>Other countries</td>
<td>1.6</td>
<td>3.7</td>
<td>3.3</td>
<td>147.8</td>
<td>-8.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>5.8</td>
<td>3.5</td>
</tr>
</tbody>
</table>

1 Estonia, Latvia, Lithuania, Poland, Czech Republic, Slovakia, Hungary, Slovenia, Cyprus, Malta.
2 The OECD Member States not included in another category.
3 Albania, Bulgaria, Romania and former Yugoslavia countries (Bosnia-Herzegovina, Croatia, FYROM and Serbia-Montenegro).
4 Greece's major trading partners in Northern Africa and the Middle East.
5 Greece's major trading partners in Southeastern Asia.

* Provisional data.

**Source:** NSSG.
Nonetheless, regardless of these developments, price and cost competitiveness of Greek products in international markets as well as structural competitiveness remain a significant problem, which requires long-term changes in the production structure and in the functioning of certain markets, given that inflation in Greece exceeds the euro area average and that there are significant rigidities in product and input markets. These weaknesses are reflected in the development of the real effective exchange rate indices on the basis of both labour costs and consumer prices (see Table IX.4 and Chart IX.1). In particular, the real effective exchange rate based on unit labour costs in manufacturing (ULCM) increased by 2.6% in 2005 against the total of Greece’s trading partners and by 4.2% vis-à-vis the other euro area countries. The real effective exchange rate based on consumer prices rose by 0.4% and 1.4% respectively. The development of these two indices suggests a further decline in the price competitiveness of Greek products in 2005, particularly vis-à-vis Greece’s trading partners in the euro area. Of course, enhancing the competitiveness of Greek products in world markets can no longer rely solely on efforts to reduce production costs, particularly taking into account the competition from exports by the emerging economies of Asia and Eastern and Central Europe, where production costs are much lower than those of Greek products. Therefore,

<table>
<thead>
<tr>
<th>Year</th>
<th>Nominal EER 1999 Q1=100</th>
<th>Percentage change</th>
<th>Real EER deflated by the CPI 1999 Q1=100</th>
<th>Percentage change</th>
<th>Real EER deflated by unit labour costs in manufacturing 1999 Q1=100</th>
<th>Percentage change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>91.6</td>
<td></td>
<td>90.5</td>
<td></td>
<td>90.9</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>92.6</td>
<td>1.0</td>
<td>91.4</td>
<td>1.0</td>
<td>94.4</td>
<td>3.8</td>
</tr>
<tr>
<td>2002</td>
<td>94.3</td>
<td>1.9</td>
<td>94.0</td>
<td>2.9</td>
<td>99.5</td>
<td>5.5</td>
</tr>
<tr>
<td>2003</td>
<td>98.8</td>
<td>4.7</td>
<td>99.3</td>
<td>5.6</td>
<td>107.7</td>
<td>8.3</td>
</tr>
<tr>
<td>2004</td>
<td>100.3</td>
<td>1.5</td>
<td>101.4</td>
<td>2.1</td>
<td>114.6</td>
<td>6.4</td>
</tr>
<tr>
<td>2005</td>
<td>99.6</td>
<td>-0.7</td>
<td>101.8</td>
<td>0.4</td>
<td>117.6</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Cumulative percentage change

<table>
<thead>
<tr>
<th></th>
<th>2001-2005</th>
<th>1999 Q1=100</th>
<th>Percentage change</th>
<th>1999 Q1=100</th>
<th>Percentage change</th>
<th>1999 Q1=100</th>
<th>Percentage change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8.7</td>
<td>12.5</td>
<td>29.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

greater importance should be attached to quality, in order to improve the composition of Greek exports and increase the share of medium- and high-technology products. This process is under way and already has a positive impact on Greece’s export performance (see also Box IX.2), but it needs to continue.

**Box IX.2**

**Review of changes in the structure of the Greek external trade**

Developments in the geographical structure of Greece’s external trade are of great interest, given that they are related to the conditions of competition faced by Greek enterprises →
both in international and domestic markets. The present analysis covers a long period \(^1\) (1960-2004), during which the countries of the EU-15 remained the top trading partners of Greece, despite the enhanced role of the Balkans as the destination of the Greek products in the last decade.

The EU-15 market remained the most important destination for Greek exports, which are mostly of low and medium technology products. The share of Greek exports to the countries of the EU-15 reached its peak in the late 1980s. This development reflected, on the one hand, the expansion (until the second half of that decade) of the Greek manufacturing sector \(^2\) and, on the other hand, Greece’s association agreement with the EEC (1961), and subsequent full participation implying (1981) liberalisation of trade transactions with the other EU Member States. By contrast, in the mid-1990s, there was a significant shift of the Greek export trade towards alternative destinations, mainly the Balkan countries. On the side of imports, more than 50% of imported products come from the EU-15 (see Table A). This percentage rose substantially, particularly after 1980, given that the entry of Greece into the EEC implied also lower import duties for intra-Community trade. Consequently, the share of the other industrial countries in Greek imports declined.

It should be noted that the share of Greek exports in total EU imports is very small and has been declining over the last years, \(^3\) while, contrariwise, Greek exports represent a much larger market in the Balkan countries. Specifically, the 1990s saw a shift in the geographical composition of export trade, characterised by the opening of markets, mainly in the Balkans but also Central and Eastern Europe countries. \(^4\) Besides, the traditional Greek exports had already been encountering increasing competition in EU markets from low-cost third countries’ products, therefore the turn to alternative destinations was seen as a way out. Overall, the percentage of exports to the EU-15 has been reduced significantly, in contrast to that of exports to the Balkan countries, which has almost tripled in spite of the notable appreciation of the euro. The rapid growth of these markets and their geographical proximity to Greece (relative to the other European markets) were factors that favoured the restructuring of Greek imports.

Greece’s trade with the ten new Member States has not been significantly affected by the recent EU enlargement. However, the enlargement seems to have had a dampening effect on Greek exports to the EU-15, with EU import demand shifting to the new entrants, owing to, among other things, their geographical proximity. \(^5\) An additional factor that triggered changes in the geographical structure of Greek external trade was the customs union between Turkey and the EU effective since 1995. Trade between Greece and Turkey has increased considerably, which is reflected in the rising share of “Developing Europe” \(^6\) in total Greek exports and, to a larger extent, imports.

---

\(^1\) The reported data come from different sources (IMF and OECD), owing to the problems with data constraints.
\(^3\) Greek exports as a percentage of total EU-15 imports averaged 0.4% in 1990-1994; it dropped to 0.2% in 2000-2004.
\(^4\) Out of the imports to “Developing Europe”, the percentage destined for the Balkan countries rose from 38% in 1990-1994 to 51% in 2000-2004.
\(^5\) The share of imports in the countries of the euro area coming from Greece was reduced from 0.5% in 1985 to 0.2% in 2001, while the share coming from the ten new Member States went five times up, from 1.1% to 5% in the same period (see ECB, MPC Task Force, “Competitiveness and the export performance of the euro area”, ECB Occasional paper, No 30, June 2005).
\(^6\) According to the IMF classification, Direction of Trade Statistics.
The breakdown of external trade by type of product (see Table B), based on the Standard International Trade Classification (SITC), is of interest, especially in terms of exports.

**TABLE A**

**GEOGRAPHICAL STRUCTURE OF GREEK EXTERNAL TRADE, 1960-2004**

**A. Exports**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-15</td>
<td>48.2</td>
<td>51.8</td>
<td>57.7</td>
<td>52.6</td>
<td>51.2</td>
<td>65.8</td>
<td>63.9</td>
<td>54.7</td>
<td>44.4</td>
</tr>
<tr>
<td>Euro area</td>
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<td>44.9</td>
<td>50.5</td>
<td>46.2</td>
<td>45.0</td>
<td>56.3</td>
<td>55.3</td>
<td>46.4</td>
<td>35.4</td>
</tr>
<tr>
<td>Developing Europe¹</td>
<td>25.6</td>
<td>23.7</td>
<td>18.6</td>
<td>14.7</td>
<td>11.6</td>
<td>9.3</td>
<td>14.7</td>
<td>25.9</td>
<td>33.3</td>
</tr>
<tr>
<td>New EU Member States²</td>
<td>9.8</td>
<td>8.0</td>
<td>6.6</td>
<td>5.6</td>
<td>4.0</td>
<td>3.3</td>
<td>5.5</td>
<td>6.7</td>
<td>8.3</td>
</tr>
<tr>
<td>Balkan countries³</td>
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<td>4.6</td>
<td>3.0</td>
<td>5.7</td>
<td>11.3</td>
<td>16.7</td>
</tr>
<tr>
<td>Non-EU-15 industrial countries⁴</td>
<td>18.4</td>
<td>14.4</td>
<td>12.0</td>
<td>8.2</td>
<td>10.0</td>
<td>10.7</td>
<td>8.7</td>
<td>7.4</td>
<td>8.6</td>
</tr>
<tr>
<td>Middle East</td>
<td>4.1</td>
<td>5.8</td>
<td>7.4</td>
<td>18.0</td>
<td>21.1</td>
<td>9.1</td>
<td>6.7</td>
<td>5.7</td>
<td>5.8</td>
</tr>
<tr>
<td>Africa</td>
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<td>1.7</td>
<td>3.7</td>
<td>3.9</td>
<td>2.0</td>
<td>2.0</td>
<td>1.7</td>
<td>2.3</td>
</tr>
<tr>
<td>Asia</td>
<td>0.3</td>
<td>0.2</td>
<td>0.4</td>
<td>0.9</td>
<td>1.2</td>
<td>1.5</td>
<td>1.7</td>
<td>2.5</td>
<td>2.9</td>
</tr>
<tr>
<td>Other countries</td>
<td>2.9</td>
<td>2.7</td>
<td>2.1</td>
<td>1.8</td>
<td>1.0</td>
<td>1.6</td>
<td>2.4</td>
<td>2.1</td>
<td>2.8</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**B. Imports**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-15</td>
<td>58.6</td>
<td>59.4</td>
<td>55.5</td>
<td>48.8</td>
<td>50.9</td>
<td>61.9</td>
<td>65.1</td>
<td>66.8</td>
<td>54.9</td>
</tr>
<tr>
<td>Euro area</td>
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<td>46.3</td>
<td>40.5</td>
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<td>54.5</td>
<td>56.7</td>
<td>57.2</td>
<td>47.9</td>
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<td>Developing Europe¹</td>
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<td>9.9</td>
<td>6.9</td>
<td>7.2</td>
<td>7.1</td>
<td>7.0</td>
<td>6.4</td>
<td>7.9</td>
<td>13.9</td>
</tr>
<tr>
<td>New EU Member States²</td>
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<td>2.6</td>
<td>2.2</td>
<td>1.9</td>
<td>1.4</td>
<td>1.6</td>
<td>1.6</td>
<td>1.4</td>
<td>2.0</td>
</tr>
<tr>
<td>Balkan countries³</td>
<td>3.5</td>
<td>4.2</td>
<td>2.7</td>
<td>2.9</td>
<td>2.2</td>
<td>2.3</td>
<td>2.0</td>
<td>2.7</td>
<td>3.1</td>
</tr>
<tr>
<td>Non-EU-15 industrial countries⁴</td>
<td>21.0</td>
<td>18.4</td>
<td>22.5</td>
<td>22.0</td>
<td>14.6</td>
<td>12.2</td>
<td>12.8</td>
<td>9.7</td>
<td>9.8</td>
</tr>
<tr>
<td>Middle East</td>
<td>4.4</td>
<td>4.9</td>
<td>8.0</td>
<td>14.1</td>
<td>19.2</td>
<td>10.6</td>
<td>7.9</td>
<td>6.3</td>
<td>8.4</td>
</tr>
<tr>
<td>Africa</td>
<td>2.0</td>
<td>2.9</td>
<td>3.5</td>
<td>3.8</td>
<td>4.1</td>
<td>2.8</td>
<td>1.4</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Asia</td>
<td>0.5</td>
<td>0.7</td>
<td>0.8</td>
<td>1.3</td>
<td>1.7</td>
<td>3.3</td>
<td>4.6</td>
<td>6.5</td>
<td>10.0</td>
</tr>
<tr>
<td>Other countries</td>
<td>3.4</td>
<td>3.8</td>
<td>2.8</td>
<td>2.7</td>
<td>2.3</td>
<td>2.2</td>
<td>1.8</td>
<td>1.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Total</td>
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<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

¹ Central and Eastern European countries, former USSR, Balkan countries, Cyprus, Malta, Turkey.
² Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia. For periods prior to 1990, separate data for Estonia, Latvia and Lithuania (former USSR) and Slovenia (former Yugoslavia) are not available.
³ Albania, Bosnia-Herzegovina, Bulgaria, Croatia, FYROM, Romania and Serbia-Montenegro.
⁴ Australia, Canada, Japan, New Zealand, Norway, Switzerland and United States.

Source: IMF, Direction of Trade Statistics database.

In the first half of the 1960s, roughly 90% of Greek exports was accounted for by agricultural products and raw materials. However, this percentage gradually declined and in the period 2000-2004 stood at about 30%, to the benefit of the other exports, most notably food, which ➔
throughout the reviewed period broadly maintained, despite some decline, its relative export market share.\(^1\) At the same time, a strong increase was recorded in the import share of the “manufactured products classified chiefly by material” category, which includes some of the traditional Greek manufactures, such as textiles\(^2\) and metallurgical products\(^3\). This upward

---

**TABLE B**

STRUCTURE OF GREEK EXTERNAL TRADE BY TYPE OF PRODUCT, (SITC CLASSIFICATION), EXCLUDING FUEL, 1960-2004

<table>
<thead>
<tr>
<th>A. Exports</th>
<th>Percentages of total; period averages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural products</td>
<td>63.7</td>
</tr>
<tr>
<td>Raw materials except fuel</td>
<td>25.6</td>
</tr>
<tr>
<td>Chemicals and related products</td>
<td>2.5</td>
</tr>
<tr>
<td>Manufactured goods classified chiefly by material</td>
<td>5.5</td>
</tr>
<tr>
<td>Machinery and transport equipment</td>
<td>1.7</td>
</tr>
<tr>
<td>Miscellaneous manufactured articles</td>
<td>1.1</td>
</tr>
<tr>
<td>Other products</td>
<td>0.0</td>
</tr>
</tbody>
</table>

| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

<table>
<thead>
<tr>
<th>B. Imports</th>
<th>Percentages of total; period averages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural products</td>
<td>14.4</td>
</tr>
<tr>
<td>Raw materials except fuel</td>
<td>10.6</td>
</tr>
<tr>
<td>Chemicals and related products</td>
<td>10.5</td>
</tr>
<tr>
<td>Manufactured goods classified chiefly by material</td>
<td>21.2</td>
</tr>
<tr>
<td>Machinery and transport equipment</td>
<td>40.1</td>
</tr>
<tr>
<td>Miscellaneous manufactured articles</td>
<td>3.3</td>
</tr>
<tr>
<td>Other products</td>
<td>0.0</td>
</tr>
</tbody>
</table>

| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |


Source: OECD – International trade by commodity statistics.

“manufactured products classified chiefly by material” category, which includes some of the traditional Greek manufactures, such as textiles\(^2\) and metallurgical products\(^3\). This upward

---

\(^1\) This ranged from 25% of the total in 1960-1964 to 17% in 2000-2004.

\(^2\) See Box IX.1.

\(^3\) In the total of “manufactured goods classified chiefly by material” category, metals and metallic items represented 42% and textiles 21% in 2000-2004, while the respective percentages in 1960-1964 were 7% and 40%.
trend was, however, reversed after the mid-1980s, mirroring developments in the structure of output. Moreover, the category of “machinery and transport equipment” is particularly noteworthy as its percentage share in total exports, although relatively low, increased considerably. Within this category, the share of high-technology products, such as office accounting and computing machinery, radio, TV and communication equipment and electrical machinery, amounted to 50% in 2000-2004, compared with 4.5% in the beginning of the reviewed period.

### Table C

**STRUCTURE OF GREEK EXTERNAL TRADE BY TECHNOLOGICAL INTENSITY**

#### A. Exports

<table>
<thead>
<tr>
<th></th>
<th>Percentages of total; period averages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-technology/resource-based industries¹</td>
<td>92.1</td>
</tr>
<tr>
<td>Low-technology industries²</td>
<td>1.9</td>
</tr>
<tr>
<td>Medium-technology industries³</td>
<td>5.7</td>
</tr>
<tr>
<td>High-technology industries⁴</td>
<td>0.2</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>

#### B. Imports

<table>
<thead>
<tr>
<th></th>
<th>Percentages of total; period averages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-technology/resource based industries¹</td>
<td>23.2</td>
</tr>
<tr>
<td>Low-technology industries²</td>
<td>16.3</td>
</tr>
<tr>
<td>Medium-technology industries³</td>
<td>52.4</td>
</tr>
<tr>
<td>High-technology industries⁴</td>
<td>8.1</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>

1. Food, beverages and tobacco; textile, leather apparel and leather industries; wood and wood products, including furniture.
2. Paper and paper products, printing and publishing; non-metallic mineral products; basic metal industries; fabricated metal products, except machinery and transport equipment.
3. Chemical products, rubber and plastic products; manufacture of agriculture and industrial machinery, except electrical; manufacture of transport equipment.
4. Professional, scientific, measuring and controlling equipment, photographic and optical goods, office and data processing machines; manufacture of electrical machinery, apparatus, appliances and supplies.

* Provisional data for the period 2001-2004.

**Source:** OECD- International trade by commodity statistics.

Turning to the composition of imports, no significant changes were observed, except for a gradual reduction in the share of raw materials, which is associated on the one hand with the declining weight of manufacturing in GDP since 1980 and, on the other hand, with changes in the composition of output and in production methods. About 40% of Greek imports is →
accounted for by machinery and transport equipment. This percentage increased in the 1970s in line with the rise in manufacturing output. More recently (2000-2004), it grew considerably, as a result of an exceptional rise in import demand associated with the Athens 2004 Olympic Games. The broadly unchanged pattern of imports reflects inadequate import substitution, largely due to a decline in the relative weight of manufacturing and the concentration of the Greek economy on the services sector.

Table C shows a different grouping of the Greek external trade, based on the distinction between products of low, medium and high technology. A number of significant changes can be observed. Specifically, the share of low-technology products, from 94% of exports in the first half of the 1960s, dropped to 70%, while the shares of medium- and high-technology products increased steadily. Among the countries of the euro area, Greece has the highest export share of low-technology products (see Table D). The shift of the Greek export trade to high-technology products was more rapid than in the average of euro area countries, but it is still of a small scale. This composition of Greek exports is important, as high-technology industries are the most

<table>
<thead>
<tr>
<th>Table D</th>
<th>SHARES OF TECHNOLOGY SECTORS IN EURO AREA COUNTRIES’ EXPORTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low-tech</td>
</tr>
<tr>
<td>Belgium-Luxembourg</td>
<td>54</td>
</tr>
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<td>France</td>
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<td>Germany</td>
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<td>Greece</td>
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<td>Ireland</td>
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<td>Italy</td>
<td>47</td>
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<tr>
<td>Netherlands</td>
<td>42</td>
</tr>
<tr>
<td>Portugal</td>
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<tr>
<td>Spain</td>
<td>57</td>
</tr>
<tr>
<td>Austria</td>
<td>51</td>
</tr>
<tr>
<td>Finland</td>
<td>59</td>
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</tbody>
</table>

| Euro area average | 38 | 30 | 48 | 49 | 14 | 21 |

Note: Figures exceeding the euro area average appear in bold print.

1 This classification is based on the two-digit codes of the Standard International Trade Classification (SITC) and follows the relevant classification used in the MPC Task Force survey (“Competitiveness and the export performance of the Euro Area”, ECB Occasional paper No 30, June 2005).
1.4 Services balance

The services surplus grew by a mere €231 million in 2005 to €15,698 million, financing 57% of the trade deficit. This rise is mainly attributable to the considerable dampening of net inflows from transport services compared with 2004 and, to a lesser extent, to the relatively moderate rise in net receipts from travel services. Specifically, in 2005 net inflows from travel services rose by €553 million, i.e. slightly less than in 2004 (€678 million). However, net inflows from transport services rose by merely €55 million, compared with €2,933 million in 2004. These developments were accompanied by a rise in net payments for other services (€377 million).

In more detail, compared with 2004, gross travel receipts (i.e. travel spending by non-residents in Greece) rose by €689 million (or 6.7%) to €11,036 million, while gross payments (i.e. travel spending abroad by residents of Greece) increased by a mere €135 million (or 5.9%) to €2,446 million. The domestic market benefited by a significantly faster increase in the number of arrivals at the global level, which reached 5.5%, despite the factors that had a restraining effect on the world tourist industry (large-scale natural disasters, rise in world oil prices and terrorist acts). Thus, arrivals in Greece increased by 5.3%,1 while travel services prices rose only moderately,2 though at a higher rate than in competitor countries. This fact, together with the appreciation of the euro, suggests a continued loss of competitiveness of Greek tourist services relative to alternative tourist des-

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1 These data are taken from the border survey conducted on behalf of the Bank of Greece for the compilation of balance of payments statistics. This performance is clearly above the average in Europe, given that arrivals at major European destinations increased by 4.3% in 2005. Gross travel receipts per visitor increased by 1.3%, reflecting a rise in average daily spending and a small decrease in the average length of stay.

2 According to CPI data, the average annual rate of increase in prices charged by hotels, restaurants and cafés dropped in 2005 to 3.2% (2004: 4.3%) and that of recreation services to 2.0% (2004: 4.9%). By contrast, the average annual rate of increase in the prices of transport services rose to 4.7% (2004: 2.2%), mainly reflecting the increase in oil prices.
tinations outside the euro area. In any case, to improve the competitiveness of the tourist sector, special weight should be attached to quality, which affects the competitiveness of tourist services to the same, if not greater, extent as prices. The successful holding of the Olympic Games and the advertising of the Greek tourist product abroad seem to have contributed to the rise in arrivals in Greece in 2005, while the reinforcement of domestic tourism is expected to limit payments for travel services, i.e. travel spending abroad by residents of Greece.

Gross transport (mainly shipping) receipts rose by €564 million compared with the particularly high receipts recorded in 2004 and reached €13,871 million, while gross payments rose by €509 million to €6,238 million. Even though world freight rates displayed a downward trend in 2005, net receipts from transport and mainly shipping services rose, albeit marginally, by €55 million. Specifically, in 2005, ore & bulk rates, as expressed by the BDI (Baltic Dry Index), fell by approximately 50%, while tanker freight rates fell by 10% (comparison of average levels in December 2004 and December 2005). The downward trend in world freight rates is due to the increase in the world fleet on account of purchases of new vessels and fewer than expected withdrawals of older vessels. In particular, the downward trend in tanker freight rates in 2005 is due to the elimination of temporary factors that gave a significant, albeit short-lived, momentum to the market in 2004, as well as to the increase in the tanker fleet on account of both purchases of new vessels and the dismantling, to a limited extent, of older vessels (due to high freight rates in 2004). However, US oil import needs following the hurricanes that hit the southern states as well as the continued rise in oil consumption in China (albeit less pronounced than in 2004) brought about the reversal of this trend in the third quarter of 2005. The reduction of ore & bulk freight rates, mainly in the first half of 2005, can be attributed to some extent to the delivery of new vessels in 2004 and during the first half of 2005 as well as to the fact that withdrawals of older vessels were fewer than expected. These factors led to higher transport capacity. Furthermore, it should be taken into account that in the first half of 2005 a decrease was recorded in the waiting-time of vessels and the crowding in Chinese ports, which had led freight rates to a historical peak in 2004. Finally, the rise in world iron prices at the beginning of 2005 induced the Chinese steel industry to draw on its stocks of raw materials, leading to the moderation of raw material imports for steel production. According to market assessments, these stocks decreased by 25%. Turning to Greece, it is estimated that the moderation (and not reduction) of net receipts to last year’s levels was due to the increase in the Greek-owned fleet and the leasing of vessels prior to the fall in freight rates.

1.5 Income account

The income account deficit widened by €1,299 million in 2005 to €5,676 million, as a result of increased net interest, dividend and profit payments. The widening of the
deficit was mainly due to a continued increase in non-residents’ holdings of old and new government bonds. To a lesser extent, it was due to stronger investment in Athens Exchange equities by foreign institutional investors, thereby resulting in larger dividend payments to non-residents. The increase in net interest, dividend and profit payments was also supported by the fact that non-residents’ reinvested profits exceeded those of Greek residents.1

1.6 Current transfers balance

In 2005, the current transfers surplus decreased by €452 million year-on-year to €3,177 million on account of both the rise in gross payments by general government to the EU and the fall in net receipts of “other” sectors (mainly remittances by emigrants). More specifically, the small drop in net current transfers from the EU to general government,2 despite a 13% rise in receipts, resulted from a significant increase in payments.3

2. CAPITAL TRANSFERS BALANCE

In 2005, the capital transfers surplus decreased by €337 million year-on-year to €2,049 million. This mainly reflects a drop in capital transfers4 from the EU to €2,137 million, compared with €2,464 million in 2004.5

Net EU transfers to general government (current transfers plus capital transfers) reached €3.8 billion in 2005.6 This amounts to 2.1% of GDP and 13.8% of the trade deficit. More specifically, inflows from the Structural Funds and the Cohesion Fund under the Community Support Framework amounted to 1.5% of GDP.

In 2006, the rate of absorption of resources from CSF III is expected to pick up, given that this year is the last of the EU budgetary period 2000-2006.7 Furthermore, in June 2005 negotiations with the European Commission on the final settlement of pending

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1 See also Section 1.1 of this chapter.
2 Current EU transfers mainly include receipts from the Guarantee Section of the European Agricultural Guidance and Guarantee Fund (EAGGF) in the context of the Common Agricultural Policy, receipts from the European Social Fund and Greece’s payments to the EU Budget.
3 Apart from regular contributions to the EU budget, which are more or less equally allocated across the months of the calendar year, general government payments also include other miscellaneous amounts, such as extraordinary contributions and refunding of EU sums, as well as temporary transfers to EU accounts held at central banks.
4 EU capital transfers mainly include receipts from the Structural Funds —except for the European Social Fund— and the Cohesion Fund under the Community Support Framework.
5 EU capital transfers under CSF III remained at 2004 levels. However, data for 2004 also include repayments from CSF II.
6 EU transfers are expressed on a cash basis, as displayed in the Bank of Greece balance of payments.
7 According to provisional data, until the end of March 2006, the rate of absorption of resources from the Structural Funds exceeded —on a cash basis— 44% of the overall EU contribution under CSF III.
issues connected with CSF III were completed. The new CSF III “revision” which will take place in the coming months and the measures put in place to simplify procedures and improve control and management of projects seek to achieve faster and more efficient utilisation of Community resources.

According to the EU budget for the years 2007-2013, which was adopted by the European Council on 17 December 2005, Greece is expected to receive €20.1 billion from the Structural Funds and the Cohesion Fund for the implementation of the National Strategic Reference Framework (CSF IV, 2007-2013). (See also Box III.3 and Box IX.3.) At the same time, the CAP is expected to remain more or less unchanged until 2013. Taking into account future Greek transfers to the EU budget, net annual receipts from the EU will amount to €3.5 billion, which corresponds to approximately 1.8% of GDP (see Box IX.3).

1 In early June 2005, the European Commission decided to lift its threat to suspend payments to Greece following the audits conducted by the EU services for the period 2000-2003. At the same time, it imposed a fiscal correction, which was limited to €518 million. This amount (which concerns funds already paid by the Community) will be refunded by withholding from future inflows four annual instalments (€100 million in 2005, €100 million in 2006, €150 million in 2007 and €168 million in 2008).

**Box IX.3**

**The outlook for EU transfers in the period 2007-2013**

1. **The EU financial perspective 2007-2013**

The European Council of Brussels (December 2005) reached an agreement on the financial perspective of the European Union (EU) for the period 2007-2013. Following a compromise between the proposals of the Luxembourgian Presidency (first half of 2005) and those of the subsequent UK Presidency, total appropriations for commitments under the Community Budget (CB) for the EU-25 (and later the EU-27) were set at €862,363 million (at 2004 prices) or 1.045% of the Community’s average Gross National Income (GNI) (see Table A).

The financial framework 2007-2013 defines the key political priorities of the enlarged EU (namely, sustainable growth, European citizenship and strengthening the voice of Europe as a global partner) and reflects the new structure of economic and social cohesion policy. However, CB expenditure as finally determined by the Council falls short of the figures originally proposed by the European Commission, thus the question arises as to whether it...
will suffice to finance the objectives of the enlarged EU. Specifically, total funds devoted to cohesion in the period 2007-2013 amount to about €307 billion and correspond to 36% of total appropriations for commitments. Funds available to agriculture under the revised Common Agricultural Policy (CAP), specifically market-related expenditure and direct aid payments, have dropped to 34% of the CB.

### Table A

**THE EU FINANCIAL PERSPECTIVE 2007-2013**

*(COUNCIL DECISION OF DECEMBER 2005)*

(Million euro at 2004 prices)

<table>
<thead>
<tr>
<th>Commitment appropriations¹</th>
<th>2006²</th>
<th>Percentage share</th>
<th>2013</th>
<th>Percentage share</th>
<th>2007-2013</th>
<th>Percentage share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sustainable growth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1a. Competitiveness for growth and jobs</td>
<td>47,582</td>
<td>39</td>
<td>57,841</td>
<td>46</td>
<td>379,739</td>
<td>44</td>
</tr>
<tr>
<td>1b. Cohesion for growth and jobs</td>
<td>8,791</td>
<td>7</td>
<td>12,600</td>
<td>10</td>
<td>72,120</td>
<td>8</td>
</tr>
<tr>
<td>2. Preservation and management of natural resources</td>
<td>38,791</td>
<td>32</td>
<td>45,241</td>
<td>36</td>
<td>307,619</td>
<td>36</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture – Market-related expenditure and direct aid payments</td>
<td>56,015</td>
<td>47</td>
<td>51,145</td>
<td>40</td>
<td>371,244</td>
<td>43</td>
</tr>
<tr>
<td>3. Citizenship, freedom, security and justice</td>
<td>43,735</td>
<td>36</td>
<td>40,645</td>
<td>32</td>
<td>293,105</td>
<td>34</td>
</tr>
<tr>
<td>4. The EU as a global partner</td>
<td>1,381</td>
<td>1</td>
<td>1,910</td>
<td>2</td>
<td>10,270</td>
<td>1</td>
</tr>
<tr>
<td>5. Administration</td>
<td>11,232</td>
<td>9</td>
<td>8,070</td>
<td>6</td>
<td>50,010</td>
<td>6</td>
</tr>
<tr>
<td>Compensations</td>
<td>3,436</td>
<td>3</td>
<td>7,680</td>
<td>6</td>
<td>50,300</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total appropriations for commitments</strong></td>
<td><strong>120,688</strong></td>
<td><strong>100</strong></td>
<td><strong>126,646</strong></td>
<td><strong>100</strong></td>
<td><strong>862,363</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td>Appropriations for commitments as % of GNI</td>
<td></td>
<td></td>
<td>1.00</td>
<td></td>
<td>1.045</td>
<td></td>
</tr>
<tr>
<td><strong>Total appropriations for payments</strong></td>
<td><strong>114,740</strong></td>
<td><strong>118,620</strong></td>
<td><strong>819,380</strong></td>
<td><strong>0.99</strong></td>
<td><strong>0.25</strong></td>
<td><strong>1.24</strong></td>
</tr>
<tr>
<td>Appropriations for payments as % of GNI</td>
<td>1.09</td>
<td>0.94</td>
<td>0.99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Margin available (as % of GNI)</td>
<td>0.15</td>
<td>0.30</td>
<td>0.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own resources ceiling as % of GNI</td>
<td>1.24</td>
<td>1.24</td>
<td>1.24</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 To facilitate comparisons, 2006 expenditure under the current financial perspective has been broken down according to the proposed new nomenclature.
2 Appropriations for commitments comprise legal obligations which can be entered into during the current year, for activities which will lead to payments in the current and future years.
3 Appropriations for payments comprise actual transfers of cash from the Community Budget to creditors during the current year, resulting from commitments made in the current or previous years.


The European Parliament rejected the Council’s decision on the financial perspective, on the grounds that the outlays would not be sufficient to finance the objectives of the enlarged Union. In early April, however, the European Parliament and the EU Council reached a political agreement to increase the CB by €4 billion for the period 2007-2013.

It should be noted that the financial framework 2007-2013 uses a new nomenclature, with CB expenditure being broken down into five priority areas, which reflect the new economic and political objectives of the enlarged EU. As a result, the various expenditure items are not fully comparable across the two programming periods (see Table A).
For the period 2007-2013, the own resources ceiling is maintained at its present level of 1.24% of the EU’s GNI. Moreover, an overall review of the financing system is envisaged, and the Commission is expected to present its report in 2008-2009.\

2. The status of Greece in the new financial perspective

As a result of the new EU budget deal, Greece is set to receive €20.1 billion for structural actions in the period 2007-2013, compared with €26.0 billion available under the third Community Support Framework for the period 2000-2006.\

With the increase in the number of EU Member States, a reduction in the amount of funds available to older Member States, including Greece, was to be anticipated. Yet, in terms of the total cohesion policy budget for the EU-15 (structural actions) Greece’s share has been increased from 11.7% in 2000-2006 to about 12.4% in 2007-2013.

The amount of €20.1 billion was determined on the basis of (a) the size of total cohesion support under the CB; and (b) eligibility of regions under each “Objective” in the new programming period.

The enlargement of the EU necessitated a radical revision of the Objectives and the functioning of structural funds. Key aspects of that revision were a reduction in the number of structural funds and a change in their Objectives.

Specifically, in 2007-2013 cohesion support will focus on a limited number of priority areas, around three new Objectives that will replace the current three Objectives of the...
Structural Funds ("Objective 1": helping regions whose development is lagging behind; "Objective 2": regions under economic and social restructuring; and “Objective 3”: promoting education and employment) as follows:

— “Convergence” (financed by the European Regional Development Fund–ERDF, the European Social Fund –ESF– and the Cohesion Fund): this objective is similar to the current Objective 1 and refers to speeding up the convergence of the least developed regions, i.e. those with a 
\[ \text{per capita GDP} \] (based on data for the last three years) of less than 75% of the average of the enlarged EU — as is the case with the regions of most new Member States. Also, regions whose 
\[ \text{per capita GDP} \] is above 75% of the EU average but less than 75% of the average of the 15 “old” Member States will be eligible for “phasing out” funding, i.e. transitional support to make up for ineligibility due to the statistical effect of EU enlargement.

— “Regional Competitiveness and Employment” (ERDF, ESF).

— “European Territorial Cooperation” objective (ERDF), aimed at promoting international, cross-border and inter-regional cooperation through common programmes.

The new financial perspective, as agreed upon in 2005, implied that the regions of Greece, as well as of other Member States, which were eligible for each Objective were determined on the basis of 
\[ \text{per capita GDP} \] in the three-year period 2000-2002. According to these data, two Greek regions (Sterea Ellada and South Aegean) will have achieved “real convergence” and thus become ineligible for the “Convergence” objective. This, however, does not mean that these regions will automatically cease to receive EU funds. Rather, they will be entitled to “phasing out” funding (until 2013) under the “Regional Competitiveness and Employment” objective. Three more regions (Central Macedonia, Western Macedonia and Attica) owing to “the statistical effect” of the enlargement will remain in the “Cohesion” Objective but, as mentioned above, will receive transitional support, to be phased out by 2013. The remaining regions (Eastern Macedonia-Thrace, Thessaly, Epirus, Ionian Islands, Western Greece, Peloponnese, North Aegean, Crete) each have a 
\[ \text{per capita GDP} \] of less than 75% of the EU and will thus continue to qualify for the “Cohesion” objective (see Table B). It should be recalled that in the current period 2000-2006 Greece is the only EU-15 country whose regions have continued to fall into Objective 1.

Table B shows how the amount of \( \text{€20.1 billion} \) is to be allocated to the individual Objectives. From the table it becomes clear that, in the period 2007-2013 too, the bulk of EU inflows (\( \text{€14.2 billion} \), first two rows on the table) will concern the financing of regions under the “Convergence” Objective.

For the new programming period, Greece remains eligible for support from the Cohesion Fund and will receive amounts close to the levels of the 2000-2006 period (\( \text{€3.1 billion} \)).

It should be recalled that Member States with a 
\[ \text{per capita GDP} \] of less than 90% of the EU average continue to be eligible for the interventions of the Cohesion Fund in the new programming period. Specifically for the Cohesion Fund, the regions are selected according to GDP data for the three-year period 2001-2003 (see Council of the European Union, Financial Perspective 2007-2013, 15915/05, Cadrefin 268).

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2 Specifically for the Cohesion Fund, the regions are selected according to GDP data for the three-year period 2001-2003 (see Council of the European Union, Financial Perspective 2007-2013, 15915/05, Cadrefin 268).
Member States that remained eligible (Greece, Portugal, Spain), as well as the ten new Member States. According to the decisions of the European Council of December 2005, the eligibility of Member States for the Cohesion Fund will be re-examined in 2010 on the basis of data regarding the EU-25. As mentioned above, in the new programming period the Cohesion Fund will be included in the Structural Funds and will be governed by the regulations applicable to them. A noteworthy feature of the Cohesion Fund, included in the proposed new framework, is that access to Fund assistance will be conditional upon the satisfaction of the conditions set out in the Treaty regarding convergence programmes and those regarding excessive deficits for the Member States participating in the economic and monetary union.

### TABLE B
GREECE’S RECEIPTS FROM THE COMMUNITY BUDGET UNDER THE NATIONAL STRATEGIC REFERENCE FRAMEWORK (NSRF) 2007-2013 (Billion euro)

<table>
<thead>
<tr>
<th>Objective</th>
<th>Receipts from the Community Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Regions with a per capita GDP less than 75% of the EU-25 average (qualifying for the “Convergence” objective)</td>
<td>8.4</td>
</tr>
<tr>
<td>2. Statistical convergence regions (phase-out support under the “Convergence” objective)</td>
<td>5.8</td>
</tr>
<tr>
<td>3. Real convergence regions (now falling under the “Regional Competitiveness and Employment” objective)</td>
<td>0.6</td>
</tr>
<tr>
<td>4. “European Territorial Cooperation” objective</td>
<td>0.1</td>
</tr>
<tr>
<td>5. Agricultural Development and Fisheries</td>
<td>1.9</td>
</tr>
<tr>
<td>6. Cohesion Fund</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20.1</strong></td>
</tr>
</tbody>
</table>

1. Eastern Macedonia-Thrace, Thessaly, Epirus, Ionian Islands, Western Greece, Peloponnese, North Aegean and Crete (about 38% of Greece’s total population).
2. Central Macedonia, Western Macedonia and Attica (about 55% of total population).
3. Sterea Ellada and South Aegean (about 8% of total population).

**Note:** It should be recalled that, apart from cohesion policy support under the NSRF, Greece will continue to receive agricultural subsidies and direct aid under the CAP.

**Source:** Bank of Greece calculations based on Ministry of Economy and Finance data.

Turning to the specific provisions regarding access to Community assistance during the new programming period, the following should be noted:

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1. As from 2004, Ireland ceased to be eligible for the Cohesion Fund, given that it exceeded the ceiling of 90% (see European Commission, COM (2004) 191 final, 24 March 2004), while in the new programming period Spain will also cease to be eligible.
2. In particular, if the Council decides, in accordance with Article 104 of the Treaty establishing the European Communities, that an excessive deficit exists and that the Member State concerned has not taken effective action, the payment will be suspended, effective from January 1 of the following year.
— Advance payments

In the period 2007-2013, the European Commission will make to Greece and the other Member States of the EU-15 an advance payment of 5% of the total contribution of the Structural Funds (2% in 2007, 3% in 2008) and 7.5% of the total contribution of the Cohesion Fund (2% in 2007, 3% in 2008 and 2.5% in 2009). The other Member States of the EU will receive larger advance payments. It should be recalled that in the current period 2000-2006 the advance payment for the Structural Funds is 7%, while for the Cohesion Fund special arrangements apply.¹

— Co-financing rates

The ceiling for the contributions from the individual Funds, as a percentage of total expenditure for each eligible project and programme in the period 2007-2013 is specified as follows:

- 85% for the Cohesion Fund;
- 75% for the ERDF or the ESF under the “Convergence” objective and exceptionally up to 80% for Member States benefiting from the Cohesion Fund;
- 50% for the ERDF or the ESF under the “Regional Competitiveness and Employment” objective,
- 75% for the ERDF under the “European Territorial Cooperation” objective.

In the case of Greece, however, the respective percentages increase from 75% to 85% for the regions coming under the “Convergence” objective and from 50% to 85% for the regions of the “Regional Competitiveness and Employment” objective. This favourable arrangement, which implies savings on national resources that can be used for the financing of other development and Community actions, is based on the decisions of the December 2005 European Council. According to these decisions, “for Member States whose average per capita GDP from 2001 to 2003 was below 85% of the EU-25 average, the ceiling for the rate of contribution by the ERDF or the ESF for all operational programmes shall be 85%”.²

— Automatic decommitment rule

Another important aspect of the new EU budget agreement is the extension of the period of access to Community funds (especially considering that absorption is more strictly controlled, and heavier sanctions apply in cases of delays). The so-called “n+2 rule”³ becomes “n+3 rule”, but only for the years 2007-2010 and only for those Member States (such as Greece) whose per capita GDP from 2001 to 2003 was below 85% of the EU-25 average.⁴

— Provisions concerning VAT

Finally, Greece benefits from a favourable provision concerning the recognition of VAT, in certain cases, as expenditure eligible for co-financing, although in the negotiations of June 2005 this arrangement would apply to the new Member States only.

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² Besides Greece, out of the old 15 Member States, Portugal also falls under this category.
³ The “n+2 rule” implies that the Commission must automatically decommit any part of a commitment for which it has not received an acceptable payment application by the end of the second year following the year of commitment. In other words, the maximum period allowed for the absorption of Community funds is two years or n+2, where n is the year of commitment (see Article 31.2 of Regulation 1260/1999 and Article 92 of the Commission’s Proposal for a Council Regulation laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund, COM (2004) 492 final, 14 July 2004.
⁴ In the current period 2000-2006, the relevant Regulation allows an extension of the decommitment period only in cases where the delay in the absorption of funds is justified by judicial procedures etc.
3. The National Strategic Reference Framework (NSRF) 2007-2013 in the context of national development planning

At a national level, the drawing up of the Greek National Strategic Reference Framework (NSRF — as the CSFs were renamed) started in the first half of 2004 and forms part of the country’s overall development planning. The preparation of the NSRF and the new Operational Programmes is under way and should be ready for submission to the EU by June 2006. In essence, the NSRF sets out the key priorities of development strategy at the national, sectoral and regional level and the relevant Operational Programmes to be financed by the EU.

Specifically, according to the NSRF 2007-2013 these priorities are centred around seven axes: (a) regional development; (b) cross-border, transnational and interregional cooperation; (c) environment and sustainable development; (d) reinforcement of accessibility and services of general economic interest; (e) entrepreneurship and external openness; (f) development of human capital; and (g) digital convergence and reform of public administration.

The above objectives are consistent with the Community Strategic Guidelines for cohesion policy and are linked to the key priorities of the revised Lisbon Strategy (i.e. to boost growth and create more and better jobs by promoting knowledge and innovation and making Europe an attractive place to invest and work).

The NSRF 2007-2013 is also expected to contribute to the promotion of the priorities of the National Reform Programme (NRP) 2005-2008 of October 2005, insofar as both cover the years 2007 and 2008. As is known, in the context of the recent revision of the Lisbon Strategy (European Council of March and July 2005) Member States undertook to prepare and submit to the European Commission “National Reform Programmes (NRPs)” for the 2005-2008 period, in accordance with the EU’s Integrated Guidelines 2005-2008.

NRPs are drawn up for the three years between 2005 and 2008 but take into consideration further prospects up to 2010. The Greek NRP, which was submitted to the European Commission in October 2005, defines in broad lines the following priorities for the period 2005-2008: (a) to restore fiscal balance; (b) to increase productivity; (c) to improve the business environment; (d) to increase employment and (e) to improve the effectiveness of education and training.

1 See also Box III.3.
2 Cohesion Policy in Support of Growth and Jobs — Community Strategic Guidelines 2007-2013, COM (2005) 0299, 5 July 2005, sets out, at the EU level, guidelines for economic and social cohesion. Their content and way of implementation are specified in Articles 23 and 24 of the Commission’s Proposal for a Council Regulation laying down general provisions on the ERDF, the ESF and the Cohesion Fund, COM (2004) 492 final, 14 July 2004. The NSRF, according to Articles 25 and 26 of the proposed Regulation, defines the relations between Community priorities, on the one hand, and national and regional priorities, on the other.
4 As the NRP period (2005-2008) covers also the last years of the implementation of CSF III (2000-2006), it is sought to utilise CSF funds for promoting the priorities of the NRP. Indeed, a number of studies have shown that CSF III is crucial to the attainment of the objectives of Greece’s Lisbon Strategy over the programming period 2000-2006: the direct contribution of the Structural Funds to the Lisbon Strategy is estimated at 39% or, including indirect contribution, 48%.
4. The outlook of transfers to the agricultural sector

Regarding agricultural support to Greece and the other Member States, it should be noted that CB outlays for agriculture, although declining, remain in the period 2000-2006 the most important category of expenditure, representing more than 40% of total CB expenditure, compared with a share of 30% accounted for by structural resources. In the case of Greece, 40%-45% of total EU support comes from the Guarantee Section of the EAGGF under the CAP provisions. Until the end of 2006 Greece and the other Member States of the EU-15 will be receiving the agricultural support agreed upon at the European Council of Berlin (March 1999). The new Member States will be subject to transitional provisions.

Beyond 2006, the amount and composition of agricultural transfers reflect the specific decisions made in the context of the June 2003 mid-term review of the CAP. According to these decisions, the financing available to the 15 old Member States was maintained at about its current level until the end of 2013 (“budgetary neutrality”). In April 2004 it was decided that Mediterranean products would enjoy equal treatment to the other products in terms of the principles and methods applicable during the reform.1

In its original CAP reform package submitted to the European Council of June 2005, the European Commission proposed that farm subsidies and direct aid payments should remain at the aforementioned levels, while at the same time increasing the total expenditure amount by €8 billion for the entire seven-year period, taking into account the entry of Romania and Bulgaria. Moreover, it proposed small increases in expenditure for the promotion of rural development. According, however, to the final decision of the European Council of December 2005, CB expenditure for agriculture (rural development and subsidies) in the period 2007-2013 was reduced in comparison with the previous period, with agricultural subsidies and direct aid payments falling to 34% of total CB expenditure (see Table A). In view of Romania’s and Bulgaria’s entry as from 1 January 2007, this reduction will burden mainly the 15 old Member States in favour of the new entrants.

On the basis of the new financial perspective and given that the implementation of the revised CAP in Greece starts in 2006, Greece’s loss in terms of agricultural support funds is estimated at €200 million for the seven-year period 2007-2013 and will be covered by national resources. Over the same period, agricultural subsidies and direct aid will be phased out. The amounts involved cannot be calculated precisely, as the CAP reform implies many and far-reaching changes and its impact should be seen against the background of the composition of Greek agricultural production and the specific features of individual market segments. In any case, in the new programming period Greece will continue to receive an amount of roughly €2.6 billion per annum (including funds in support of rural development).

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1 The mid-term review of the CAP was approved in June 2003 (OJ L 270, 21 October 2003). The second phase of the reform, which concerns Mediterranean products, was approved in April 2004 (see Regulations (EC) 864/2004 on tobacco, cotton and hops and 865/2004 on olive oil, OJ L 161, 30 April 2004). A fundamental guiding line of the mid-term CAP review is strategic rural development as a second pillar of the CAP. Two key aspects of the reform are: (i) the decoupling of direct aid from production and the introduction of the single payment scheme; and (ii) a reduction in direct aid payments to bigger farms, which however will not affect direct payments up to €5,000 per farm; the sums to be saved are to be allocated to rural development measures under the second pillar (modulation).
3. FINANCIAL ACCOUNT

In 2005, net financial inflows to the Greek economy, together with the capital transfers surplus, more than offset the current account deficit. Deficit financing inflows reflected, to a great extent, borrowing (particularly purchases of Greek government bonds by foreign investors) and, to a lesser extent, the net inflow for “other” investment (given that non-residents’ investment in deposits and repos in Greece grew more vigorously than residents’ similar investment abroad). Of course, a part of these inflows reflected non-residents’ investment in shares listed on the Athex and cannot be considered as borrowing. Nevertheless, direct investment recorded a net outflow (see below).

In more detail, financial investment, i.e. the sum of direct, portfolio and “other” investment, showed a net inflow of €12,558 million, compared with €5,487 million in 2004 (See Table IX.1). This is accounted for by the net inflow of €7,323 million for portfolio investment (2004: €13,727 million) and of €5,914 million for “other” investment (2004: net outflow of €9,104 million). By contrast, direct investment showed a net outflow of €679 million (2004: net inflow of €864 million).

3.1 Direct Investment

In 2005, inflows for direct investment remained at low levels, resulting in negative net inflow. Apart from the economy’s structural weaknesses (serving to reduce the level of appeal to foreign investors), this development partly reflects the overall decline in direct investment worldwide, as well as the shift to emerging and developing economies.
Specifically, underlying the net outflow of funds for direct investment is primarily residents’ investment abroad (€1,167 million in 2005, €829 million in 2004), which more than offset the net inflow of €488 million for non-residents’ investment in Greece (2004: net inflow of €1,692 million). As already mentioned, non-residents’ direct investment in Greece and residents’ direct investment abroad comprise the respective reinvested (undistributed) profits. Table IX.5 includes both primary direct investment and reinvested profits (secondary direct investment) in 2003-05 by non-residents in Greece and by residents abroad. According to these data, non-residents’ primary investment in Greece recorded a net outflow of €212 million, which was nonetheless more than offset by a significantly larger inflow of €700 million for non-residents’ reinvested profits.

Although the relatively small net inflow of non-residents’ direct investment in Greece reflects the economy’s low level of appeal to foreign investors, it does not imply a total lack of significant foreign investment. The most important primary foreign direct investments in 2005 (see Table IX.6) concern a €60 million inflow for the acquisition of Elliniki Technodomiki by a Luxembourg-based company, the participation, worth €57 million, of Société Générale in Geniki Bank’s capital increase, Crédit Agricole’s participation, worth €69 million, in Emporiki Bank’s capital increase, and the €40 million inflow in the context of the acquisition of Interamerican’s stake in Nova Bank’s capital by the Portuguese bank BCP. It should be pointed out that the net outflow under non-residents’ primary direct investment in Greece is accounted for by the fact that the Dutch company Aramco withdrew from the share capital of Motor Oil Hellas S.A. (outflow of €275 million), while the Luxembourg company Motor Oil Holding S.A. sold its stake in the share capital of the said company. However, the shares sold by Motor Oil Holding S.A., worth €318 million, were purchased by other

| TABLE IX.5 DIRECT INVESTMENT (Million euro) |
|---------------------------------------------|-------------------------------|-------------------------------|
| By residents abroad                         | By non-residents in Greece    |
| Primary investment                          | 585.9                        | 1088.4                        | –212.3                        |
| Reinvested profits                          | 544.0                        | 604.0                         | 700.0                         |
| **Net inflow**                              | 764.7                        | 863.6                         | –679.0                        |

Source: Bank of Greece.
### TABLE IX.6

**BREAKDOWN OF PRIMARY FOREIGN DIRECT INVESTMENT IN GREECE BY AREA OF ORIGIN**

<table>
<thead>
<tr>
<th>Area of Origin</th>
<th>Million euro</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2003</td>
</tr>
<tr>
<td>EU-25</td>
<td>1,179</td>
</tr>
<tr>
<td>EU-15</td>
<td>1,168</td>
</tr>
<tr>
<td>Euro area</td>
<td>574</td>
</tr>
<tr>
<td>Other OECD countries¹</td>
<td>−355</td>
</tr>
<tr>
<td>Balkan countries²</td>
<td>1</td>
</tr>
<tr>
<td>Middle East, Mediterranean and former USSR³</td>
<td>1</td>
</tr>
<tr>
<td>Other countries</td>
<td>−240</td>
</tr>
<tr>
<td>Total primary direct investment by non-residents</td>
<td>586</td>
</tr>
</tbody>
</table>

1 Australia, Canada, Iceland, Japan, South Korea, Mexico, New Zealand, Norway, Switzerland, Turkey and USA.
2 Albania, Bulgaria, Romania and former Yugoslavia countries (Bosnia-Herzegovina, Croatia, FYROM and Serbia-Montenegro).
3 Greece’s major trading partners in the Middle East, the Mediterranean and former USSR countries.

* Provisional data.

**Source:** Bank of Greece.

### TABLE IX.7

**REGIONAL BREAKDOWN OF GREEK RESIDENTS’ PRIMARY DIRECT INVESTMENT ABROAD**

<table>
<thead>
<tr>
<th>Region</th>
<th>Million euro</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2003</td>
</tr>
<tr>
<td>EU-25</td>
<td>−316</td>
</tr>
<tr>
<td>EU-15</td>
<td>264</td>
</tr>
<tr>
<td>Euro area</td>
<td>137</td>
</tr>
<tr>
<td>Other OECD countries¹</td>
<td>18</td>
</tr>
<tr>
<td>Balkan countries²</td>
<td>261</td>
</tr>
<tr>
<td>Middle East, Mediterranean and former USSR³</td>
<td>2</td>
</tr>
<tr>
<td>Other countries</td>
<td>77</td>
</tr>
<tr>
<td>Total primary direct investment by Greek residents</td>
<td>41</td>
</tr>
</tbody>
</table>

1 Australia, Canada, Iceland, Japan, South Korea, Mexico, New Zealand, Norway, Switzerland, Turkey and USA.
2 Albania, Bulgaria, Romania and former Yugoslavia countries (Bosnia-Herzegovina, Croatia, FYROM and Serbia-Montenegro).
3 Greece’s major trading partners in the Middle East, the Mediterranean and former USSR countries.

* Provisional data.

**Source:** Bank of Greece.
non-residents (mainly institutional investors); as a result, this transaction is recorded as an inflow under portfolio investment and the overall financial account balance is not significantly affected thereby.

Direct investment abroad by residents reflects the expansion of Greek enterprises, mainly banks, in the Balkans. Specifically, approximately 70% of Greek enterprises’ primary investment was directed towards Balkan countries (see Table IX.7), which further supports the already significant presence of Greek companies in the said area. The largest direct investments abroad by residents were the acquisition, worth €152 million, of Jubanka bank in Serbia by Alpha Bank, Cosmote’s participation, worth €120 million, in Cosmorom’s capital increase in Romania, Alpha Bank’s participation, worth €66 million, in the capital increase of its subsidiary Alpha Bank Romania, and the acquisition, worth €41 million, of Nationalna Stedionica Banka in Serbia by Eurobank.

3.2 Portfolio investment

Inflows for portfolio investment remained at very high levels in 2005, reaching €25.8 billion (€25.2 billion in 2004). The purchase of Greek government bonds by foreign investors continues to be the main source of considerable inflows for portfolio investment. Specifically, non-residents’ investment in Greek bonds stood at €20.7 billion in 2005 (2004: €21.6 billion). Purchases of shares by foreign investors also increased significantly to €5.1 billion in 2005 (2004: €3.4 billion).

Greek residents’ portfolio investment abroad was also substantial (2005: €18.5 billion, 2004: €11.5 billion), mainly concerning investment in foreign bonds (€14.3 billion), which grew relative to 2004 (€10.3 billion). Moreover, investment in foreign bonds (2005: €2.4 billion, 2004: €0.2 billion) and foreign equities (2005: €1.8 billion, 2004: €0.7 billion) is also noteworthy.

3.3 Other investment

“Other” investment showed a net inflow of €5,914 million, because residents’ external liabilities rose by €12,215 million; this rise was partly offset by the €6,301 million increase in residents’ external assets. The rise in residents’ liabilities is exclusively accounted for by non-residents’, mainly credit institutions, investment in deposits and repos in Greece (2005: €14.2 billion, 2004: fall by €0.8 billion), which largely offset loan pay-offs (€2.0 billion), while the increase in residents’ assets was a result of investment in deposits and repos abroad (€6.3 billion).

Finally, Greece’s reserve assets recorded a marginal decline of €49 million in 2005, to stand at €2.0 billion at the end of the year.
In 2005, Greece’s negative international investment position deteriorated further to €–148 billion at the end of the year, from €–124 billion at end-2004. As a result, despite the considerable growth of GDP, the country’s negative investment position rose from 73.7% of GDP in 2004 to 81.8% in 2005 (see Table IX.8).

The deterioration of the country’s international investment position reflects the negative effect primarily of portfolio investment and “other” investment and, secondarily, of direct investment. The negative impact of portfolio investment is due to the considerable increase in liabilities, mainly owing to the sale of Greek government bonds to non-residents. At the same time, assets from residents’ investment in foreign bonds increased considerably. The negative impact of “other” investment is due to the significant increase in residents’ liabilities, while assets recorded only a small increase. Finally, the negative effect of foreign direct investment is associated with non-residents’ investment in Greece, given that residents’ foreign investment increased considerably less.
X. THE BANKING SYSTEM AND ITS SUPERVISION

1. INTRODUCTION

The robustness of the banking system was further enhanced in 2005, as banks’ profitability improved considerably and their capital adequacy remained high. Underlying this positive performance were mainly strong credit expansion, the containment of operating costs and the fact that Greek banks’ investment in South-eastern Europe has started to mature. At the same time, Greek commercial banks absorbed successfully the impact from the implementation of the International Financial Reporting Standards (IFRS), the adoption of which increased the transparency and quality of their financial statements.

Operating profitability improved considerably, both for the banking system as a whole and for most credit institutions. This is largely accounted for by the rise in net interest income, mainly as a result of strong housing credit expansion, which was strengthened by conjunctural factors (the levy of VAT on new buildings and the adjustment of real estate objective values as from 1 January 2006), while the growth rate of consumer loans slowed, but remained high. At the same time, income from commissions rose, as retail banking operations grew further and the stock market recovered. On the cost side, the positive results of the implementation of employee voluntary retirement plans last year and the containment of administrative costs were evident.

With respect to the quality of the loan book, the non-performing loans (NPLs) ratio improved slightly, with the exception of consumer loans, for which it worsened. Banks’ high profitability and the measures taken by the Bank of Greece led to increased provisioning and, in particular, loan write-offs; as a result, the coverage ratio rose considerably and the structure of NPLs improved across the banking system, under the strong beneficial influence of the restructuring of the loan book of the Agricultural Bank of Greece. Since the cost of credit risk, as measured by the banks’ provisioning-to-income ratio, remains clearly higher in Greece than in the other euro area countries, banks should on the one hand adopt a policy for reducing NPLs (including rescheduled or restructured high-risk loans) by making fuller use of risk management systems in order to better estimate the impact of a possible reversal of the favourite environment and, on the other hand, use part of their profits to further consolidate their portfolios.

Although the implementation of the IFRS weighed on some credit institutions’ own funds, mainly owing to the recognition of the actuarial deficits of defined benefit pension funds and increased provisioning,1 banks responded by increasing their own funds, where required, while the foundations were laid for solving the problem of bank employees’ social security through the establishment of the Unified Bank Employees’ Social Security Fund. Capital increases, in conjunction with improved profitability, helped maintain the overall cap-

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1 “Loan impairment” according to the IFRS terminology.
ital adequacy ratio of both banks and (on a consolidated basis) banking groups at satisfactory levels, despite strong credit expansion and the ensuing rise in credit-risk-weighted assets.

The domestic and international macroeconomic environment remained favourable during 2005 and at the beginning of 2006. In Greece, despite a decline in public investment, domestic consumption rose and economic growth remained strong. The euro area interest rates rose slightly towards the end of 2005 and in early 2006, but remain at historical lows, favouring further credit expansion. International bond and derivative markets absorbed successfully the downgrading of major car industries in spring 2005 and generally did not show considerable volatility, while liquidity in world financial markets remained high. At the same time, Greek banks’ expansion to South-eastern European countries accelerated, either through organic development or through acquisitions, the most recent example being the National Bank of Greece’s expansion to Turkey, while Greek banks also penetrated new markets beyond the Balkans, such as Egypt, Poland and Estonia.

The continued strengthening of the banking system was also confirmed by the assessment of financial stability in Greece by the International Monetary Fund (IMF) in 2005 in the context of the Financial System Assessment Program (FSAP). The domestic financial system’s shock-absorbing capacity is also largely confirmed by stress tests conducted by credit institutions according to specific instructions of the Bank of Greece.

However, certain risks should be highlighted, which are associated with the possibility of a deterioration in the economic climate or conditions in the money, bond and equity markets. First, the growth of households’ borrowing (which, as a percentage of GDP, is lower than, but converges rapidly with, the euro area average), in conjunction with the fact that the bulk of their loans are floating-rate loans, makes them vulnerable to a possible decrease in their real disposable income or further interest rate hikes. Second, increasing competition among banks, notably in housing credit in the second half of 2005, for gaining market shares and maintaining interest income seems to have led to a loosening of their credit standards, taking into account the profile of the risks assumed, as estimated by banks’ risk management units. This is implied by the rise in the housing loan-to-value ratio, the restructuring of loans and the positive relation between the loan application approval rate and NPLs. Third, a possible further increase in oil prices and/or economic slowdown will affect the results of firms (chiefly small and medium-sized ones, which rely on domestic demand) and energy-intensive industries (transport, energy etc.), enhancing banks’ credit risk. Fourth, the faster increase in loans than in deposits and the prolongation of the maturity of loans (due to the growing share of housing credit) push banks to seek new financing sources, such as Euro Commercial Paper (ECP) and Euro Medium Term Notes (EMTN), loan securitisation etc., which make it easier for banks to raise funds and improve their liquidity ratios.\(^1\) However, these financial instruments on the one hand are costlier than saving and sight deposits and, on the other hand, make Greek banks more vulnerable to fluctuations in the money and capital markets. Besides, in com-

\(^1\) Currently, the share of these new financial instruments in the total financing of Greek banks is small.
comparison with large European banks, Greek banks are in a worse competitive position owing to their relatively small size and lower credit rating.

For these reasons, the Bank of Greece continuously adapts the supervisory framework, which was judged by the IMF as highly compliant with the Basel principles. In this direction, the Bank, in addition to advising banks to reduce their NPLs, also took new prudential measures concerning credit risk diversification, especially for loans to households, which may not be capable of assessing their total debt servicing costs throughout the loan duration. Specifically, it raised both capital requirements for housing loans where the loan-to-value ratio exceeds a reasonable limit as well as the provisions required for non-performing consumer and housing loans more than 12 months overdue. Furthermore, it determined the acceptable (for risk management purposes) level of the ratio of households’ principal and interest payments to disposable income (also with a view to protecting borrowers) and focused its audits on banks’ risk management units. At the same time, it established compulsory liquidity ratios (the liquid asset ratio and the asset/liability maturity mismatch ratio); introduced arrangements aimed at upgrading the role of banks’ risk management, compliance and internal audit units; established a stricter anti-money laundering and counter-terrorist financing (AML/CTF) framework; and recommended the implementation of the IFRS also by credit institutions not listed on organised markets.

2. DEVELOPMENTS IN BANKS’ KEY BALANCE SHEET AGGREGATES

The year 2005 saw positive changes in the balance sheet aggregates of the credit institutions active in the Greek market (see Table X.1). Their total loans\(^1\) grew by 19.1%.

\[
\begin{array}{|c|c|c|c|}
\hline
& \text{All banks} & \text{Greek commercial banks} \\
\hline
\text{Loans} & 17.0 & 19.1 & 17.9 & 18.6 \\
\text{Own funds} & 4.9 & 30.8 & 4.3 & 39.9 \\
\text{Deposits} & 14.0 & 17.3 & 12.0 & 14.9 \\
\text{Deposits and repos} & 10.5 & 10.2 & 8.0 & 13.0 \\
\text{Total assets} & 9.4 & 21.1 & 7.3 & 21.5 \\
\hline
\end{array}
\]

\textbf{Source:} Bank of Greece, calculations based on data from balance sheets and financial statements.

At the same time, as a result of a large increase (of 17.3%) in deposits, total deposits and repos rose by 10.2%, despite a drop in the latter.\(^2\) Owing to these developments, in con-

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\(^1\) Loans to the private and the public sector, excluding securitised loans and corporate bonds.

\(^2\) The decline in repo investment in 2005 is explained by the increase in the tax rate on their yields, which has become equal with that on deposits (10%).
juncture with banks’ further expansion in capital (mainly bond) markets, total assets grew by 21.1%, reaching 152.6% of GDP at end-2005, compared with 135.4% at end-2004. Foreign banks active in the Greek market and specialised credit institutions (SCIs) saw increases of 23.7% and 13.8% respectively in their assets.

The corresponding aggregates of Greek commercial banks, which form the majority of the Greek credit system, followed a similar path. Specifically, their loans’ growth remained high (18.6%), faster than that of deposits (14.9%), while their own funds rose substantially (by 39.9%).

3. THE BANKING SYSTEM: STRUCTURE AND COMPETITION

At end-2005, the structure of the Greek banking system (see Table X.2) was only slightly different from 2004. Greek commercial banks continue to retain a large market share, both in terms of assets (81.2%) and in terms of loans (84.9%) and deposits (80.5%).

The market shares of commercial banks, branches of foreign banks and cooperative banks in terms of assets widened marginally, while that of the Specialised Credit Institutions (SCIs) narrowed. However, the latter saw a marginal increase in their market share in lending, while the share of Greek commercial banks shrank commensurately.

Regarding deposits, Greek commercial banks’ market share declined slightly by 1.3% to 80.5% (2004: 81.8%). This favoured foreign banks, SCIs and cooperative banks, which managed to widen their shares by 0.9%, 0.3% and 0.1% respectively. However, cooperative banks’ market shares are still very low.

Measured by the market share of the five largest banks, the degree of concentration of the Greek banking system changed marginally. Specifically, it increased slightly on the basis of assets (to 65.6%, from 65.0% in 2004), but declined a little in terms of loans (to 66.1%, from 66.3% in 2004) and even more in terms of deposits (to 65.5%, from 66.5% in 2004).

Although the degree of concentration of the Greek banking system in terms of assets is considerably higher than the EU average (2004: 40.5%), it is well below the corresponding figure recorded in the Netherlands (2004: 84%), Belgium (2004: 84.3%) and Finland (2004: 82.7%). Moreover, it is slightly lower than the average of the ten new Member States of the EU (68.6%).

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1 These comprise the Postal Savings Bank and the Deposits and Loans Fund.
2 See Section 3 of this chapter.
3 This increase is limited to 26.5% excluding two banks that increased their capital substantially in order to cover the actuarial deficits of their defined benefit pension plans according to the IFRS.
4 ECB, EU banking structures, October 2005.
5 This conclusion is also confirmed by the Herfindahl concentration index. In 2004, this index was 1,070 for Greece (1,097 in 2005), compared with 569 for the EU, 1,726 for the Netherlands, 2,100 for Belgium and 2,680 for Finland. This index takes into account all banks and is calculated as the sum of their squared market shares, ranging from 0 to 10,000. A level lower than 1,000 suggests low concentration, between 1,000 and 1,800 moderate concentration and over 1,800 high concentration.
6 See ECB, op. cit.
As far as mortgages are concerned, the degree of concentration of the Greek banking system (61.5%), on the basis of the assets of the three largest banks, is slightly lower than in the EU (66%), but substantially higher than in the euro area (50%).¹ In certain euro area countries (Germany, Spain, Italy and Austria), the degree of concentration is low owing to the “dual” structure of the housing credit market, where commercial banks have to compete with a considerable number of regional and cooperative banks.

It should be noted that the high degree of concentration reflects an effort by the most efficient banks to take advantage of economies of scale and scope and does not necessarily hamper competition, provided that the price-setting procedure is not subject to collusion² (an area regulated by the Hellenic Competition Commission). In any case, although the Greek banking system shows a relatively high degree of concentration, the five largest Greek banks are classified as medium-sized banks, by European

TABLE X.2
STRUCTURE OF THE GREEK CREDIT SYSTEM

<table>
<thead>
<tr>
<th></th>
<th>Assets</th>
<th>Loans</th>
<th>Deposits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greek commercial banks</td>
<td>81.0</td>
<td>81.2</td>
<td>85.1</td>
</tr>
<tr>
<td>Foreign banks</td>
<td>10.0</td>
<td>10.1</td>
<td>8.8</td>
</tr>
<tr>
<td>Cooperative banks</td>
<td>0.7</td>
<td>0.8</td>
<td>1.0</td>
</tr>
<tr>
<td>Specialised Credit Institutions¹</td>
<td>8.3</td>
<td>7.9</td>
<td>5.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Banks</th>
<th>Branches</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greek commercial banks</td>
<td>21</td>
<td>21</td>
<td>2,953</td>
</tr>
<tr>
<td>Foreign banks</td>
<td>23</td>
<td>22</td>
<td>223</td>
</tr>
<tr>
<td>Cooperative banks</td>
<td>16</td>
<td>16</td>
<td>87</td>
</tr>
<tr>
<td>Specialised Credit Institutions¹</td>
<td>2</td>
<td>2</td>
<td>140</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>62</strong></td>
<td><strong>61</strong></td>
<td><strong>3,403</strong></td>
</tr>
</tbody>
</table>

1 Postal Savings Bank and Deposits & Loans Fund.

Source: Bank of Greece (data from financial statements).

¹ See ECB, op. cit., pp. 23-30.
standards, mainly owing to the small size of the domestic market. However, their expansion to international markets, notably in South-eastern Europe, provides scope for further growth.

The number of credit institutions in Greece fell to 61 at end-2005, from 62 in 2004, because one foreign credit institution withdrew. By contrast, the number of bank branches rose (2005: 3,543, 2004: 3,403), contrary to the declining trend observed in the EU. This partly reflects Greek customers’ preference for bank transactions through branches, not least because e-banking is not as common in Greece as in the other euro area countries. Branch density relative to population is lower in Greece (32 branches per 100,000 inhabitants) than in the euro area (2004: 54 branches per 100,000 inhabitants) and the EU (2004: 43 branches per 100,000 inhabitants). However, GDP per branch does not differ significantly from the euro area and EU averages.

In addition to increasing the number of branches, which are now smaller, have fewer employees and focus on consultancy services, banks continue a sustained effort to further develop alternative distribution channels, such as automatic teller machines (ATMs), phone banking and e-banking. In line with this trend, the number of ATMs rose from 5,787 in 2004 to 6,230 in 2005 and, at the same time, their operations expanded to include fund transfers to third-party accounts and credit card and utility bill payments. Moreover, registered users of e-banking services grew.

At end-2005, the number of employees of credit institutions operating in Greece was higher year-on-year (2005: 61,295, 2004: 59,337), as staff requirements grew owing to the expansion of their networks and the low replacement rate of employees that retired under voluntary retirement plans in 2004. As a result, the number of employees per branch in Greece remained unchanged (17), in line with a similar trend in both the euro area (2004: 13, 2003: 13) and the EU (2004: 15, 2003: 15). At the same time, as a result of a fast increase in the assets of Greek banks, assets per employee rose to €4.2 million in 2005 (from €3.4 million in 2004), but continue to fall short considerably of the EU average (€11.4 million at end-2004).

Finally, there is considerable scope for further cooperation between Greek credit institutions and insurance companies —as many of the latter are subsidiaries of the former — in the provision of bankassurance products, as total premiums as a percentage of nominal GDP in Greece (2004: 2.2%) remain at about 1/4 of the corresponding EU average (2003: 8.3%). The enhancement of the institutional framework (Law 3229/2004) through the full activation and operational independence of the new supervisory authority for the insurance sector and increasing demand for supplementary pension coverage are expected to strengthen public trust in the institution of private insurance. Regarding the profitability of Greek insurance companies, the January-September 2005 results of five large Athens

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1 According to the ECB’s definition, medium-sized banks are banks that have assets between 0.005% and 0.5% of the total consolidated assets of EU banks. It should be noted that, at end-2004, the total consolidated assets of EU banks were €20 trillion.

2 Despite the increase in the number of ATMs, their density in Greece (56 ATMs per 100,000 inhabitants in 2005) is lower than in the euro area (2004: 78).
Exchange-listed companies show a substantial improvement: pre-tax profits came to €40.6 million, compared with losses of €21.2 million in the same period of 2004. However, the ratio of own funds to total insurance provisions remained low, despite improving marginally (January-September 2005: 27.06%, January-September 2004: 26.95%).

4. GREEK BANKS’ PROFITABILITY

The operating profitability of Greek commercial banks, both at bank and group level, showed a considerable improvement in 2005 for the third consecutive year, as a result, primarily of continued strong credit expansion and, secondarily, of the containment of operating costs in the domestic market. This improvement is reflected in all the profitability ratios (pre-tax and after-tax profits, return on assets —ROA— and return on equity – ROE), although any comparisons with previous years should be made with caution, owing to the impact from the first implementation of the International Financial Reporting Standards (IFRS) on credit institutions’ balance sheets and operating results (see Box X.3). It should be noted that, for those commercial banks that have shifted to the IFRS (representing 97% of the total assets of Greek commercial banks), an adjustment has been made to 2004 profit figures to ensure comparability.

4.1 Banks

An examination of the balance sheets of Greek commercial banks (see Table X.3) shows a considerable increase (of 15.5%) in their operating profits, mainly steming from a 13.9% rise in net interest income, as a result of continued strong credit expansion, notably to households and small and medium-sized enterprises.

In more detail, interest income grew by 22.3%, despite a decline in bond interest income, while interest expenses rose faster (by 35.3%). Higher interest expenses are partly accounted for by the increased use of alternative financing sources, such as the interbank market, credit instruments and subordinated loans, which are costlier than deposits. Despite the decline in nominal interest rates in many categories of loans, the net interest rate margin1 remained virtually unchanged at 2.8% as a result of an increase in the outstanding balance of bank loans (see Table X.4).

Although non-interest income remained at the level of 2004 as a percentage of average assets (0.9%, see Table X.4), it showed a considerable increase (of 20.8%, see Table X.3), overshooting the rise in net interest income. Specifically, net commission income, which makes up around 60% of non-interest income, rose by 12.9%, reflecting the further growth of retail banking, the provision of specialised financial investment products

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1 Calculated as the ratio of net interest income to total average assets.
### TABLE X.3
GREEK COMMERCIAL BANKS' AND BANKING GROUPS' INCOME STATEMENTS FOR 2005
(Percentage changes over 2004)

<table>
<thead>
<tr>
<th></th>
<th>Banks</th>
<th>Banking groups</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Net interest income</td>
<td>15.5</td>
<td>16.6</td>
</tr>
<tr>
<td>- Interest income</td>
<td>13.9</td>
<td>17.9</td>
</tr>
<tr>
<td>- Interest expenses</td>
<td>22.3</td>
<td>23.3</td>
</tr>
<tr>
<td>- Net non-interest income</td>
<td>35.3</td>
<td>32.2</td>
</tr>
<tr>
<td>- Net commission income</td>
<td>20.8</td>
<td>13.9</td>
</tr>
<tr>
<td>- Income from financial operations and the investment book¹</td>
<td>96.3</td>
<td>34.2</td>
</tr>
<tr>
<td>- Other income</td>
<td>13.6</td>
<td>6.7</td>
</tr>
<tr>
<td><strong>Operating expenses</strong></td>
<td>-3.2</td>
<td>-0.4</td>
</tr>
<tr>
<td>- Personnel outlays</td>
<td>-5.6</td>
<td>-2.4</td>
</tr>
<tr>
<td>- Depreciation</td>
<td>-1.0</td>
<td>7.4</td>
</tr>
<tr>
<td>- Other expenses</td>
<td>1.3</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td>51.0</td>
<td>48.7</td>
</tr>
<tr>
<td><strong>Pre-tax profits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisions for non-performing loans</td>
<td>7.6</td>
<td>11.3</td>
</tr>
<tr>
<td><strong>Tax</strong></td>
<td>-18.8</td>
<td>-9.8</td>
</tr>
<tr>
<td><strong>Profits after tax and (for banking groups) minority interests</strong></td>
<td>197.9</td>
<td>150.3</td>
</tr>
</tbody>
</table>

1 Excluding investment book income, this item decreased by 50.9% for banks and by 27.2% for banking groups.

**Source:** Bank of Greece, calculations based on income statement data.

### TABLE X.4
GREEK COMMERCIAL BANKS' AND BANKING GROUPS' INCOME STATEMENTS
(Percentage of average assets)

<table>
<thead>
<tr>
<th></th>
<th>Banks</th>
<th>Banking groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2004</td>
<td>2005</td>
</tr>
<tr>
<td>Interest income</td>
<td>4.7</td>
<td>5.0</td>
</tr>
<tr>
<td>Interest expenses</td>
<td>1.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Net interest income</td>
<td>2.8</td>
<td>2.8</td>
</tr>
<tr>
<td>Non-interest income</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>2.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Net income</td>
<td>1.3</td>
<td>1.7</td>
</tr>
<tr>
<td>Provisions</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Pre-tax profits (ROA)</td>
<td>0.4</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>Pre-tax profits as a percentage of own funds (ROE)</strong></td>
<td>5.7</td>
<td>16.3</td>
</tr>
</tbody>
</table>

**Source:** Bank of Greece calculations based on balance sheet and income statement data.
and services, such as fund management, and a rise in the value of stock exchange transac-
tions. Income from financial operations and the investment book grew by 96.3%, while “other” income recorded a considerably lower rate of increase (13.6%).

The share of net interest income in total operating income showed a slight decline (2005: 75.3%, 2004: 76.4%). A similar decrease was recorded in commission income (2005: 15.4%, 2004: 15.7%) and other income (2005: 5.6%, 2004: 5.7%). By contrast, the share of income from financial operations and the investment book grew (2005: 3.7%, 2004: 2.2%, see Chart X.1).

Banks made a very effective effort to curtail their operating costs, which dropped by 3.2% as a result of the implementation of voluntary retirement plans by certain banks in 2004 and of their cost containment policies in general. Specifically, staff costs and depreciation expenses declined by 5.6% and 1% respectively, while “other” expenses showed a small increase (1.3%). With respect to the structure of operating costs, staff costs account for 61.6% (2004: 63.2%), “other” expenses for 31% (2004: 29.6%) and depreciation expenses for 7.4% (2004: 7.2%).

---

1 This is exclusively attributable to a large increase in income from the investment book, as income from financial operations dropped by 50.9%.
As a result of the considerable increase in banks’ operating income and the curtailment of their operating costs, net income grew by 51%, leading to a clear improvement in the cost-to-income ratio, which fell to 54.8%, from 65.4% in 2004.

At the same time, Greek banks’ provisions rose by 7.6% (see Table X.3); as a result, they remained at the same level as a percentage of average assets (0.6%). This rate of increase may seem lower than the lending growth rate, but high provisioning in 2004 should also be taken into account.

Pre-tax profits rose substantially by 91.9% (see Table X.3), as the 2004 results had been affected by extraordinary expenses, such as voluntary retirement plan costs and increased provisioning by some banks, resulting in strong base effects. At the same time, profits for 2005 were boosted by extraordinary one-off revenues, such as proceeds from the sale of treasury shares. Moreover, the cut in corporate tax in 2005 to 32% from 35%, the reduced tax rates applicable under Law 2992/2002 to banks absorbing subsidiaries and tax deferrals under the IFRS pushed up after-tax profits substantially (197.9%).

As a result, banks’ ROA and ROE improved considerably (see Table X.4). Specifically, after-tax return on average assets rose to 0.9% (2004: 0.4%) and return on average equity came to 16.3% (2004: 5.7%).

**BOX X.1**

**ROE decomposition analysis**

Return on equity (ROE) is a measure of the financial strength of a credit institution and a key determinant of investors’ decisions. In the context of prudential supervision, the ROE decomposition analysis allows the qualitative evaluation of ROE’s evolution over time in relation to supervisory factors, such as risk exposures and the quality of capital.

For the after-tax ROE decomposition analysis, the following equation has been used:  \( \text{ROE} = \left( 1 - \frac{\text{Taxes}}{\text{Pre-tax profits}} \right) \times \frac{\text{Pre-tax Operating Gross profits}}{\text{Pre-tax Operating Gross income}} \times \frac{\text{Gross income}}{\text{RWA}} \times \frac{\text{RWA}}{\text{Assets}} \times \frac{\text{Assets}}{\text{Supervisory capital}} \times \frac{\text{Supervisory capital}}{\text{Equity}} \)

where RWA = risk-weighted assets.

The above parameters are interpreted as follows:

1) Taxes/Pre-tax profits: It shows the real tax rate and isolates the impact of taxation on ROE.

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1 Derived by adjusting the corresponding methodologies developed and applied by the supervisory authorities and central banks of Spain, the United Kingdom and Belgium.
(2) Pre-tax profits/Operating profits: It shows the magnitude of the impact from loan impairment provisions, as well as extraordinary results in relation to operating results.

(3) Operating profits/Gross income: It reflects operating profitability. Alternatively, it may be expressed as 1 minus the operating profitability ratio (operating costs to gross income).

(4) Gross income/RWA: It shows the return on risk-weighted assets, i.e. income per unit of risk-weighted assets.

(5) RWA/Assets: It is a measure of the riskiness of the credit institution’s assets and, therefore, a measure of its willingness to undertake risk. This ratio is subject to the weaknesses of credit risk assessment under the current capital adequacy framework and it is expected that the implementation of the new framework (Basel II) will allow higher risk sensitivity of capital requirement calculations.

(6) Assets/Supervisory capital: It measures the leverage of supervisory capital. For a given financial risk, higher leverage entails on the one hand higher bankruptcy risk for a credit institution and, on the other hand, higher return per unit of capital (i.e. higher ROE).

(7) Supervisory capital/Equity: It reflects the quality of the credit institution’s capital, as the numerator includes subordinated loans, hybrid capital and preferred shares. A deterioration in the quality of capital implies an increase in supervisory capital for given equity and therefore a rise in ROE through leverage.

The chart shows the contribution of each parameter to changes in Greek commercial banks’ (after-tax) ROE for the years 2003-2005 on a non-consolidated basis (so as to reflect mainly developments in the domestic market).

The considerable increase in Greek commercial banks’ after-tax ROE on a non-consolidated basis (2005: 16.3%, 2004: 5.7%)1 is broadly based across all components, with the exception of supervisory capital leverage. In more detail, a decline in the real tax burden, owing to a cut in the nominal tax rate to 32% for the year 20052 (from 35% in 2004), the utilisation of the tax advantages provided by Law 2992/2002 in mergers of subsidiaries and the recognition of deferred taxes under the IFRS contributed decisively in this direction.

Furthermore, the improvement in both the profitability ratio (which stemmed from a large increase in operating income and the containment of operating costs) and the pre-tax profits/operating profits ratio (as provisioning rose slower than operating profitability) have contributed considerably to the improvement of the ROE. The deterioration in the quality of supervisory capital (as the share of core capital narrowed), the increase in asset risk and the improvement in the return on risk-weighted assets had a smaller effect. The decline in supervisory capital leverage was the only factor that had a dampening effect.

From a supervisory point of view, the worsening of the quality of supervisory capital seems to be partly offset by the decline in its leverage. Moreover, the small increase in asset risk and return on risk-weighted assets shows that strong credit expansion to households neither led to an excessive increase in banks’ credit risk nor squeezed their profit margins. On the other hand, the large increase in after-tax ROE in 2005 seems to be mainly attributable to one-off

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1 It should be pointed out that Greek commercial banks’ after-tax ROE for 2004 according to the Greek Accounting Standards was 7.5%. Following the adjustment of the 2004 results according to the IFRS, after-tax ROE came to 5.7%.

2 Pursuant to Law 3296/14 December 2004 (Government Gazette 253A).
The impact from the first implementation of the IFRS on the profit change rate is evident if the 2005 profit figures are compared with the 2004 figures, compiled in accordance with the Greek Accounting Plan. This shows an increase of 71% in pre-tax profits and 96.5% in profits after tax and minority interests. Under the IFRS, profits (in absolute terms) benefited not only from tax deferrals, but also from the decrease in depreciation expenses (by 28.6% over the figures compiled according to the Greek Accounting Plan), stemming on the one hand from their calculation on the basis of the useful life of fixed assets and, on the other hand, from the direct write-down of part of the intangible assets which were previously depreciated in instalments.

Factors, such as the considerable decrease in the tax burden, the improvement of the profitability ratio and high extraordinary income. In 2006, a possible slowdown in credit expansion and economic growth will limit banks’ potential to further improve their profitability and may increase credit risk and the necessary provisioning. In addition, the favourable effect of a further cut in the tax rate to 29% in 2006 may be offset by a decline in deferred tax if loss-making banks become profitable again.
4.2 Banking groups

Developments in banking groups’ aggregates moved, more or less, in the same direction as those in banks’ aggregates. Their operating income rose faster than at the bank level, while their operating costs showed a small increase, compared with a slight decline at the bank level. Underlying this were the profitability of groups’ subsidiaries and the further expansion of banking groups to foreign markets, notably South-eastern European countries.

In more detail, a 16.6% increase in operating income was broadly based across income categories. Net interest income grew by 17.9% (see Table X.3), the net interest rate margin reached 3.1% (2004: 3.0%) (see Table X.4) and net commission income rose by 13.3%. “Other” income, including from insurance business, showed a smaller rise (6.7%). However, income structure differs between banks and banking groups, as non-interest income has a larger share in groups’ income (see Chart X.1).

Operating costs showed a marginal decline (0.4%) and their share in average assets shrank (2005: 2.5%, 2004: 2.9%). Underlying this were a very moderate increase in staff costs and, partly, an effort by certain banking groups to rationalise their structure and operation by absorbing subsidiaries, concentrating activities in privately-owned premises and taking other measures for cutting administrative expenses. Regarding the structure of operating costs, staff costs dropped by one percentage point as a percentage of total operating costs (to 59.6%), but are still slightly higher than the corresponding average of banking groups of a similar size in the EU (2004: 58.8%).

As a result, net income grew by 48.7%, driving down the cost-to-income ratio (2005: 55.9%, 2004: 65.5%, see Chart X.2).

Provisions rose by 11.3%, remaining at 0.6% of average assets (compared with 0.3% for EU banking groups in 2004); as a result, pre-tax profits improved by 73.7%, while profits after tax and minority interests increased by 150.3%. Furthermore, the performance of individual banking groups converged, as some of them were restructured successfully, thus improving their results considerably. These developments led to a substantial improvement in banking groups’ ROA and ROE: after-tax return on average assets rose to 1.1% (from 0.5% in 2004) and return on average equity to 17% (from 8.7% in 2004). A similar trend was also observed in available data on the after-tax return on average assets of large banks that apply the IFRS in the euro area (first half 2005: 20.8%, 2004: 13.6%). It should also be noted that after-tax average return on equity of Greek banking groups for the 2003-2005 period is estimated at 12.1%, compared with 11.5% in the euro area.

The impact from the first implementation of the IFRS on the profit change rate is obvious if one compares the 2005 profits with the 2004 profits according to the Greek

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1 For the comparability between the 2005 and the 2004 data, see the section on banks’ profitability.
Accounting Plan. Specifically, pre-tax profits appear to have risen by 58.9%, while profits after tax and minority interests have increased by 87.4%.

Underlying these positive developments in the profitability of Greek banking groups were also their cross-border activities, chiefly in South-eastern European countries. Specifically, the profitability of Greek banks’ operations in the Balkan markets improved considerably, although it is still low in absolute terms.

In more detail, a 56% rise in lending in the said markets and wider profit margins than in the Greek market pushed up net interest income by almost 50%, which accounts for about 65% of total gross income, while net commission income rose less (by 24%). These developments led to a 45% increase in gross income. However, operating costs also grew considerably (by 55%) because of the branch network expansion cost, the cost of widening the range of activities and integrating IT, and staff costs. As a result, the cost-to-income ratio remained high (68%), slightly above the 2004 level (66%), diverging considerably from the corresponding ratio for Greek commercial banks’ overall activity (see Chart X.2).

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1 It should be noted that during 2005 and at the beginning of 2006 Greek banking groups expanded their activities to Egypt, Estonia, Poland and Turkey.
Overall, as a result of Greek commercial banks’ expansion to South-eastern European countries, the share of their gross income from domestic operations in their total income appears slightly reduced, while their corresponding share in pre-tax profits showed a small increase. Specifically, at end-2005 the share of gross income from operations in South-eastern European countries approached 7.5%, i.e. almost one percentage point higher than in 2004, while the corresponding share of pre-tax profits was slightly affected by the increased costs of Greek banks’ expansion in this region and approached 6.5%. Between 2004 and 2005, pre-tax profits from operations in South-eastern European countries grew by about 40%.

5. BANKING RISKS

5.1 Credit risk

5.1.1 Quality of the loan book and evolution of provisioning

During 2005, NPLs grew, but, as a result of substantial write-offs (about €1,430 million) and increased restructuring of loans,¹ the ratio of NPLs to total outstanding loans of Greek commercial banks clearly improved (6.3% at end-2005, compared with 7% in 2004).² Specifically, the NPL ratio dropped in corporate credit³ (to 7.1%, from 7.8% in 2004) and housing credit (to 3.6%, from 4.6% in 2004), but rose in consumer credit from 7.2% in 2004 to 7.8% at end-2005, considerably lower than in the January-September 2005 period (when it had reached 8.8%), as a result of write-offs at the end of the year (see Chart X.3).

On the other hand, a 10.8% rise in NPLs (after write-offs) was accompanied by a larger (28.6%) increase in cumulative loan-loss provisioning; as a result, the ratio of net NPLs (i.e. NPLs minus provisions) more than three months overdue for the banking system as a whole dropped considerably to 2.4% in 2005, from 3.4% in 2004 (see Chart X.4). Despite the overall improvement in this ratio in 2005, it still exceeds 2% for banks that make up 42.7% of total assets (compared with 73.5% in 2004).

At the same time, the provisioning coverage of NPLs more than three months and more than one year overdue rose to 61.9% and 90.3% respectively in 2005, from 51.4% and 77.3% in 2004 (see Chart X.4). In addition, a considerable improvement was observed in the structure of NPLs owing to write-offs of bad loans (which are the worst category of NPLs) and a decrease in lending to enterprises with negative net worth. This led to a widening of the share of other categories of NPLs in total loans, which typically have higher recovery ratios and a

¹ Such restructuring, as well as loan write-offs in the fourth quarter of 2005, reduced the amount of NPLs in absolute terms.
² It should be pointed out that this ratio remains in Greece higher than the average for medium-sized banks in the euro area (2004: 3.6%), although the definition of NPLs used in Greece is more conservative than in the other countries, implying that the comparison between nominal percentages does not reflect the real picture.
³ NPL ratios in corporate and housing credit in 2005 would have been 6.9% and 3.9% respectively if the breakdown of collateralised loans by category, which is available for the 2005 data only, had not been taken into account.
bigger possibility of becoming performing again. Generally, it should be noted that the efforts to restructure the Agricultural Bank’s loan book and resolve the “compound interest debt” problem led to gradual convergence of all NPL ratios across the banking system.

Greek commercial banks, contrary to their European counterparts, maintained a high provisioning policy, as strong credit expansion, in conjunction with a rise in NPLs, increased their credit risk exposures. However, in the opinion of the Bank of Greece, ex post provisioning is not the best policy, because on the one hand it increases banks’ operating costs (provisions correspond to 15.6% of banks’ income in 2005, pushing up the ratio of operating costs — including provisions — to operating income to 70.4%) and, on the other hand, does not take fully into account the possibility of reduced profitability in the future and, therefore, reduced provisioning capacity, especially since provisions should cover 100% of NPLs overdue by more than three years as from 1 January 2007. Hence, the Bank of Greece considers that adapting risk management systems and (in certain cases) credit policies should be the top priority for banks, if they are to further reduce — in a dynamically developing system — the NPL ratios.
Against this background, the Bank of Greece raised twice in 2005 (by Bank of Greece Governor’s Acts 2557/26 January 2005 and 2565/11 October 2005) banks’ regulatory provisioning ratios for consumer and housing loans, in order to both offset the impact from possible credit risk mispricing and encourage banks to write off bad loans, also ensuring a level-playing field for all banks. Finally, the implementation of the IFRS led to increased provisioning by certain banks for losses already recognised on their balance sheets. However, since such provisions do not quantify data and indications of possible future losses from swings in the business/credit cycle, which dynamically affect expected loss, as the latter is defined in the new “Basel II” framework, the Bank of Greece cooperates with Greek banks in order to evaluate any discrepancies between provisions under the IFRS, regulatory provisions and the findings of on-site examinations.

5.1.2 Household loans’ credit risk

As a result of continued rapid credit expansion to households in the last five years, the share of loans to households in banks’ total lending to the private sector widened from 28.6% in 2000 to 48% in 2005. Therefore, developments in households’ financial
condition now affect considerably the level and nature of the static and dynamic credit risk facing banks.

In December 2005, households’ total borrowing from Monetary Financial Institutions (MFIs) rose to 36.3% of estimated nominal GDP1 (compared with 30.7% in 2004), which, however, is still considerably lower than the corresponding euro area average (52.6% in 2005). Specifically, the outstanding balance of housing (mortgage) loans grew to 23.9% of GDP (from 19.7% in 2004), while the outstanding balance of consumer and “other” loans to households rose to 12.4% of GDP (from 11.0% in 2004). The increase in households’ borrowing, in conjunction with their preference for floating-rate loans (e.g. 89% of new housing loans granted in 2005 were floating-rate loans or loans with an initial rate fixation of up to one year, compared with 55% for the euro area as a whole), makes them vulnerable to a possible decline in their real disposable income, rise in unemployment or further interest rate hikes. The lack of adequate historical data for correlating the magnitude of credit risk with the evolution of the business cycle, as well as households’ limited experience in debt management inevitably give rise to uncertainties about the extent of potential implications. The probability of an increase in credit risk was also underlined by the IMF during its recent assessment of the Greek financial sector.2 To limit credit risk, the Bank of Greece has asked banks to further tighten their credit standards, as it has been observed that there is a correlation between the consumer loan and credit card application approval rate and the evolution of NPLs in this category.3 Despite this, and notwithstanding the need for banks to take into account the phase of the business cycle by carrying out proper stress tests, few banks reduced the credit card application approval rate, which fell only marginally to 58.6% in 2005, from 61.2% in 2004.

As 2/3 of household credit concern housing loans, banks’ credit risk is also directly influenced by developments in residential property prices, since the value of the underlying collaterals changes, affecting the bad loan recovery ratio. Although a future fall in residential property prices in certain segments of the market cannot be ruled out, a considerable across-the-board correction would seem unlikely.4 In any case, credit risk considerations would imply that the market value of the real estate used as collateral should exceed total lending to each borrower by a sufficient margin. During 2005, under the pressure of competition, in 32% of new mortgage loans (accounting for 40% of total new disbursements) the loan-to-value ratio exceeded 80%. Thus, the Bank of Greece decided that the reduced capital requirement ratio for credit risk (4%) will henceforth apply only to the part of the loan up to 75% of the market value of real estate collaterals (which is considered consistent with reduced capital requirements according to international experience),

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1 Including loans securitised by Greek banks, total loans to households rose to 38.3% (from 31.4% in 2004).
3 The correlation ratio between the approval rate and the evolution of NPLs in consumer loans and credit cards is estimated at 0.7, subject to the caveat of limited data availability.
4 As implied by the evolution of residential property prices and the relevant indicators over time (e.g. residential property prices to households’ disposable income, rents to residential property prices, owner-occupation percentage etc.).
the remaining part being subject to the standard 8% capital requirement (Bank of Greece Governor’s Act 2564/11 October 2005).

5.1.3 Corporate loans’ credit risk

The rate of MFIs’ credit expansion to non-financial corporations falls considerably short of that to households and overall accelerated only slightly (2005: 9.8%, 2004: 8%), with marked differences across sectors. Thus, for the corporate sector as a whole, the rate of credit expansion does not seem to constitute in itself a potential source of additional credit risk for banks. Exposures to corporate borrowers or branches are discussed below (see Section 5.2). On the other hand, the bearing of the economic robustness and prospects of the domestic corporate sector on banks’ credit risk should not be disregarded.

According to data compiled by the Bank of Greece on a sample of 435 firms, excluding financial corporations, despite a 10% rise in sales, pre-tax profits of these firms grew by only 5.3% in 2005, a trend already apparent in the results for the first half of 2005. An analysis of indicators shows that the financial condition of these firms was not much different from 2004. In short, the net profit margin was 9.4% (from 9.9% in 2004), the financial vulnerability index (financial costs to gross profits) remained unchanged at 7.5%, while the gearing ratio came to 1.02 (down from 1.10 in 2004, but much higher than 0.75, which was the average during the 1997-2001 period for an ICAP sample of about 27,000 firms). However, since the sample comprises typically large —by Greek standards— firms, which are not necessarily representative both in terms of sectoral distribution and of developments in their aggregates, it is not possible to draw safe conclusions on the evolution of corporate profitability in 2005. However, it is plausible that the relative slowdown of economic growth, the increasing penetration of imports from low-cost countries and the deceleration in income growth had an impact on the financial condition of domestically-oriented firms, notably SMEs.

In the construction sector, in 2005 a substantial drop was observed in both the turnover and the profitability of construction firms (–15% and –41% respectively). By contrast, export-oriented firms with international activities showed positive results across sectors. These firms on the one hand are less vulnerable to shifts in domestic demand and, on the other hand, seem better placed to take advantage of both economies of scale and investment opportunities abroad.

The migration matrix data for 2005 imply a deterioration in the financial condition and prospects of firms, as net downgradings account for 8.2% of corporate borrowers and 5% of the total outstanding balance of corporate loans (compared with

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1 For a more detailed discussion of the development of business profits on the basis of this sample, see Chapter IV.3.
2.6% and 7% respectively in 2004). Specifically, of the total number of borrowers and the total loans rated, (a) 71.3% and 74.8% respectively remained at the same credit rating levels; (b) 18.4% and 15.1% respectively were downgraded; and (c) 10.3% and 10.1% respectively were upgraded. Similar indications about the evolution of firms’ financial condition are provided by credit registry data of the Greek credit bureau “Tiresias S.A.” concerning all firms (not only some large ones included in the aforementioned sample). As shown in Table X.5, in 2005 the value of both unpaid cheques and court payment orders grew substantially (by 41.6% and 24.5% respectively over 2004). By contrast, the value of bankruptcy petitions fell (by 36.7%). In conclusion, there is a trend towards increased credit risk from the banks’ corporate loan book, and

<table>
<thead>
<tr>
<th>TABLE X.5</th>
<th>ANNUAL PERCENTAGE CHANGES IN CREDIT REGISTRY DATA¹</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2002</td>
</tr>
<tr>
<td>Bankruptcy petitions</td>
<td>–61.5</td>
</tr>
<tr>
<td>Payment orders</td>
<td>–34.7</td>
</tr>
<tr>
<td>Unpaid cheques</td>
<td>20.7</td>
</tr>
</tbody>
</table>

¹ Changes in the relative amounts. Adjustments of previous years’ figures have been taken into account.
² 2/3 of the total increase concerns 10 enterprises.
Source: Tiresias S.A.

the outlook for 2006 depends on the overall course of domestic and international economic activity.

5.1.4 Credit risk transfer

Credit risk transfer through loan securitisation accelerated considerably in 2005. Specifically, in the course of 2005, Greek commercial banks securitised loans of €2,250 million (of which €750 million of credit card loans, securitised for the first time), compared with €750 million in 2004 (200% up – see Chart X.5). At end-2005, the total stock of securitised housing loans was €2,220 million and the outstanding balance of securitised credit card loans was €975 million.¹ The total outstanding balance of securitised loans came to €3,195 million (1.1% of total assets). In addition to serving as a credit risk transfer tool, securitisation also improved asset allocation, increased liquidity and served as a source for funding banks’ credit expansion, notably to households. Credit risk transfer

¹ The resulting difference from the issues is accounted for by the special terms applying to the securitisation of credit card loans.
through loan securitisation may have led banks to relax their credit standards for loans to households, according to international experience.

At the same time, the Bank of Greece monitors and attaches particular importance to credit risk transfer through the use of credit derivatives in bank portfolios. At end-2005, the total amount invested in credit default swaps\(^1\) and total return swaps\(^2\) in the credit protection market rose to €695 million, up 312\% over 2004, while the corresponding amount for protection selling was €30 million. Finally, credit insti-

![Chart X.6]

LOAN SECURITISATION BY GREEK COMMERCIAL BANKS
(MILLION EURO)

Source: Bank of Greece.

<table>
<thead>
<tr>
<th>Year</th>
<th>Credit Cards</th>
<th>Housing Loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>200</td>
<td>500</td>
</tr>
<tr>
<td>2004</td>
<td>1000</td>
<td>1500</td>
</tr>
<tr>
<td>2005</td>
<td>2000</td>
<td>2500</td>
</tr>
</tbody>
</table>

\(^1\) Credit default swaps are off-balance-sheet over-the-counter financial contracts whereby the protection buyer transfers credit risk from an underlying instrument to the protection seller by paying a lump-sum or periodical premium, in exchange for compensation if a credit event is triggered. It is possible that the underlying instrument is not in the possession of the protection buyer.

\(^2\) Total return swaps are off-balance-sheet over-the-counter financial contracts whereby the protection buyer transfers to the protection seller the total return of an underlying instrument and the possible appreciation of its market value in exchange for the possible depreciation of the market value of the underlying instrument plus a reference rate and a preset compensation/margin. It is possible that the underlying instrument is not in the possession of the protection buyer.

\(^3\) Credit-linked notes are balance-sheet items incorporating a credit default swap, where the protection buyer issues securities linked with the underlying instrument and acquired by the protection seller.
5.2 Concentration risk

5.2.1 Large exposures to groups or individual firms

Prudential returns on credit institutions' large exposures (i.e. exposures over 10% of their supervisory own funds) as at 31 December 2005 show that, at the bank level, the aggregate net large exposures of Greek commercial banks to individual borrowers or to associated groups of borrowers as a percentage of their supervisory own funds rose to 144.5%, from 123.7% at end-2004, reflecting a 27% increase in large exposures and a smaller (9%) rise in credit institutions’ supervisory own funds. Furthermore, the distribution of these percentages across individual banks indicates a shift in concentration to the medium bands (mainly between 200% and 300%), while only one credit institution has large exposures of over 600% of supervisory own funds (the upper limit being 800%).

At the banking group level, large exposures rose to 57% of supervisory own funds in 2005, from 43% in 2004. The lower percentages of groups’ large exposures compared with those of banks on a non-consolidated basis are justified by the fact that the bulk of groups’ large exposures are exposures to their subsidiaries, which are consolidated and therefore are not taken into account. It should be noted that no banking group has total exposures of over 400% of supervisory own funds. In addition, at the banking group level, the average weighted index of individual net exposures as a percentage of supervisory own funds came to 10.7% in 2005 (from 11.6% in 2004), which is satisfactory and slightly exceeds the average for EU banks. In any case, monitoring of banks’ and groups’ concentration risk should be an integral part of credit institutions’ risk management systems, in view of the implementation of the new Capital Adequacy Directive (Basel II – Pillar II).

5.2.2 Large exposures to specific sectors

Although no ceilings on sectoral exposures have been imposed, sectoral concentration and the adaptation of exposures to the prevailing conditions should be an integral part of banks’ risk management systems and are assessed separately by the Bank of Greece. According to data reported by banks regarding loans over €1 million as at 31 December 2005, Greek commercial banks' substantial exposures to two sensitive sectors of economic activity (constructions and tourism) recorded in 2004 continued to exist in 2005, with shares in total exposures of 4.3% and 4.9% respectively. In the construction

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1 Under Bank of Greece Governor’s Act 2246/16 September 1993, to determine large exposures, the data on credit institutions’ supervisory own funds are used, according to the outturn for the previous quarter (i.e. for the end of 2005, supervisory own funds for the first nine months of 2005 are used). The change mentioned here is based on a comparison between data for the first nine months of 2005 and of 2004 respectively.

2 According to Bank of Greece Governor’s Act 2563/15 July 2005, credit institutions are required to report data on loans over €1 million, instead of €1.5 million, as provided for previously by Bank of Greece Governor’s Act 159/26 September 2003.
sector, banks’ exposures,¹ which had stabilised in 2004 after the completion of infrastructure projects associated with the Olympic Games, rose to 24.2% of banks’ supervisory own funds at end-2005, from 23.5% at end-2004 (see Chart X.6). It should be pointed out, however, that this increase is partly accounted for by the widening of the credit sample on which data are compiled. The data submitted show that the NPLs to total loans ratio rose from 3.5% in 2004 to 5.0% in 2005, while the results of listed construction firms deteriorated considerably in 2005 (see Section 5.1.3 of this chapter). However, the prospects of

¹ Only loans and debit instruments are included in the calculation of exposures to the construction sector as a percentage of supervisory own funds.
funds, from 37.8% in 2004) and the NPLs to total loans ratio (2005: 3%, 2004: 10%), which reflects an improvement in the sector’s outlook.

Turning to the other sectors of economic activity, exposures to the textile sector, although they are rather high (3.1% of total exposures), dropped by 14% over 2004. Furthermore, despite increasing competition from low-cost countries, NPLs in this sector showed a small increase to 9% in 2005, from 8% in 2004. In (retail and wholesale) trade, exposures remain very high, but the steady and relatively low level of NPLs (2005: 3.6%, 2004: 3.4%) is not a source of concern. Finally, in the ICT sector, there is a small decline in the ratio of exposures to own funds, also accompanied by a decrease in the NPL ratio.

5.2.3 Exposures to non-residents

Greek commercial banks’ foreign claims on an ultimate risk basis amounted to €42.5 billion at end-2005, accounting for 233% of their supervisory own funds and 19.3% of their assets.\(^1\) They are broken down as follows: €22.3 billion or 52.5% on Developed Countries, €16.7 billion or 39.2% on Developing Europe\(^2\) and only 8.3% on other geographical regions. Claims on Developed Countries are mainly cross-border claims (86%) and claims on credit institutions (59%), accounting for 122% of Greek commercial banks’ supervisory own funds (see Chart X.7). The breakdown of claims on Developing Europe is highly diversified. Specifically, cross-border claims make up 31% of total claims on this region, compared with 34% for local claims in local currency and 35% for local claims in non-local currency, reflecting Greek commercial banks’ strong presence through subsidiaries and branches. Moreover, the bulk of these claims are claims on the private sector (55%), followed by claims on credit institutions (27%) and the public sector (18%).\(^3\) Claims on Developing Europe make up 91% of banks’ supervisory own funds and have shown an upward trend in recent years.

Specifically, claims on South-eastern Europe amounted to €10.6 billion (25% of total foreign claims and 58% of banks’ supervisory own funds, see Chart X.7). This percentage is very high in certain cases, calling for vigilance. The overwhelming majority of foreign claims on South-eastern Europe are local claims (87%), 46% of which on the private sector, 33% on credit institutions and 21% on the public sector. Claims on Cyprus amount to €4.5 billion, accounting for 11% of total claims and 25% of banks’ supervisory own funds. They are mostly local claims (70%) on the private sector (84%).

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1 From now on, foreign claims on an ultimate risk basis will include subsidiaries’ and branches’ total local claims in local currency (not only the net worth in local currency), so as to give a more comprehensive picture of the structure of exposures. This change makes the 2005 data not comparable with those of previous years.

2 According to the BIS classification, Developing Europe includes Eastern and Central Europe, South-Eastern Europe, Cyprus and Malta.

3 Excluding claims not classified by counterparty capacity.
As pointed out in the Annual Report 2004, developments in foreign claims are primarily addressed by credit institutions in the context of their risk management and provisioning policies. As far as prudential supervision is concerned, the Bank of Greece attaches particular importance to the specialised and accurate measurement of country and contagion risk and encourages adequate provisioning,\(^1\) especially when foreign claims on a country or a geographical region exceed a reasonable level of a credit institution’s own funds.

5.3 Market risk

The total value of banking groups’ trading book as at 31 December 2005 was €17.7 billion (7.7% of groups’ assets), compared with €18.1 billion as at 31 December 2004. It should be pointed out that, since mid-2005, the available-for-sale book is no longer included in the trading book. The fair value of derivatives on the trading book came to €2.16 billion on 31 December 2005, compared with €1.43 billion on 31 December 2004.

\(^1\) To estimate country risk, account should be taken of the extent to which subsidiaries’ and branches’ claims in local currency are offset by liabilities in local currency.
The bulk of these products are interest rate and foreign exchange derivatives (74% and 24% respectively), while the share of equity derivatives is very small (2%). The total funds required for covering the domestic banking system’s market risk were €416 million on 31 December 2005, compared with €524 million at end-2004. The share of market-risk-weighted assets in total weighted assets dropped to 3.6% on 31 December 2005, from 5.3% on 31 December 2004.

5.3.1 Value-at-risk models

The Bank of Greece has recognised internal value-at-risk (VaR)1 models of banks accounting for about 40% of the assets of the banking system, applied in the calculation of capital requirements for covering the market risk (interest rate, equity and exchange risk) of the trading book. The evaluation and authorisation procedure for the internal model of one more bank is in progress.

In 2005, the cumulative potential loss of those banks’ trading books ranged between €3.4 million and €10.3 million, with an average of €6.8 million, reaching €6.6 million at the end of the year, compared with €9 million on 31 December 2004 (down 26.6%). Underlying this decrease are changes in positions and risk hedging, as well as the fact that the volatility of risk factors (interest rates, equity prices and exchange rates) remained low, showing only occasional movements. It should be noted that the potential loss of trading books makes up a very small share of these banks’ own funds; as a result, the share of market risk in total risk (total weighted assets) is low. However, banks should continuously carry out alternative stress tests to monitor and estimate the impact from sudden increases in risk factor volatility.

The Bank of Greece considers that, according to the “proportionality to market risk exposure” principle, the application of sophisticated techniques, especially by systemically important banks, and the recognition of their use by the Bank of Greece for supervisory purposes help manage market risks more effectively and form a more accurate picture of the credit system’s market risk.

5.3.2 Structured products

During 2005, banks shifted to structured products, both to strengthen their capital base and to raise funds. In this context, hybrid securities issuance and structured deposit products grew. Several of these products, which are linked with international (stock and bond) indices, were launched in the banking market and were used by investors as alter-

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1 Used to calculate the maximum potential loss of a portfolio with positions in financial products for a given period of time, at a given probability level.
natives, because they offer minimum guaranteed return and they are guaranteed capital products. However, such products should target customers that are capable of evaluating them and provision thereof should be accompanied by appropriate information. At the same time, banks’ shift to structured products was also underpinned by the shrinkage of government securities spreads internationally. Heightened uncertainty about the future path of interest rates led banks to participate in special issues linked with such market parameters as key interest rates, interbank rates, credit ratings, volatility etc. Against this background, effectively managing risks that arise from these products is an essential aspect of the Bank of Greece’s evaluation of banks’ capital adequacy (Pillar II).

5.3.3 Hedge funds

The number of hedge funds established in 2005 rose sharply internationally in comparison with previous years. Credit institutions’ holdings of units and capital managed by hedge funds grew commensurately in 2005. Greek credit institutions’ positions in hedge funds are small in relation to their total investment, as they are rather occasional investors in hedge fund units (€88.2 million at end-2005). Although investment in hedge funds has not spread in Greece, the Bank of Greece monitors, in addition to investment in traditional categories of mutual funds (closed and open-ended), also the special risks emanating from investment in hedge funds, as the latter may make use of guarantees and may have short positions.

5.4 Liquidity risk

The Greek banking system fulfils the criteria of adequate liquidity, since the relevant ratios exceed the minimum limits established by Bank of Greece Governor’s Act 2560/1 April 2005. Specifically, as at 31 December 2005, the liquid asset ratio and the asset/liability maturity mismatch ratio stood at 23.3% and –2.2% respectively, compared with regulatory minimums of 20% and –20%. A small decline was observed in these ratios in the last quarter of 2005, as a result of strong credit expansion (6.7%), which was not accompanied by a commensurate increase in deposits. The supplementary “loan-to-deposit” ratio, despite increasing to 94.5% on 31 December 2005, from 90% on 30 September 2005, is still considerably lower than the euro area average (2004: 122%).

As a result of banks’ strong credit expansion, competition for raising funds has increased, leading to higher recourse to the interbank market or refinancing by the Eurosystem, as banks increasingly rely on interbank borrowing and the issuance of bank bonds and other debt securities to finance credit expansion. It should be noted, in this connection, that the total outstanding balance of bank bonds and other debt securities issued by Greek credit institutions rose to €16.4 billion in 2005, from €12.2 billion in 2004.
As already mentioned, these liquidity ratios are on average satisfactory, although for certain (mainly foreign) banks they fall short of the regulatory minimums. As far as foreign banks’ branches operating in Greece are concerned, the procedure for the abolition, on an ad hoc basis and subject to conditions, of the requirement to comply with these liquidity ratios is in progress.

### BOX X.2

**Results of stress tests**

Stress testing is aimed at assessing the vulnerability of credit institutions or the banking system as a whole to extreme but (even remotely) possible economic shocks.¹ For this reason, the Bank of Greece’s Department for the Supervision of Credit Institutions, in cooperation with

<table>
<thead>
<tr>
<th>RESULTS OF STRESS TESTS</th>
<th>Capital Adequacy Ratio (%)</th>
<th>Impact on the capital adequacy ratio (percentage points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Adequacy Ratio before the shock</td>
<td>12.81 (for credit risk)</td>
<td>12.52 (for market risk)</td>
</tr>
<tr>
<td>Credit risk (60% increase in probability of default)</td>
<td>11.69</td>
<td>–1.12</td>
</tr>
<tr>
<td>Interest rate risk (+200 basis points)</td>
<td>12.05</td>
<td>–0.47</td>
</tr>
<tr>
<td>Interest rate risk (steepening of the interest rate curve)</td>
<td>12.15</td>
<td>–0.37</td>
</tr>
<tr>
<td>Equity risk (~30% for developed markets, ~50% for emerging markets)</td>
<td>11.82</td>
<td>–0.71</td>
</tr>
<tr>
<td>Exchange risk (30% drop in the euro exchange rate)</td>
<td>12.58</td>
<td>+0.06</td>
</tr>
</tbody>
</table>

**Source:** Bank of Greece.

Greek commercial banks, carried out stress tests applying the methodology agreed with IMF officers. The sample used included five large and two medium-sized banking groups, which, at end-2004, accounted for 74% of commercial banking groups’ total assets.

Specifically, two alternative credit risk scenarios were examined. The former simulated a slowdown in domestic economic activity for two years in a row, with zero growth

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¹ That is shocks with little likelihood of occurring, but considerable potential impact.
6. CAPITAL ADEQUACY

6.1 The Capital Adequacy Ratio (CAR) according to the current framework (“Basel I”)

Despite dropping marginally from 13.5% in 2004 to 13.3% in 2005 at bank level, Greek commercial banks' CAR remains satisfactory and provides a buffer of supervisory own funds — in excess of the regulatory minimum — of about €7 billion for covering unexpected losses, although this additional potential is blunted by the narrowing of the share of core capital (see Chart X.8). The marginal decrease in the CAR is accounted for by a comparatively weaker increase in supervisory own funds (15.4%) than in risk-weighted assets (16.8%). The decline was more pronounced for the Tier I ratio (from 9.6% in 2004 to 8.7% in 2005). Moreover, taking into account the provisioning shortfall (i.e. the difference between regulatory requirements and banks’ accounting provisions), the CAR was 13.1% in 2005. Therefore, the impact of the provisioning shortfall on the CAR was reduced to 20 basis points in 2005, from 50 basis points in 2004, reflecting banks’ increased loan-loss provisioning in 2005. With respect to the distribution of CARs across the Greek commercial bank population, the percentage (on the basis of risk-weighted assets at bank level) of banks with a CAR below 10% rose to 12.1%, from 3.9% in 2004 (see Chart X.9).
Underlying the increase in Greek commercial banks’ supervisory own funds were a considerable rise in supplementary capital (mainly subordinated loans and undated securities), capital increases\(^1\) by several credit institutions (to counter the impact on their own funds from the first implementation of the IFRS), as well as the improvement in banks’ profitability during 2005. In more detail, the Tier I CAR for banks showed a 5.4% rise in 2005 over 2004, while supplementary capital grew much faster for the second year in a row (by 42.0%). As a result, the share of core capital in total supervisory own funds declined further (2005: 64.3%, 2004: 71%).

In the first implementation of the IFRS, according to a transitional arrangement adopted by the Bank of Greece, core capital (Tier I) included an amount of €664 million, representing capitalisation of fixed asset valuation reserves, which had been preceded by stock issuance. This arrangement pushed up the overall CAR by 0.25 percentage point in 2005, in relation to other countries that had already adjusted core capital in previous years. If this amount had been included in supplementary capital (Tier

\(^1\) The first implementation of the IFRS put a strain on the own funds of certain credit institutions, mainly owing to the recognition of banks' liabilities from their personnel’s defined benefit plans and the adjustment of provisions.
II), the share of core capital would have been limited to 60.8% of total supervisory own funds (from 64.3% in 2005).

The total on- and off-balance-sheet risk-weighted assets on a non-consolidated basis, including notional assets corresponding to capital requirements for market risk, rose by 16.8% in 2005 to 62% of total assets (from 60% in 2004). The share of credit-risk-weighted assets grew further to 97% of total weighted assets (from 96% in 2004) as a result of a decline over time in notional assets, which dropped considerably by 17.5% in 2005, pointing to limited exposure of Greek banks to market risks. By contrast, the 18.3% rise in credit-risk-weighted assets in 2005 reflects increased credit risk.

On a consolidated basis, the CAR rose to 13.2% in 2005, from 12.8% in 2004 (see Chart X.8) —mainly because supervisory own funds (including hybrid capital) grew faster (by 20.4%) than risk-weighted assets (17%)— and remained at a considerably higher level than the corresponding average for euro area banks overall (11.5% in 2004). The Tier I CAR rose to 10.9% in 2005, from 10.0% in 2004 (compared with 8.4% in the euro area in 2004). The share of hybrid capital in core capital is estimated at 18.4%.

The CAR of cooperative banks fell to 20.4% in 2005, from 21.1% in 2004 (compared with a minimum requirement of 10%), as their total risk-weighted assets rose by 23.6%, whereas supervisory own funds grew by 19.2%.
6.2 The impact of the new framework (“Basel II”)

The Fifth Quantitative Impact Study (QIS 5), undertaken in 2005 to review the calibration of the Basel II framework, is still in progress. Although the results have not been released yet, it seems that, for Greek banks, the application of the Standardised Approach overall leads to a 2% increase in capital requirements. For banks that first reported data on the basis of the Foundation Internal Ratings-Based (FIRB) approach for the calculation of capital requirements, it is not possible yet to draw firm conclusions, owing to considerable divergences across results. In any case, a negative impact on capital requirements from the use of the more sophisticated and, therefore, more risk-sensitive IRB approach in a favourable economic environment would imply relatively high-credit-risk portfolios.

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**BOX X:3**

The impact from the transition to the IFRS on Greek credit institutions

In 2005, 16 credit institutions, representing about 97% of commercial banks’ assets, published audited (individual and consolidated) annual financial statements according to the IFRS. Fifteen of these institutions applied for the first time the IFRS, as adopted by the EU and applicable for the year 2005. The considerable impact from the implementation of the IFRS on each credit institution is concentrated on its net worth, following adjustment of the GAS1-based figures of 1 January 2004 (date of transition to the IFRS) and 31 December 2004. These adjustments of credit institutions’ net worth and 2004 operating results were necessary to ensure comparability with the 2005 figures and were included in the Appendix to the 2005 annual financial statements. On the basis of these data, the main effects of the IFRS are as follows:

**Impact on net worth**

The net worth, as at 31 December 2004, of the credit institutions that applied the IFRS dropped by 28% and 13%, on average, on an individual and a consolidated basis respectively. Although the impact from the implementation of the IFRS varied considerably across banks, this overall decline is attributable to the following negative effects:

- a) the recognition, for the first time, on the balance sheet of unfunded liabilities from employee defined benefit plans, according to IAS 19 and IFRS 1;
- b) additional provisioning, at the date of transition and during the year 2004, for doubtful debts according to IAS 39;
- c) the reduction in the value of interests in subsidiaries and associated companies owing to provisioning against impairment of these interests;

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1 Greek Accounting Standards.
d) derecognition of intangible assets, notably multi-annual depreciation expenses capitalised under the GAS, which, under the IFRS, are recognised as an expense when incurred;
e) the deferral of the recognition of interest and commission income; this deferral, which has a negative impact on net worth, is attributable to the fact that interest income is recognised on a time-proportion basis applying the effective interest method, through real interest discounting of future cash flows;
f) the (net) decrease in the value of the debt securities book of credit institutions as a result of fair value accounting.

Positive effects on net worth from the implementation of the IFRS stemmed from:

a) the recognition, for the first time, on credit institutions’ balance sheets of deferred tax assets; these assets were higher for those banks that saw the most important reclassifications of items owing to the implementation of the IFRS;
b) the addition of the dividends and directors’ fees payable by credit institutions for the year 2004 to net worth; this increase in net worth is attributable to the fact that, according to IAS 10, dividend payment liabilities are not accounted during the year of realisation of the appropriable profits, but in the year when dividends are declared.

In addition to these adjustments, banks’ net worth was also strengthened by:

a) the adjustment at fair value of fixed assets on 31 December 2003 and the partial capitalisation of the surplus value produced; and

b) the use of fixed assets’ fair value as deemed cost at the date of transition, according to the option provided for by IFRS 1, from which date surplus values were generated and then capitalised.

The impact from the transition to the IFRS on credit institutions’ supervisory own funds was dampened considerably as a result of adjustments to the accounting data on the basis of which supervisory capital is calculated. These adjustments were required by Decision 198/9/17 May 2005 of the Banking and Credit Committee (for details, see Section 9.1), on a recommendation from the Committee of European Banking Supervisors (CEBS) of 21 December 2004.

Impact on financial results

After-tax profits for the year 2004 declined considerably by 34% and 24% on an individual and a consolidated basis respectively as a result of the transition to the IFRS. Underlying this decrease were:

a) a marginal increase in net interest income and a decline in commission income as a result of the deferral of the recognition of certain income items, the change in the loan valuation method, as well as the addition of interest from securitised loans to loan interest; contrary to the GAS provisions, securitised loans remained on credit institutions’ balance sheets according to IAS 39; by contrast, non-operating income, under which interest from these securitised loans had been classified according to the GAS, was reduced;
7. OTHER SUPERVISORY ISSUES

7.1 Transparency of transactions

The Bank of Greece, in an effort to promote customer information and strengthen competition among credit institutions, started to publish in December on its website the following information:

a) a list of interest rates and commissions/fees applied by banks, including comparative data on certain key products offered by credit institutions (interest rates on housing and consumer loans, loan fees and commissions/fees on other banking operations); and

b) a list of banking intermediaries, i.e. natural and legal persons authorised by banks to promote banking products and services.

With respect to the crucial issue of floating rates, which determine the future path of borrowers’ indebtedness as a result of interest rate hikes, the Bank of Greece has recorded cases where banks implement unevenly the provision on floating rate changes on the basis of the references rate, in both new contracts and contracts entered into before the issuance of Bank of Greece Governor’s Act 2501/2002. Owing to the importance of the
In the context of the cooperation and consultation between authorities responsible for protecting customers of credit institutions, the Bank of Greece participated in 2005 in working groups established within the Ministry of Development in order to clarify issues that arise from the implementation of domestic provisions on consumer protection and to accelerate the transposition of EU Directives to Greek law. Moreover, it promoted cooperation with consumer unions, presenting to both the competent authorities and these unions its views on banking transparency matters within the scope of its authority, with a view to helping investigate consumers’ complaints about their transactions with credit institutions.

According to data reported to the Bank of Greece (see Chart X.10), although the number of customers’ complaints submitted to credit institutions has risen in comparison with 2004, their rate of increase is declining (11.8% in average weighted terms, in comparison with 25.6% in 2004). This slowdown is partly attributable to a comparatively large increase in previous years as banks gradually started to record complaints more systematically, as well as to the improvement in bank services’ organisation and a resultant decrease in complaints, notably those about inadequate information on the conditions and cost of transactions.
7.2 Inspections

7.2.1 On-site inspections

On-site inspections are instrumental to exercising supervision, as they can help verify whether the conditions of operation of supervised institutions are fulfilled and identify any weaknesses, e.g. mispricing of potential loss. The results of on-site inspections are communicated to the competent officers of the supervised institutions and then either corrective measures are taken or sanctions are imposed.

During 2005, the Bank of Greece’s Department for the Supervision of Credit Institutions, according to the annual plan and supervisory emergencies, carried out 49 on-site inspections of credit and financial institutions:

- 28 on-site inspections of credit institutions operating in Greece and Greek credit institutions’ subsidiaries established in Balkan countries, focusing on the evaluation of internal control systems, including risk management systems; and
- 21 on-site inspections of financial institutions (financial leasing companies, exchange bureaux and fund transfer intermediaries) to verify compliance with supervisory rules; the majority of the weaknesses found concerned anti-money laundering procedures.

Finally, 22 general and specific inspections were carried out to verify the secure and efficient operation of credit and financial institutions’ IT systems.

7.2.2 Prevention and suppression of money laundering and terrorist financing

Given the major importance attached to the implementation of effective anti-money laundering procedures, in 2005 the Bank of Greece also carried out:

- 75 inspections of credit institutions to verify compliance with anti-money laundering provisions, as well as 45 inspections in cooperation with the Hellenic Capital Market Commission;
- 90 inspections of commercial banks’ branches to verify compliance with the Bank of Greece’s circulars on the quality and genuineness of euro banknotes;
- 77 inspections concerning natural persons and legal entities subject to restrictive measures according to the European Council regulations.

7.2.3 Complaints in writing

In 2005, the competent services of the Bank of Greece received 550 complaints in writing within the scope of its authority on transaction transparency and its legal power to control the information on compound interest provided by credit institutions, and in the overall context of its supervisory and regulatory role. The corresponding number of oral complaints, mainly requests for clarifications, was three times as high.
A large part (38%) of total complaints in writing concerned credit card charges, notably the continued debiting of credit card accounts with subscription fees to firms that had closed down, while a small percentage (12%) concerned banks’ failure to implement arrangements on restructuring of compound interest debts, notably delayed or inadequate provision of data or information to debtors.

The rest of the complaints mainly concerned court judgments on appeals against banks’ decisions imposing penalties for early repayment of floating-rate loans, inadequate information prior to the conclusion of contracts, as well as other unclassifiable issues.

Of the complaints examined:
— about 20% either did not fall within the Bank of Greece’s scope of authority or were dismissed as ill-founded;
— around 20% were satisfied under the new Law 3259/2004 on compound interest;
— about 40% were resolved by the banks concerned, either on their own initiative or following an intervention by the Bank of Greece and the Ministry of Development;
— finally, around 20% were transmitted to the Banking and Credit Committee for further examination.

7.3 Sanctions

According to the provisions of its Statute and Law 2076/1992, in cases where it verified violations of provisions or weaknesses in credit institutions’ risk management and internal control systems, including staff unsuitability for crucial functions, the Bank of Greece decided to:

a) recommend structural or other measures, such as replacement of officers, increasing accounting provisions and/or the minimum CAR, and/or refraining from establishing further branches;

b) impose sanctions in the form of interest-free deposits with the Bank of Greece (of €28.9 million in whole) on 24 credit institutions;

c) impose fines in favour of the Greek State (of €185 thousand in whole) on 12 credit institutions and 14 financial corporations;

d) suspend the operation of one exchange bureau; and

e) send recommendations to four financial corporations.

8. EUROPEAN AND INTERNATIONAL DEVELOPMENTS

8.1 New institutional framework on credit institutions’ capital adequacy

In October 2005, the ECOFIN Council, accepting the amendments proposed by the European Parliament, agreed on the revised capital adequacy framework for credit institu-
tions, in particular on the two draft directives revising Directives 2000/12/EC and 93/6/EC. The directives will soon be translated into all the EU official languages, adopted by the Council of Ministers and published (possibly within May). It should be pointed out that the agreed text of Directive 93/6/EC has undergone some changes in relation to the European Commission's initial proposal, most notably the addition of the Trading Book Review.

The new capital adequacy framework, reflecting the new Basel Accord (“Basel II”), aims at enhancing the stability and reliability of the financial sector by promoting the use of advanced risk management techniques by credit institutions.

The new framework allows credit institutions to choose among three approaches for calculating their capital requirements: the simple (standardised) approach, the intermediate (internal ratings-based) approach and the advanced measurement approach. The simple and intermediate approaches may be used by credit institutions from the end of 2006, while the advanced measurement approach from the end of 2007.

In addition to revising the methods for calculating “supervisory” capital requirements (Pillar I), the new framework requires (a) credit institutions to apply internal procedures for measuring and managing their risks and ensure that they have the “internal” capital required for covering these risk; and (b) supervisory authorities on the one hand to examine the strategies and procedures applied by credit institutions to comply with the new framework and, on the other hand, to evaluate the risks these institutions assume, so as to verify any capital shortfalls (Pillar II).

Finally, under the new framework, both supervisory authorities and credit institutions are required to report specific information in order to enhance transparency, as well as financial robustness and stability (Pillar III).

The Bank of Greece and the credit institutions supervised thereby have taken action to implement smoothly and promptly the new framework (see Sections 6.2 and 9.2 of this chapter).

8.2 New organisational structure of the European financial sector committees

In 2005, the decision-making procedure on financial supervision within the EU was completed, leading to the adoption of Directive 2005/1/EC.¹ This directive, in conjunction with six other decisions issued by the European Commission, expands the revised decision-making procedure (so-called “Lamfalussy” procedure)² beyond the securities sector, to which it has applied since 2002, to cover the banking, insurance and occupational pen-

² Named after Alexandre Lamfalussy, chairman of the “Committee of Wise Men on the Regulation of European Securities Markets” (see also Bank of Greece, Annual Report 2003, p. 293).
sion sectors. This revision aims at enhancing the flexibility and effectiveness of the Community legislative procedure in the financial sector, as well as the cooperation among supervisory authorities and the convergence of supervisory practices. Among other things, this directive adjusts the role of the Banking Advisory Committee, which is replaced by the European Banking Committee (EBC).\footnote{Commission decision 2004/10/EC of 5 November 2003, establishing the European Banking Committee.} The latter’s mandate is to advise the European Commission on the formulation of banking legislation and assist it in the exercise of its executive powers.

8.3 Policy of the European Commission in the area of financial services 2005-2010

Following two years of consultations, the European Commission published in May 2005 the Green Book and in December 2005 the White Book on its policy in the area of financial services for the period from 2005 to 2010. Among other things, the European Commission makes it clear that, after the successful completion of the Financial Services Action Plan, special emphasis should be laid on ensuring consistent transposition and effective implementation of the directives adopted, whereas any future legislative initiative should be taken only if it is necessary and compatible with the “optimum regulatory approach”. The European Commission considers the enhancement of cooperation between supervisory authorities and the convergence of supervisory practices a priority. It also considers that progress in this direction will affect considerably the debate on the future of decentralised supervision in the EU. To this end, it presses for faster adaptation and allocation of the necessary resources.

8.4 Ongoing institutional changes at the EU level

On the initiative of the European Commission, the competent advisory committees prepare its proposals for:

a) the revision of Directive 94/19/EC on deposit guarantee schemes, with a view to identifying and eliminating differences between national systems that more or less hamper the further development of a competitive and stable financial framework for banking groups with cross-border activities;

b) the revision of Directive 2000/46/EC on the taking up, pursuit of and prudential supervision of the business of electronic money institutions, in order to assess whether the legal framework is still compatible with technological developments; and

c) the revision of Article 16 of Directive 2001/12/EC, with a view to identifying and lifting any obstacles to cross-border mergers and acquisitions in the European financial sector.
Moreover, in June 2005, the European Commission submitted a proposal amending certain deadlines provided for by Directive 2004/39/EC on financial instrument markets. Specifically, it recommended a six-month extension to the deadline for the transposition of Directive 2004/39/EC to Member States’ domestic law (until 30 December 2006) and to the deadline for compliance by enterprises with the relevant provisions (until 30 April 2007).

Finally, in December 2005, the European Commission submitted to the European Parliament and the Council a proposed directive on payment services in the internal market. According to the proposed directive, a new category of supervised “payment institutions” will be established that will take advantage of the “Community passport”.

8.5 The Committee of European Banking Supervisors (CEBS)

During 2005, the Committee of European Banking Supervisors (CEBS), in which the Bank of Greece participates as banking supervisory authority, determined the procedures and resources required for carrying out its duties and sped up its work considerably in order to fulfil its mandate both to advise the European Commission and promote the convergence of supervisory practices and the enhancement of cooperation among banking supervisory authorities.

Specifically, with a view to promoting the convergence of supervisory practices among European banking supervisors and on the opportunity of the forthcoming adoption and implementation of the new capital adequacy framework, the CEBS published five Guidelines (GL):

a) Guidelines on the Application of the Supervisory Review Process under Pillar II of the new capital adequacy framework (GL03). According to this process, supervised institutions are responsible for assessing the risks they undertake and determining their internal capital requirements, while supervisory authorities are responsible for evaluating them on the basis of their own assessment of credit institutions’ risk profile and capital requirements.

b) Guidelines on a Common Reporting Framework to be used by credit institutions when they report their solvency ratio to supervisory authorities (GL04) and Guidelines for the Implementation of the Framework for Consolidated Financial Reporting (GL06), which aim at facilitating the exchange of information among supervisory authorities, as well as at reducing the obstacles to financial integration by cutting down compliance cost for groups with cross-border activities.

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3 For the Committee of European Banking Supervisors, see Bank of Greece, Annual Report 2004, p. 293.
c) Guidelines for implementing a Common European Framework for Supervisory Disclosure (GL05), which facilitate access to qualitative information on Member States’ legislative and regulatory framework and use of discretions, as well as to statistics on the implementation of the Capital Adequacy Directive (CAD).

d) Guidelines on the recognition of External Credit Assessment Institutions (GL07) in the implementation of the new supervisory framework.

Moreover, the CEBS prepares Guidelines on the Implementation, Validation and Assessment of Advanced Measurement (AMA) and Internal Ratings-Based (IRB) Approaches, having already published a revised consultation document (CP10). These guidelines will describe the analysis, assessment and decision-making process to be followed by the supervisory authorities with respect to the implementation of IRB approaches for the calculation of credit and operational risk, and to the way they understand the basic conditions for using this approach, as provided for by the CAD.

With a view to enhancing cooperation between banking supervisory authorities, the CEBS issued Guidelines for Cooperation between Consolidating Supervisors and Host Supervisors (GL09), taking into account, among other things, the increasing importance of certain subsidiaries or branches of banks in host countries' financial markets.

At the same time, the CEBS advised the European Commission at the latter’s request on: (a) the revision of Directive 2000/46/EC on electronic money institutions; (b) the revision of Directive 94/19/EC on deposit guarantee schemes; and (c) the revision of Article 16 of Directive 2000/12/EC on the procedure for acquiring qualifying holdings in credit institutions, in the context of the elimination of any obstacles to cross-border mergers and acquisitions. This matter is of great importance, as a balance must be struck between, on the one hand, the need for effective prudential supervision of credit institutions and, on the other hand, the need to prevent abuse of supervisory power through the evaluation of applications according to non-supervisory criteria.

Finally, in the context of the closer and more intensive cooperation between the CEBS and similar European committees of the insurance and investment sectors, in November 2005 a Joint Protocol on Cooperation was signed between the CEBS, the Committee of European Insurance and Occupational Pensions (CEIOPS) and the Committee of European Securities Regulators (CESR). Subsequently, a joint working programme for 2006 was prepared.

8.6 New directive on the prevention of the use of the financial system for money laundering and terrorist financing

The new Directive of the European Parliament and the Council (2005/60/EC) on the prevention of the use of the financial system for money laundering and terrorist financing (AML/CTF) came into force on 15 December 2005. The new directive transposes to Community law the revised Forty Recommendations on the prevention of money
laundering and the Nine Special Recommendations on the suppression of terrorist financing issued by the FATF. The EU Member States must transpose the directive to domestic law by 15 December 2007. Greece has already started the transposition procedure, with the active participation of the Bank of Greece.

Moreover, a Regulation of the European Parliament and the Council on information on the payer accompanying transfers of funds is soon to be passed.

8.7 The transition to the IFRS and its impact on the aggregates of European credit institutions

The year 2005 was the first financial year when financial statements (at least consolidated ones) were prepared according to the IFRS by almost all firms who are established in the EU and listed on organised markets. As regards credit institutions that have been licensed in an EU Member State and published financial statements according to the IFRS, the impact of the new accounting standards on their balance sheet aggregates and results was expectedly considerable. The CEBS conducted a survey on a large sample of European credit institutions concerning the impact of the implementation of the IFRS on their key aggregates, following adjustments to the balance sheets of 31 December 2004, which had been published according to the accounting standards previously in force. According to the survey results, credit institutions’ total assets and liabilities rose by 9% and 10% respectively, while their net worth dropped by 5% owing to the adjustment. More important differences were observed in the items of the three balance sheet components (assets, liabilities, net worth); there were also significant reclassifications of items within and across these categories.

Specifically:

1. Financial assets accounted at fair value, including derivatives, rose by 47%. At the same time, financial liabilities (negative positions in debt securities and derivatives with negative fair value) more than doubled. The increase in these assets, which make up credit institutions’ trading book, was combined with a 67% decline in assets (other than loans) in the investment book, which continue to be accounted at cost value under the IFRS.

2. Loans and other claims of credit institutions dropped marginally by 3%, as the decrease in their value owing to the different pricing method (discounting of future flows) more than offset the upward effect of the addition of securitised loans to the credit institutions’ loan book. The re-recognition of loans securitised in the past on credit institutions’ balance sheets was warranted by the strict rules of the IFRS for the treatment of transfers of loans as true sales. Loan-loss provisions remained unchanged, despite forecasts of an expected decline, which were based on the fact that, under the IFRS, provisions are exclusively made for incurred loss, not expected or statistical loss.

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1 The Financial Action Task Force (FATF) is an intergovernmental task force established under the auspices of the OECD.
2 Including loans where loss has been caused by impairment, but with no apparent relevant indications (servicing delays, other unfavourable signs etc.).
3. Other important changes in assets and liabilities as at 31 December 2004 owing to the implementation of the IFRS included: a) a 19% increase in the value of real estate and other fixed assets as a result of the use of the fair value option under the IFRS; b) 75% and 51% increases in deferred tax assets and liabilities respectively; and c) a 33% increase in post-retirement personnel benefits, as the actuarial deficits of pension and defined benefit plans were recognised on the balance sheets as liabilities.

4. Moreover, the transition to the IFRS had a considerable impact on the net worth of financial institutions on a consolidated basis, which dropped by 5%, reflecting the following effects: a) a 46% decline in minority interests; b) the one-off recognition of the increased provisions for unfunded personnel benefits as previous years’ losses, on the date of transition to the IFRS; c) the rise in differences from the fair value adjustment of fixed assets; d) the beneficial effect of the inclusion of the dividends of the closed year in net worth; and e) the downward restatement of 2004 profitability.

From a supervisory point of view, the aforementioned decrease in credit institutions’ accounting net worth would have led to a 12% decline in their consolidated core capital. Finally, this decline was limited considerably owing to supervisory adjustments of the accounting aggregates on the basis of which supervisory own funds are calculated. Adjustments were adopted in a uniform manner by the domestic supervisory authorities on a recommendation from the CEBS. According to the aforementioned CEBS survey, as a result of these adjustments, the decline in the supervisory own funds as at 31 December 2004 owing to the transition to the IFRS was limited to 2%.

9. DOMESTIC DEVELOPMENTS IN BANKING REGULATION

9.1 Bank of Greece decisions and legislative arrangements

During 2005 and in early 2006, the Bank of Greece adapted the rules of supervision of credit and other financial institutions. Specifically:

Bank of Greece Governor’s Act 2557/26 January 2005 adjusted the minimum provisioning ratios for the risk arising from certain categories of credit institutions’ loans.

In particular, provisioning ratios for consumer loans of any category were increased as follows: (a) from 70% to 90% for NPLs one year overdue or lost loans; and (b) from 84% to 100% for doubtful loans. By contrast, the provisioning ratio for housing loans was reduced from 0.7% to 0.5%, provided that these loans are backed by real estate collaterals and the amount of the loan does not exceed 70% of the objective value of the underlying real estate collateral.

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1 For more details about these supervisory adjustments, see Bank of Greece, Annual Report 2004, Chapter 7.4 “International Accounting Standards”.
Decision No. 193/1/11 March 20051 of the Bank of Greece Banking and Credit Committee requires the establishment of the terms and procedures of any credit to, or participation in, legal persons specially related with the credit institution. This arrangement is aimed at ensuring that credit standards in relation to these persons do not diverge from the institution’s general credit policy. The same decision also lays down the main principles to be followed by credit institutions with total assets of over €100 million for the secure and efficient operation of IT systems, with a view to the effective management of operational risk.

Bank of Greece Governor’s Act 2560/1 April 20052 adapted the current institutional framework on the monitoring of credit institutions’ liquidity by establishing specific liquidity ratios and requiring monitoring and compliance with supervisory minimums. Specifically, up to 30 September 2005, the Liquid Asset Ratio3 should not be less than 15% and the Asset/Liability Maturity Mismatch Ratio4 should not be below –25%, while as from 1 October 2005 these ratios should not be lower than 20% and –20% respectively. This requirement also extends to branches in Greece of credit institutions established in EEA or non-EEA countries, unless the Bank of Greece waives this requirement, provided that the credit institutions’ headquarters ensure adequate liquidity for their branches in Greece.

Decision No. 196/1/14 April 2005 of the Banking and Credit Committee amended Bank of Greece Governor’s Act 2258/1993, requiring cooperative banks to report to the Bank of Greece large exposures in excess of 5% of their own funds (from 10%).

Decision No. 198/9/17 May 2005 of the Banking and Credit Committee adapted the supervisory treatment of accounting data and classification differences arising during the implementation by credit institutions of either the IAS or other relevant legislative provisions. This adaptation is in line with the CEBS and BIS Guidelines and reflects the need to distinguish the supervisory from the accounting treatment of certain aggregates (see Section 8.7). It concerns the calculation of credit institutions’ own funds, solvency ratio and capital requirements, both on an individual and a consolidated basis. The said decision, amending Decision No. 178/7/19 July 2004 of the Banking and Credit Committee, reduced: a) the percentage of hybrid securities recognised as supplementary capital from 30% to 25% of core capital; and b) the percentage of innovative hybrid securities recognised as supplementary capital from 15% to 10% of core capital.

Decision No. 202/1/12 July 2005 of the Banking and Credit Committee supplemented Bank of Greece Governor’s Acts 2536/2004 and 2541/2004 on money transfer intermediaries and exchange bureaux respectively. Specifically, the said decision allowed money

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1 The provisions of Decision No. 193/1/11 March 2005 of the Bank of Greece Banking and Credit Committee were later incorporated into Bank of Greece Governor’s Act 2577/9 March 2006.
2 The provisions of Bank of Greece Governor’s Act 2560/1 April 2005 were incorporated into Bank of Greece Governor’s Act 2563/19 July 2005.
3 Defined as the ratio of the cumulative stock of “liquid assets” within the shortest maturity band, from overnight up to 30 days, to “deposit and other short-term liabilities”.
4 Defined as the ratio of the cumulative stock of “assets net of liabilities” within the shortest maturity band, from overnight up to 30 days, to “deposit and other short-term liabilities”.
transfer intermediaries to engage in supplementary operations similar to those carried out by exchange bureaux and laid down the conditions under which money transfer intermediaries or exchange bureaux may cooperate with credit institutions in fund transfers.

Subsequently, Decision No. 207/5/30 September 2005 of the Banking and Credit Committee clarified that some of these conditions of cooperation with credit institutions do not apply in the event of cooperation with a parent credit institution established in Greece or another EEA country.

With a view to facilitating supervised institutions and the Bank of Greece in the exercise of its supervisory powers, Bank of Greece Governor’s Act 2563/19 July 2005 amended and codified Bank of Greece Governor’s Act 1313/9 June 1988 and its later amendments on credit institutions’ supervisory data reporting to the Bank of Greece.

Decision No. 207/4/30 September 2005 of the Banking and Credit Committee clarified that the provisions of Bank of Greece Governor’s Act 1955/2 July 1991 on credit institutions’ loans to private individuals for house construction, repair and purchase also concern real estate abroad.

According to Bank of Greece Governor’s Act 2564/11 October 2005, the reduced weighting (50%) for the calculation of capital requirements for credit risk arising from loans fully backed by mortgages will apply, as from 31 December 2005, only to the part of the loan up to 75% of the real estate collateral market value (instead of the total outstanding balance of the fully-backed loan), the remaining part being subject to a 100% weighting.

Underlying this decision was the fact that the observed increase in the loan-to-value ratio and its maintenance at high levels, in conjunction with continuing strong housing credit expansion, may push up potential loss considerably.

By Bank of Greece Governor’s Act 2565/11 October 2005, the Bank of Greece made the following arrangements concerning the parameters that determine loan-loss provisioning (Bank of Greece Governor’s Act 2442/29 January 1999):

a) As from 31 December 2005, the reduced capital requirement ratios that mortgage-backed loans enjoy will apply to the part of the loan up to 75% of the real estate collateral market value.

b) The reduced capital requirement ratio ceased to apply to non-performing housing loans more than 12 months overdue.

b) For the assessment of capital adequacy, the percentage of bad loan write-offs in the years 2005 and 2006 will be included in supervisory provisions.

d) As from 1 January 2007, credit institutions are required to cover by a special reserve NPLs more than three years overdue, provided that they are not covered by specific provisions.

Finally, under the aforementioned Bank of Greece Governor’s Act, the competent department of the Bank of Greece was authorised to provide instructions on the incorporation into each bank’s risk management mechanism of the factors that determine potential loss, notably the ratio of natural persons’ monthly interest and amortisation payments on their total consumer and housing loans to their disposable income. In this connection,
a range of 30-40% was recommended as generally acceptable, and indicative factors to be taken into account for determining this ratio were established.

Bank of Greece Governor’s Act 2567/23 November 2005 amended the provisions of Bank of Greece Governor’s Act 2474/31 May 2001 on the extension of credit for stock market transactions, reducing: (a) the percentage of the “maintenance margin” from 35% to 30% of the collateral portfolio’s current value; and (b) the percentage of the “initial margin” from 50% to 40% of the collateral portfolio’s current value.

Decision No. 211/1/5 December 2005 of the Banking and Credit Committee supplemented the provisions of Bank of Greece Governor’s Act 2526/2003 on the terms and conditions for establishing a credit institution, with provisions including the terms and conditions for authorising credit institutions domiciled abroad to establish and operate representative offices in Greece.

Bank of Greece Governor’s Act 2577/9 March 2006 adapted to current conditions the terms of operation and the evaluation criteria of the organisation and the internal control systems (ICS) of the credit and financial institutions supervised by the Bank of Greece, at both bank and group level. Specifically:

— All credit institutions are required to establish an independent Risk Management Unit. Credit institutions are also required to establish a Risk Management Committee, depending on their size and complexity of operations.

— Credit institutions are required to establish a compliance function, with particular focus on the prevention and suppression of money laundering and terrorist financing.

— Officers who sit on credit institutions’ boards of directors are required to be qualified and experienced in the institutions’ main activities.

— Ensuring the provision of quality services to customers and transaction transparency becomes an integral part of operational risk management.

— The basic principles applicable to outsourcing (including collection of debts and card management) are established.

— All banks are recommended to adopt the IAS.

In addition, Law 3424/13 December 2005 amended and supplemented the provisions of Law 2331/1995 with a view to: (a) adapting Greek legislation to Directive 2001/97/EC of the European Parliament and the Council and to certain Revised Recommendations of the FATF on the prevention of the use of the financial system for money laundering and terrorist financing; and (b) adapting the current framework to the recommendations made by the IMF following the assessment of the Greek financial system. Among other things:

— The task of the committee referred to in Article 7 of Law 2331/95 is supported by the establishment of an independent administrative authority with the name “National Anti-Money Laundering Committee”.

— Certain Special Recommendations of the FATF, concerning the requirement to report to the Competent Authority suspicious transactions related to terrorist financing (Recommendation IV), wire transfers (Recommendation VII) and the prevention of the use of non-profit organisations for money laundering and terrorist financing (Recommendation VIII), are incorporated into Greek law.

— Post companies, to the extent that they engage in money transfer intermediation activities, will henceforth be supervised by the Bank of Greece (insofar as the provisions of the said law are concerned).

— The legal authorisation of Competent Authorities and the Bank of Greece to issue decisions laying down their obligations are specified and expanded.

— The Bank of Greece is authorised to impose on supervised credit and financial institutions the administrative sanctions provided for by its Statute and the legislation in force.

— The procedures for exchange of non-confidential information between the Ministry of Economy and Finance, the Independent Authority referred to in Article 7 of Law 2331/95 and the Competent Authorities are laid down.

By authority of this law, the Bank of Greece is preparing instructions to supervised credit and financial institutions.

9.2 Preparation for the transposition and implementation of the new supervisory framework

In the context of the transposition of the new Directive to domestic law and the preparation of Greek banks for its implementation, the Bank of Greece issued in 2005 another two Consultation Documents, the former containing its positions about the two simpler approaches for calculating operational risk (Basic Indicator Approach and Standardised Approach) and the latter restating and supplementing the Bank of Greece’s positions, also taking into account the opinions of banks that responded to all the previous Consultation Documents, on issues concerning the new Capital Adequacy Directive.

Consultations with banks continued and will continue at both the multilateral and bilateral level. Specifically, 2005 saw the beginning of the preliminary assessment of the readiness of Greek banks for the implementation of the new capital adequacy framework, first focusing on the banks that have declared their intention to pass directly from the current framework to the Foundation Internal Ratings-Based (FIRB) Approach for the calculation of capital requirements against credit risk, owing to the need for historical data. The preliminary assessment of banks, including those that will apply the standardised approach, is expected to be completed within the first half of 2006.

The procedure includes identifying the problems of Greek banks and specifying the areas on which they must focus their efforts in order to achieve their smooth transition to the new framework within the contemplated general time limits and the time schedule of each bank, which will take into account both its position in the Greek banking system and the extent of its cross-border activities.
The procedure of transition to the new framework, especially in cases of implementation of sophisticated approaches, in certain cases seems to be more time-consuming than expected, as the preliminary assessment revealed differences in readiness across banks. The Bank of Greece has made it clear that it will not relent its insistence on the implementation of sophisticated approaches and expects banks to step up their efforts so as to keep up with the initial time schedule they have submitted to the Bank of Greece.

10. PAYMENT SYSTEMS

10.1 The HERMES payment system

The HERMES real time gross settlement system operated effectively in 2005, contributing positively to the smooth flow of payments and financial stability.

<table>
<thead>
<tr>
<th>TABLE X.6</th>
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<tr>
<td>TRANSACTIONS THROUGH THE HERMES SYSTEM</td>
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<table>
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</thead>
<tbody>
<tr>
<td>1. Domestic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Customer payments</td>
<td>695,493</td>
<td>331,823</td>
<td>629,437</td>
<td>271,949</td>
</tr>
<tr>
<td>– Interbank payments¹</td>
<td>326,615</td>
<td>1,343,477</td>
<td>449,184</td>
<td>2,885,973</td>
</tr>
<tr>
<td>2. Cross-border</td>
<td>340,427</td>
<td>2,021,865</td>
<td>316,083</td>
<td>2,459,569</td>
</tr>
<tr>
<td>– Customer payments</td>
<td>213,135</td>
<td>10,196</td>
<td>181,186</td>
<td>12,201</td>
</tr>
<tr>
<td>– Interbank payments</td>
<td>127,292</td>
<td>2,011,669</td>
<td>134,897</td>
<td>2,447,368</td>
</tr>
<tr>
<td>HERMES total</td>
<td>1,364,535</td>
<td>3,697,165</td>
<td>1,394,704</td>
<td>5,617,491</td>
</tr>
<tr>
<td>TARGET total</td>
<td>69,213,486</td>
<td>443,993,000</td>
<td>76,150,602</td>
<td>488,900,500</td>
</tr>
</tbody>
</table>

¹ Domestic interbank payments include the debiting of clearing systems (13,415 payments amounting to €382,809 million in 2004 and 13,318 payments amounting to €393,504 million in 2005).

Sources: Bank of Greece and ECB.

Payment traffic in the HERMES system rose by 2.2% to 1.4 million in volume terms and by 51.9% to €5,617.5 billion in value terms in comparison with 2004 (see Table X.6). The considerable increase in value terms stemmed mainly from domestic payments (which grew by 88.5%), as a result of the change (as from 27 June 2005) in the settlement of transactions through the System for Monitoring Transactions in Book-Entry Securities operated by the Bank of Greece. As from that date, end-of-day netting was replaced with trade-by-trade settlement in real time; as a result, payments increased not only in value, but also in volume terms.
Cross-border payments dropped by 7.2% in volume terms and grew by 21.6% in value terms in 2005. As a result, the average value per transaction rose to €7.8 million in 2005, from €5.9 million in 2004.

These developments led to a decline in the share of HERMES in the TARGET transactions in volume terms (to 1.83% in 2005, from 1.99% in 2004) and an increase in value terms (to 1.15% in 2005, from 0.83% in 2004).

The smooth flow of payments was supported by the sufficient intraday liquidity provided by the Bank of Greece. Data analysis shows that the value of posted collateral was well in excess of the collateral actually used throughout 2005. Specifically, the average daily amount of posted collateral was €1,995 million, while the average value of intraday credit was €632.3 million, providing an adequate buffer against any increased liquidity needs.

The availability of the HERMES system remained high in 2005, with the average annual availability rate being stable at 99.80% (owing to five short failures due to technical reasons, which were addressed promptly), marginally lower than the average annual figure for the TARGET system (99.83%).

The development of TARGET2, the new trans-European payment system, continued at a fast pace in 2005, in order to help national central banks and credit institutions prepare in time. The Bank of Greece, which will coordinate the migration to the new system, plays a pivotal role in the preparations for the connection of Greece’s credit institutions with this system.

The TARGET (Trans-European Automated Real-time Gross-settlement Express Transfer) payment system comprises the Real-Time Gross Settlement (RTGS) systems of the 15 (pre-enlargement) Member States of the EU and the ECB’s Payment Mechanism (EPM).

The new system will consist of a single shared platform, based on the payment systems of the national central banks of France, Germany and Italy. The system provides, *inter alia*, modern tools for liquidity management, processing and monitoring of payments in real time, as well as links with the so-called “ancillary” systems, i.e. the netting systems and the securities settlement systems. Communication with the system will be possible through the SWIFT network and the services provided thereby.

The operational features of the TARGET2 system were finalised in November 2005 according to the requirements of central banks, credit institutions and clearing and settlement firms, following long consultations. Credit institutions and other parties involved now have ➔
10.2 Retail payment systems

In 2005, the number of cheques in euro processed through the Athens Clearing Office and DIAS S.A. dropped by 1.81% to 16.4 million, while their total value increased by 4.0% to about €288 billion in comparison with 2004. A similar path was followed by total cheques processed through clearing systems and banks' networks, which declined by 1.2% in volume terms (from 27.7 million in 2004 to 27.4 million in 2005) and rose by 5.2% in value terms (from €339.9 billion in 2004 to €357.5 billion in 2005).

The year 2005 saw a considerable increase in the value and volume of small-value fund transfer orders through DIASTRANSFER (of 73.6% and 98% respectively), although transactions through this system remain relatively low (981,747 transfer orders with a total value of about €2 billion in 2005). This rise mainly stemmed from the admission of new member banks to the system, as well as from bulk salary, pension, benefit and dividend payments. Underlying it was also the expansion of the use of the system through the introduction of internet banking applications by certain member banks.

Direct debit orders processed through the DIASDEBIT system in 2005 reached 2.4 million in volume terms and €303 million in value terms (up 6.2% and 19.4% respectively in comparison with 2004). The share of this system in total direct debits through the banking system dropped to 14.4% in 2005, from 17.2% in 2004, while its share in the total value of direct debits grew to 5.0% in 2005, from 4.3% in 2004.

In 2005, the Bank of Greece completed the assessment of the Athens Clearing Office and the DIAS S.A. systems, in the context of its power to oversee payment systems. This assessment was based on the Core Principles for Systemically Important Payment Systems, which also apply by way of analogy to the “payment systems of prominent importance”. 

➔ at their disposal the information required to both make their strategic decisions on their participation in the new system and adapt their subsystems.

The migration to TARGET2 will be split into waves. Each wave will consist of a group of national central banks and their respective banking communities. The planned dates of each migration wave are as follows: 19 November 2007, 18 February 2008 and 19 May 2008. The grouping criteria ensure smooth migration to the new system. The Bank of Greece and the credit institutions of Greece are included in the third migration wave.

Since 2004, the Bank of Greece has started to inform banks and clearing offices about the TARGET2 system and the coordination of the connection procedures, according to the framework prepared by the Eurosystem. To ensure smooth and effective migration, the Bank of Greece has organised briefings for banks, answers to queries of the parties concerned and monitors the progress in the adaptation of their systems.

Credit institutions and clearing and settlement firms already know the general content and time schedule of tests, which (with respect to Greece and its connection with the single shared platform) will start in July 2007.
Oversight of payment systems

One of the main powers of the Bank of Greece, according to Articles 2 and 55 subpara. 5 of its Statute, is to oversee payment systems with a view to ensuring their efficiency and soundness and limiting systemic risk.

The Bank of Greece performs its oversight duties according to the Eurosystem’s common policy.

The oversight framework is specified by Act 50/31 July 2002 of the Monetary Policy Council laying down the object, scope and methodology of oversight, which is exercised according to the Core Principles for Systemically Important Payment Systems,1 published by the BIS in 2001 and adopted by the Eurosystem.

In 2003 the Eurosystem established the oversight policy for small-value payment systems, which are divided into three categories: a) systemically important systems; b) systems of prominent importance; and c) other systems. All Core Principles apply to the first category, Principles I, II, VII, VIII, IX and X apply to the second category, while in the third category, which includes systems with a small impact on financial stability, such as electronic money systems, every national central bank may exercise oversight at its discretion.

The Core Principles are as follows:

I The system should have a well-founded legal basis under all relevant jurisdictions.

II The system’s rules and procedures should enable participants to have a clear understanding of the system's impact on each of the financial risks they incur through participation therein.

III The system should have clearly defined procedures for the management of credit risk and liquidity risk, which specify the respective responsibilities of the system operator and the participants and which offer appropriate incentives to manage and contain those risks.

IV The system should provide prompt final settlement on the day of value, preferably during the day and, at a minimum, at the end of the day.

V A system in which multilateral netting takes place should, at a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participant with the largest settlement obligation.

VI Assets used for settlement should preferably be claims on the central bank; where other assets are used, they should carry little or no credit risk and little or no liquidity risk.

VII The system should ensure a high degree of security and operational reliability and should have contingency arrangements for timely completion of daily processing.

VIII The system should provide a means of making payments which is practical for its users and efficient for the economy.

---

1 A systemically important system is a system that meets at least one of the following conditions: a) it is the sole or the main payment system of a country in terms of the total amount of payments processed through it; b) it processes mainly large-value payments; and c) it is used for the settlement of transactions in financial markets or the settlement of payments of other systems.
The system should have objective and publicly disclosed criteria for participation, which permit fair and open access.

The system's governance arrangements should be effective, accountable and transparent.
APPENDIX TO CHAPTER X

BANK OF GREECE DECISIONS CONCERNING THE ESTABLISHMENT AND OPERATION
OF CREDIT INSTITUTIONS AND THE SUPERVISION OF THE FINANCIAL SYSTEM

7 January 2005
The Bank of Greece withdraws its authorisation for the establishment and operation of an exchange bureau by Center S.A.

19 January 2005
Alpha Bank is authorised to acquire 100% of the share capital of the Belgrade-based “Jubanka a.d. Beograd”.

26 January 2005
– The provisioning ratios on claims from (i) non-performing consumer loans one year past due or in permanent arrears and (ii) doubtful consumer loans are increased, respectively, from 70% to 90% and from 84% to 100%. At the same time, the provisioning ratio on performing loans backed by residential mortgages is lowered from 0.7% to 0.5%, provided that the amount of the loan does not exceed 70% of the objective value of the residential property.
– The provisioning ratios applying on the secured by the European Investment Fund part of the outstanding guarantees of the Credit Guarantee Fund for Small and Very Small Enterprises are set at 20% of the respective general minimum provisioning ratios.
– The Bank of Greece withdraws its authorisation for the establishment and operation of an exchange bureau by American Express S.A.

7 February 2005
– Deutsche Zentral-Genossenschaftsbank AG is authorised to acquire a qualifying holding of Panellinia bank’s share capital.
– The Bank of Greece withdraws its authorisation for the establishment and operation of a representative office in Greece by the Milan-based Banka Intesa S.p.A.

25 February 2005
– The National Bank of Greece is authorised to establish and operate 15 new branches in Serbia-Montenegro.
– The Bank of Greece withdraws its authorisation for the establishment and operation of an exchange bureau by G.P. Serres Exchange S.A.
– Alpha Bank is authorised to establish and operate one new branch in Albania.
11 March 2005

– The obligation of credit institutions for detailed recording of the terms and procedures concerning loans is extended to every loan to, or participation in, legal persons related to the credit institution, in order to ensure that these terms do not diverge from the credit institution’s general loan policy in force. Furthermore, the basic principles to be respected by credit institutions for the secure and effective operation of IT systems are defined.

– Piraeus Bank is authorised to acquire the majority of the share capital of the Sofia-based “Eurobank a.d.”

– Piraeus Bank is authorised to acquire 100% of the share capital of the Belgrade-based “Atlas Banka a.d.”

23 March 2005

“Famanet Hellas S.A. Financial Information Services” is authorised to operate as a money transfer intermediary.

28 March 2005

– As of 31 March 2005, the Paris-based bank “Crédit Commercial de France S.A.” discontinues the operation of its branch in Greece.


1 April 2005

The Bank of Greece supervision framework for the liquidity adequacy of credit institutions is amended and minimum compulsory ratios are set.

14 April 2005

– For cooperative banks, the threshold for reporting large exposures is lowered from 10% to 5% of own funds.

– Alpha Bank is authorised to establish and operate 12 new branches in Bulgaria.

– EFG Eurobank Ergasias is authorised to acquire 100% of the share capital of “HC Istanbul Holding A.S.”

17 May 2005

– Piraeus Bank is authorised to acquire 100% of the share capital of the Cairo-based “Egyptian Commercial Bank”.

– The supervisory treatment of accounting data and discrepancies arising from the application of International Financial Reporting Standards by credit institutions is determined and the provisions on the recognition of hybrid securities as part of credit institutions’ own funds are amended.
13 June 2005
EFG Eurobank Ergasias is authorised to establish and operate a branch in Poland.

12 July 2005
– The range of services offered by money transfer intermediaries is expanded and the terms of money transfers by intermediaries and exchange bureaux in co-operation with credit institutions are set.
  – Alpha Bank is authorised to establish and operate two new branches in Albania.
  – “International Express Remittance S.A.” is authorised to operate as a money transfer intermediary.
  – “Wordlink S.A.” is authorised to operate as a money transfer intermediary.

19 July 2005
Bank of Greece Governor’s Act 2563/19 July 2005 amends and codifies the provisions of Bank of Greece Governor’s Act 1313/9 June 1988, as amended by all relevant decisions and circulars of the Bank of Greece issued since 1988, concerning the items assessed in the exercise of the supervisory power of the Bank. These arrangements, for which consultation was carried out with credit institutions, facilitate the fulfilment of their obligations and reinforce the effectiveness of Bank of Greece’s supervision.

26 July 2005
The ceiling on the financing of natural persons by the Postal Savings Bank for the purchase of goods and the coverage of personal needs is increased from 15% to 40% of its own funds.

4 August 2005
EFG Eurobank Ergasias is authorised to acquire the majority of the share capital of “Nacionalna Stedionika Banka”, based in Serbia-Montenegro.

16 September 2005
Marfin Financial Group S.A. Holdings is authorised to acquire 10.67% of the share capital of Egnatia Bank. In the first three months of 2006 the above participation increased gradually to 34.45%, resulting in the effective control of Egnatia Bank by Marfin.

11 October 2005
– Taking into consideration that any increase in the ratio of housing loans granted by banks to the relevant collateral and the maintenance of this ratio at high levels may affect significantly the size of potential loss, the relevant arrangements concerning the weights applied to the calculation of capital requirements for credit risk are amended.
  – With a view to, on the one hand, harmonising the concept of adequately securing loans backed by real estate collateral from a supervisory viewpoint and, on the other hand,
incorporating into banks’ risk management mechanisms the other risk parameters, especially the instalment-to-disposable income ratio, the provisions on the adequacy of credit institutions’ provisioning for mortgage-backed loans are amended.

2 November 2005
“Deutsche Schiffsbank AG” is authorised to establish and operate a representative office in Greece.

23 November 2005
The provisions concerning the granting of credit for financing stock exchange transactions are amended. More specifically, the maintenance margin and the initial margin are reduced to 30% from 35% and to 40% from 50% of the buffer portfolio current value, respectively.

5 December 2005
– The terms and conditions for authorising credit institutions based abroad to establish and operate representative offices in Greece are set.
– The Germany-based “Deutsche Bank AG” is authorised to establish and operate a representative office in Greece.
– The France-based bank “CALYON” is authorised to establish and operate a representative office in Greece.

15 December 2005
A branch of the Luxembourg-based “Société Generale Bank and Trust” commences its operation in Greece.

20 December 2005
The National Bank of Greece is authorised to acquire the majority of the share capital of the Romania-based Eurial Leasing SRL.

1 January 2006
The Paris-based bank “Société Generale” discontinues the operation of its branch in Greece.

2 January 2006
A branch of the Belgium-based “Fortis Bank SA/NV” commences its operation in Greece.

24 January 2006
– Alpha Bank is authorised to establish and operate 30 new branches in Bulgaria and four in Albania.
– The National Bank of Greece is authorised to establish and operate seven new branches in Albania.
– The Bank of Greece withdraws its authorisation for the establishment and operation of an exchange bureau by Change Star S.A.

24 February 2006

The maximum amount the Agricultural Bank of Greece is authorised to invest in shares and mutual fund units is harmonised with that of other credit institutions and raised to 25% from 15% of the Bank’s own funds.

9 March 2006

With a view to adapting the principles and criteria that govern credit and financial institutions’ internal control systems to supervisory developments, as well as taking into account the need to further specify individual issues, notably relating to risk management and compliance with the institutional and supervisory framework in force, the basic general principles and criteria all credit and financial institutions supervised by the Bank of Greece must comply with are established in order to ensure that these institutions have, on both a non-consolidated and a group basis, an effective organisational structure and an adequate Internal Control System, including risk management, internal audit and regulatory compliance.

10 March 2006

Marquis International S.A. is authorised to operate as a money transfer intermediary.
GLOSSARY

**Community Support Framework (CSF):** compiled by the Commission of the European Communities in co-operation with the EU Member State concerned and approved by the Commission. It includes the country’s growth strategy, activity priorities and financing resources (Community funding, national public expenditure, private funding).

**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 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. The euro area currently comprises: Austria, Belgium, Germany, Greece, Finland, France, Ireland, Italy, Luxembourg, the Netherlands, Portugal 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 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):** composed of the ECB and the national central banks of all 25 EU Member States, i.e. it includes, in addition to the mem-
bers of the *Eurosystem*, the national central banks of those Member States that have not yet adopted 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 12 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 appointed by common accord by the Heads of State or Government of the countries that have adopted the euro.

**General government:** as defined in the European System of Accounts 1995 (ESA 95), comprises central, state and local government and social security organisations.

**Governing Council:** one of the decision-making bodies of the *ECB*. It comprises all the members of the *Executive Board* and the governors of the national central banks of the countries that have adopted the euro.

**Harmonised Index of Consumer Prices (HICP):** a measure of consumer prices which is compiled by Eurostat and harmonised for all EU countries.

**Key ECB interest rates:** the interest rates, set by the *ECB*, which reflect the monetary policy stance of the ECB. Currently, key ECB interest rates are the minimum bid 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 weekly open market operation conducted by the *Eurosystem*. The operations are conducted as variable rate tenders with a pre-announced minimum bid rate and have a maturity of one week.

**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 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 period of 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.

**MFI net external assets:** the external assets of the *euro area MFI* sector (such as gold, banknotes in currencies other than the euro, securities issued by non-euro area residents and loans granted to non-euro area residents) minus the external liabilities of the
euro area MFI sector (such as non-euro area residents’ deposits and repurchase agreements, as well as their holdings of money market fund shares/units and debt securities issued by MFIs with a maturity of up to and including two years).

**Monetary Financial Institutions (MFIs):** financial institutions forming the money-issuing sector of the euro area. They include the ECB, the NCBs of the euro area countries, and credit institutions and money market funds located in the euro area.

**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 until the end of 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.

**Supervisory own funds:** the ones defined in Bank of Greece Governor’s Act 2053/8 March 1992, incorporating Directive 89/299 (EEC) into Greek law. This Directive was later amended and supplemented by Directive 2000/12 (EC).

**TARGET System (Trans-European Automated Real-time Gross settlement Express Transfer system):** a decentralised system consisting of 15 national RTGS (Real-Time Gross Settlement) systems (one in each of the 15 EU Member States) and the ECB payment mechanism. These are interconnected by common procedures (Interlinking Mechanism) to allow cross-border fund transfers throughout the EU at real time.
APPENDIX
ANNUAL ACCOUNTS
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AUDITORS’ REPORT
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### BALANCE SHEET AS AT

#### ASSETS

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Gold and gold receivables</td>
<td>1,938,504,319</td>
<td>1,430,827,937</td>
</tr>
<tr>
<td>2. Claims on non-euro area residents denominated in foreign currency</td>
<td>494,074,402</td>
<td>904,914,418</td>
</tr>
<tr>
<td>2.1 Receivables from the IMF</td>
<td>173,601,402</td>
<td>334,351,329</td>
</tr>
<tr>
<td>2.2 Balances with banks and security investments, external loans and other external assets</td>
<td>320,473,000</td>
<td>570,563,089</td>
</tr>
<tr>
<td>3. Claims on euro area residents denominated in foreign currency</td>
<td>951,283,800</td>
<td>1,382,733,073</td>
</tr>
<tr>
<td>3.1 General government</td>
<td>857,695,042</td>
<td>1,224,558,075</td>
</tr>
<tr>
<td>3.2 Other claims</td>
<td>93,588,758</td>
<td>158,374,998</td>
</tr>
<tr>
<td>4. Claims on non-euro area residents denominated in euro</td>
<td>1,254,313,788</td>
<td>1,196,035,142</td>
</tr>
<tr>
<td>4.1 Balances with banks, security investments and loans</td>
<td>1,254,313,788</td>
<td>1,196,035,142</td>
</tr>
<tr>
<td>4.2 Claims arising from the credit facility under ERM II</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. Lending to euro area credit institutions related to monetary policy operations denominated in euro</td>
<td>2,354,018,096</td>
<td>201,368,044</td>
</tr>
<tr>
<td>5.1 Main refinancing operations</td>
<td>1,561,000,000</td>
<td>48,000,000</td>
</tr>
<tr>
<td>5.2 Longer-term refinancing operations</td>
<td>793,018,096</td>
<td>153,368,044</td>
</tr>
<tr>
<td>6. Other claims on euro area credit institutions denominated in euro</td>
<td>1,013,525,131</td>
<td>771,559,153</td>
</tr>
<tr>
<td>7. Securities of euro area residents denominated in euro</td>
<td>7,281,045,787</td>
<td>6,443,828,060</td>
</tr>
<tr>
<td>8. General government debt denominated in euro</td>
<td>8,786,178,291</td>
<td>9,254,374,380</td>
</tr>
<tr>
<td>8.1 Long-term debt</td>
<td>1,527,126,785</td>
<td>1,668,806,532</td>
</tr>
<tr>
<td>8.2 Loans for participation in the IMF</td>
<td>761,114,532</td>
<td>726,634,375</td>
</tr>
<tr>
<td>8.3 Long-term loans and securities</td>
<td>6,497,936,974</td>
<td>6,858,933,473</td>
</tr>
<tr>
<td>9. Intra-Eurosystem claims</td>
<td>1,449,244,341</td>
<td>1,449,244,341</td>
</tr>
<tr>
<td>9.1 Participating interest in the ECB</td>
<td>393,403,998</td>
<td>393,403,998</td>
</tr>
<tr>
<td>9.2 Claims equivalent to the transfer of foreign reserves to the ECB</td>
<td>1,055,840,343</td>
<td>1,055,840,343</td>
</tr>
<tr>
<td>9.3 Claims related to promissory notes backing the issuance of ECB debt certificates</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9.4 Net claims related to the allocation of euro banknotes within the Eurosystem</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9.5 Net claims related to transactions with the ESCB (TARGET)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9.6 Other claims within the Eurosystem (net)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10. Items in course of settlement</td>
<td>1,834,373</td>
<td>389,343</td>
</tr>
<tr>
<td>11. Other assets</td>
<td>6,424,173,268</td>
<td>6,618,040,175</td>
</tr>
<tr>
<td>11.1 Coins</td>
<td>34,660,705</td>
<td>33,287,864</td>
</tr>
<tr>
<td>11.2 Tangible and intangible fixed assets</td>
<td>758,447,832</td>
<td>758,842,518</td>
</tr>
<tr>
<td>11.3 Other financial assets</td>
<td>4,619,813,384</td>
<td>4,864,714,102</td>
</tr>
<tr>
<td>11.4 Accruals and prepaid expenses</td>
<td>576,711,439</td>
<td>570,467,497</td>
</tr>
<tr>
<td>11.5 Sundry</td>
<td>434,539,908</td>
<td>390,728,194</td>
</tr>
<tr>
<td><strong>TOTAL ASSETS</strong></td>
<td><strong>31,948,195,596</strong></td>
<td><strong>29,653,314,066</strong></td>
</tr>
</tbody>
</table>

#### OFF-BALANCE-SHEET ITEMS

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Investments in Greek government securities on behalf of public entities (legal persons in public law, social security funds in public and private law)</td>
<td>19,105,547,134</td>
<td>15,218,519,470</td>
</tr>
<tr>
<td>2. Investments in Greek government securities and other debt securities on behalf of public entities, social security funds and private agents</td>
<td>10,430,655,763</td>
<td>8,723,342,399</td>
</tr>
<tr>
<td>3. Other off-balance-sheet items</td>
<td>5,256,542,624</td>
<td>2,606,875,223</td>
</tr>
<tr>
<td><strong>TOTAL OFF-BALANCE-SHEET ITEMS</strong></td>
<td><strong>34,792,745,521</strong></td>
<td><strong>26,548,737,092</strong></td>
</tr>
</tbody>
</table>

**Notes:**

1. Under Article 54A of the Bank’s Statute, the balance sheet was drawn up in compliance with the accounting rules and techniques determined by the European Central Bank (ECB) and applying to the members of the European System of Central Banks (ESCB).
2. Claims/liabilities denominated in euro or foreign currency are broken down into claims on/liabilities to euro area residents and non-euro area residents.
3. Account balances related to monetary policy operations are shown under separate items.
4. The value of gold has been calculated on the basis of the euro price of the gold ounce referred to in the ECB’s exchange rate list of 30 December 2005 (€434.856 per ounce compared with €321.562 per ounce on 31 Dec. 2004).
### Liabilities

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Banknotes in circulation</td>
<td>13,799,748,640</td>
<td>12,238,189,655</td>
</tr>
<tr>
<td>2. Liabilities to euro area credit institutions related to monetary policy</td>
<td>4,286,009,203</td>
<td>5,234,280,080</td>
</tr>
<tr>
<td>operations denominated in euro</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Current accounts (covering the minimum reserve system)</td>
<td>4,282,809,203</td>
<td>5,233,450,080</td>
</tr>
<tr>
<td>2.2 Deposit facility</td>
<td>3,200,000</td>
<td>830,000</td>
</tr>
<tr>
<td>3. Other liabilities to euro area credit institutions</td>
<td>27,565,000</td>
<td>0</td>
</tr>
<tr>
<td>denominated in euro</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Liabilities to other euro area residents denominated in euro</td>
<td>1,106,657,696</td>
<td>1,211,444,873</td>
</tr>
<tr>
<td>4.1 General government</td>
<td>1,085,934,059</td>
<td>1,196,313,972</td>
</tr>
<tr>
<td>4.2 Other liabilities</td>
<td>20,723,637</td>
<td>15,130,901</td>
</tr>
<tr>
<td>5. Liabilities to non-euro area residents denominated in euro</td>
<td>863,282,339</td>
<td>648,506,465</td>
</tr>
<tr>
<td>6. Liabilities to euro area residents denominated in foreign currency</td>
<td>164,012,424</td>
<td>109,831,235</td>
</tr>
<tr>
<td>7. Liabilities to non-euro area residents denominated in foreign currency</td>
<td>109,831,235</td>
<td>536,364,014</td>
</tr>
<tr>
<td>7.1 Deposits and other liabilities</td>
<td>109,831,235</td>
<td>536,364,014</td>
</tr>
<tr>
<td>7.2 Liabilities arising from the credit facility under ERM II</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8. Counterpart of special drawing rights allocated by the IMF</td>
<td>125,275,550</td>
<td>117,993,482</td>
</tr>
<tr>
<td>9. Intra-Eurosystem liabilities</td>
<td>8,455,940,423</td>
<td>6,966,258,551</td>
</tr>
<tr>
<td>9.1 Liabilities related to promissory notes backing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>the issuance of ECB debt certificates</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9.2 Net liabilities related to the allocation of euro</td>
<td>1,232,234,040</td>
<td>416,930,960</td>
</tr>
<tr>
<td>banknotes within the Eurosystem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.3 Net liabilities related to transactions with the ESCB (TARGET)</td>
<td>7,216,770,680</td>
<td>6,545,889,704</td>
</tr>
<tr>
<td>9.4 Other liabilities within the Eurosystem (net)</td>
<td>6,955,703</td>
<td>3,437,887</td>
</tr>
<tr>
<td>10. Items in course of settlement</td>
<td>28,141,546</td>
<td>27,541,742</td>
</tr>
<tr>
<td>11. Other liabilities</td>
<td>804,083,276</td>
<td>973,095,264</td>
</tr>
<tr>
<td>11.1 Off-balance sheet instruments revaluation differences</td>
<td>8,324</td>
<td>0</td>
</tr>
<tr>
<td>11.2 Accruals and income collected in advance</td>
<td>143,172,258</td>
<td>133,340,775</td>
</tr>
<tr>
<td>11.3 Sundry</td>
<td>660,902,694</td>
<td>839,754,489</td>
</tr>
<tr>
<td>13. Revaluation accounts</td>
<td>682,695,696</td>
<td>123,871,662</td>
</tr>
<tr>
<td>14. Capital and reserves</td>
<td>648,230,563</td>
<td>625,981,892</td>
</tr>
<tr>
<td>14.1 Capital</td>
<td>88,994,690</td>
<td>66,746,019</td>
</tr>
<tr>
<td>14.2 Ordinary reserve</td>
<td>88,994,690</td>
<td>66,746,019</td>
</tr>
<tr>
<td>14.3 Special reserve from the revaluation of land and buildings under Law</td>
<td>470,018,863</td>
<td>492,267,534</td>
</tr>
<tr>
<td>3229/2004</td>
<td>222,320</td>
<td>222,320</td>
</tr>
</tbody>
</table>

**Total Liabilities**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>31,948,195,596</td>
<td>29,653,314,066</td>
</tr>
</tbody>
</table>

5. Claims and liabilities in foreign currency have been valued on the basis of the exchange rates referred to in the ECB’s exchange rate list of 30 December 2005.

6. The value of securities has been calculated on the basis of average prices applying on 30 December 2005, except for the securities included in asset item 11.3 “Other financial assets”, which have been valued at cost. This item monitors the investment portfolio of the Bank of Greece, which comprises Greek government securities and government securities issued by other euro area countries; these securities constitute fixed investment to be held by the Bank up to maturity.

7. Fixed assets are valued at cost, except land and buildings, which are valued at market prices, determined by independent appraisers, less depreciation.

8. The depreciation of buildings and banknote production costs is calculated, as of the financial year 2005, at a rate of 2.5% and 20%, respectively, according to the estimated useful life of buildings (40 years) and the lifetime of banknotes (5 years on average). The change in the depreciation rate for buildings from 5% to 2.5% had a positive effect of €4.7 million on financial results, while the increase in the depreciable value of buildings (due to their revaluation at market prices) and the change in the depreciation method for banknote production costs had a negative effect of €4.9 million on financial results.

9. By Council of Ministers’ Act 17/4 July 2005, the Bank’s capital was increased by €22,248,671.20. This amount accounts for a part of the surplus value which arose from the revaluation (31 Dec. 2004), at market prices, of the Bank’s land and of the undepreciated value of the Bank’s buildings. The increase was covered by the issuance of 3,972,977 new shares of a nominal value of €5.60 each, which were distributed free of charge (bonus shares) to the Bank’s shareholders, at a rate of one bonus share to three old shares. The Bank’s ordinary reserve was increased by an equal amount, drawn from the profits for the financial year 2005, so as to become equal to the capital, in compliance with Articles 10 and 71 of the Bank’s Statute.

10. The weighted key for subscription of the Bank of Greece to the ECB’s capital fully paid by the 12 National Central Banks of the Eurosystem is 2.65405%.

11. Some items of the balance sheet and the profit and loss account for the financial year 2004 have been reclassified so as to be comparable with the corresponding items for the financial year 2005.
PROFIT AND LOSS ACCOUNT FOR THE YEAR 2005

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(in euro)</td>
<td></td>
</tr>
<tr>
<td>1. Net interest income</td>
<td>311,925,536</td>
<td>301,535,422</td>
</tr>
<tr>
<td>1.1 Interest income</td>
<td>683,455,834</td>
<td>673,598,545</td>
</tr>
<tr>
<td>1.2 Interest expense</td>
<td>−371,530,298</td>
<td>−372,063,123</td>
</tr>
<tr>
<td>2. Net result of financial operations, write-downs and risk provisions</td>
<td>133,713,007</td>
<td>28,260,300</td>
</tr>
<tr>
<td>2.1 Realised gains/losses arising from financial operations</td>
<td>155,370,075</td>
<td>99,505,494</td>
</tr>
<tr>
<td>2.2 Write-downs on financial assets and positions</td>
<td>−21,657,068</td>
<td>−71,245,464</td>
</tr>
<tr>
<td>2.3 Transfer to/from provisions for foreign exchange rate and price risks</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3. Net income from fees and commissions</td>
<td>124,906,121</td>
<td>141,630,119</td>
</tr>
<tr>
<td>3.1 Fees and commissions income</td>
<td>125,933,049</td>
<td>142,465,547</td>
</tr>
<tr>
<td>3.2 Fees and commissions expense</td>
<td>−1,026,928</td>
<td>−835,428</td>
</tr>
<tr>
<td>4. Income from equity shares and participating interests</td>
<td>3,476,715</td>
<td>2,459,420</td>
</tr>
<tr>
<td>5. Net result of pooling of monetary income</td>
<td>9,874,431</td>
<td>10,795,758</td>
</tr>
<tr>
<td>6. Other income</td>
<td>26,903,702</td>
<td>113,943,220</td>
</tr>
<tr>
<td>Total net income</td>
<td>610,799,512</td>
<td>598,623,969</td>
</tr>
<tr>
<td>7. Staff costs</td>
<td>−200,810,488</td>
<td>−191,813,880</td>
</tr>
<tr>
<td>7.1 Wages and salaries</td>
<td>−132,282,005</td>
<td>−126,350,375</td>
</tr>
<tr>
<td>7.2 Employer’s contributions and other levies</td>
<td>−68,528,483</td>
<td>−65,463,505</td>
</tr>
<tr>
<td>8. Pensions and benefits</td>
<td>−49,036,451</td>
<td>−46,562,364</td>
</tr>
<tr>
<td>9. Administrative and other expenses</td>
<td>−39,460,857</td>
<td>−37,552,145</td>
</tr>
<tr>
<td>10. Depreciation of tangible and intangible fixed assets</td>
<td>−33,803,564</td>
<td>−34,613,846</td>
</tr>
<tr>
<td>11. Provisions</td>
<td>−59,228,907</td>
<td>−82,476,430</td>
</tr>
<tr>
<td>Total expenses</td>
<td>−382,340,267</td>
<td>−393,018,665</td>
</tr>
<tr>
<td>PROFIT FOR THE YEAR</td>
<td>228,459,245</td>
<td>205,605,304</td>
</tr>
</tbody>
</table>

DISTRIBUTION OF NET PROFIT
(Article 71 of the Statute)

|                                | 2005   | 2004   |
|                                | (in euro) |        |
| Dividend on capital, €0.67 per share on 15,891,909 shares | 10,647,579 | 7,985,684 |
| To the ordinary reserve | 22,248,671 | 0 |
| Additional dividend, €1.73 per share on 15,891,909 shares* | 27,493,003 | 25,983,272 |
| Tax payment (Law 3296/2004, Article 6) | 17,948,509 | 18,290,976 |
| To the Government | 150,121,483 | 153,345,372 |
| **228,459,245** | **205,605,304** |        |

* The dividend on capital and the additional dividend for the year 2004, adjusted to take into account the new number of shares, was €2.14 per share.

Athens, 22 March 2006

THE GOVERNOR
NICHOLAS C. GARGANAS

THE DIRECTOR OF THE ACCOUNTS DEPARTMENT
DIMITRIOS E. MATSIMANIS
AUDITORS’ REPORT

To the Shareholders of BANK OF GREECE S.A.

We have audited the accompanying financial statements of BANK OF GREECE S.A., as of and for the year ended 31 December 2005. These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the Greek Auditing Standards, which are based on the International Standards on Auditing. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, evaluating the overall financial statement presentation as well as assessing the consistency of the General Council report with the aforementioned financial statements. We believe that our audit provides a reasonable basis for our opinion.

Based on our audit we noted that the recorded provision for pension and other liabilities to Employee Funds amounts to €705 million, whose adequacy we could not assess.

In our opinion, except for the effect on the financial statements of the matter referred to in the preceding paragraph, the aforementioned financial statements give a true and fair view of the financial position of the Company as at 31 December 2005, and of the results of its operations, for the year then ended, in accordance with the accounting principles determined by the European Central Bank as they have been adopted by the Bank in Article 54A of its Statute and Company Law 2190/1920, and the General Council Report is consistent with the aforementioned financial statements.

Without qualifying our opinion we draw attention to Note 8 to the financial statements. The company’s results for the year 2005 have been affected positively by €4.7 million due to the change in depreciation rates for buildings based on their useful life and negatively by €4.9 million due to the increase of their depreciable amount (as a result of revaluation) and the change in the depreciation method of banknotes capitalised production cost now depreciated based on their useful life.

Athens, 22 March 2006

The Certified Auditors-Accountants
Nikolaos Moustakis Despina Xenaki Ernst & Young (Hellas) S.A.
(Registration No. 13971) (Registration no. 14161) Certified Auditors Accountants
11th klm National Road Athens Lamia
144 51 Metamorphosi Attiki
ACCOUNTING POLICIES

General principles regarding the preparation of the Bank’s accounts

The annual accounts of the Bank of Greece, under Article 54A of its Statute, are prepared in accordance with the accounting rules and practices applicable to the European System of Central Banks, as set out by the European Central Bank (ECB) in its Guideline ECB/2002/10 of 5 December 2002.

These rules and practices, although based on internationally accepted accounting policies, have been adjusted to reflect the specific status of the 12 national central banks (NCBs) of the Eurosystem.

Any issues that are not covered by the aforementioned rules or ECB guidelines or are governed by non-mandatory provisions are to be treated in accordance with the Bank’s Statute and Law 2190/20 on sociétés anonymes.

Accounting principles

The main accounting principles applicable in the Eurosystem (i.e. the ECB and the 12 NCBs of the euro area, including the Bank of Greece), are the following:

- **Transparency**: Accounting and financial reporting must reflect the Bank’s true financial situation.
- **Prudence**: Unrealised valuation gains on gold and foreign exchange are not recognised as income in the Profit and Loss Account but are transferred directly to revaluation accounts. By contrast, unrealised valuation losses at the year-end are recognised as expenses and are taken to the Profit and Loss Account.
- **Post-balance-sheet events**: Assets and liabilities are adjusted for events that occur between the annual balance sheet date and the date on which the annual accounts are approved, if they affect the condition of assets or liabilities on the balance sheet date.
- **Materiality and non-deviation from accounting rules**.
- **Going concern basis**: Accounts are prepared on a going concern basis.
- **The accruals principle:** Income and expenses are recognised in the accounting period in which they are earned or incurred and not according to the period in which they are received or paid.
- **Consistency and comparability:** The criteria for balance sheet valuation and income recognition are applied consistently so as to ensure comparability of data in the financial statements.

**Recording of financial transactions**

Transactions in financial assets and liabilities are recognised on the basis of their settlement date.

**Balance sheet valuation rules**

- Assets and liabilities in foreign currency and gold are converted into euro at the exchange rate prevailing on the balance sheet date, as derived from the ECB’s daily quotation of reference exchange rates.
- Income and expenses are converted into euro at the exchange rate prevailing at the trade date.
- No distinction is made between the price and currency revaluation differences for gold. Instead, a single gold valuation is accounted for on the basis of the price in euro per fine ounce of gold, which is derived from the exchange rate of the euro against the US dollar on the balance sheet date.
- The revaluation of foreign exchange assets and liabilities, including on-balance-sheet and off-balance-sheet instruments, is performed on a currency-by-currency basis.
- Marketable debt securities are valued at the mid-market prices prevailing on the balance sheet date on a security-by-security basis (by ISIN).
- Debt securities and holdings recorded under asset item 11.3 “Other financial assets” are valued at acquisition cost.

**Income recognition**

- Realised gains and losses arising from the sale of foreign exchange, gold and securities are taken to the Profit and Loss Account. Such realised gains and losses are calculated by reference to the average cost of the respective asset.
- Unrealised gains (revaluation gains) are not recognised as income but are transferred directly to revaluation accounts.
- Unrealised losses (revaluation losses), to the extent that they exceed previous revaluation gains registered in the corresponding revaluation account, are taken to the
Profit and Loss Account at the year-end and are not netted against revaluation gains in subsequent years. Unrealised losses in any one security, currency or in gold are not netted against unrealised gains in other securities, currencies or gold.

- In the event of an unrealised loss on any item at the year-end, the average cost of that item is reduced to the year-end exchange rate and/or market price.
- Premiums or discounts arising on purchased securities are calculated and presented as part of interest income and are amortised over the remaining life of the assets.

Off-balance sheet instruments

Foreign exchange forward transactions are included in the net foreign currency position for the purpose of calculating foreign exchange gains and losses.

Banknotes in circulation

The ECB and the 12 euro area NCBs, which together comprise the Eurosystem, issue euro banknotes.¹ The ECB has been allocated a share of 8% in the total value of euro banknotes in circulation and the remaining 92% is allocated to the NCBs. The total value of euro banknotes in circulation is allocated to the Eurosystem central banks on the last working day of each month according to their banknote allocation keys.²

The share of banknotes in circulation that has been allocated to the Bank of Greece is disclosed under the Balance Sheet liability item 1 “Banknotes in circulation”.

The difference between the value of euro banknotes allocated to each NCB according to its banknote allocation key and the value of euro banknotes that the NCB actually puts into circulation produces “Intra-Eurosystem claims/liabilities”. These interest-bearing claims or liabilities³ are disclosed under the sub-item “Net claims/liabilities related to the allocation of euro banknotes within the Eurosystem”.

For financial years 2002 to 2007, “Intra-Eurosystem balances” that stem from the allocation of euro banknotes are adjusted in order to avoid sharp fluctuation in the monetary income of NCBs relative to previous years.

The amounts of these adjustments were calculated taking into account the differences between the average value of banknotes in circulation of each NCB during the period from 1 July 1999 to 30 June 2001 and the average value of banknotes that would have been allocated to them during the same period in accordance with the ECB’s capital key.

¹ ECB Decision of 6 December 2001 on the issue of euro banknotes (ECB/2001/15).
² “Banknote allocation key” means the percentages that result from taking into account the ECB’s share (8%) in the total euro banknote issue and applying the subscribed capital key to the NCB’s share in the total.
³ ECB Decision of 6 December 2001 on the allocation of monetary income of the national central banks of participating Member States from the financial year 2002 (ECB/2001/16).
These amounts will decline gradually and will come to zero by the end of 2007. Income from banknotes will then be allocated in full to the NCBs, in proportion to their share in the subscribed capital of the ECB.

Interest income and interest expenses on these claims/liabilities are netted in the ECB accounts and are disclosed in the Profit and Loss account of each NCB under “Net interest income”.

The Governing Council of the ECB has decided that the income from the ECB’s share (8%) of the total value of euro banknotes in circulation will be distributed separately to the NCBs in the form of an interim distribution.¹ This income is due in full, unless the ECB’s net profit for the year is less than its income earned on euro banknotes in circulation and also subject to any decision of the Governing Council in respect of expenses incurred by the ECB in connection with the issue and handling of euro banknotes.

For the year 2005, the Governing Council of the ECB decided that the full amount of income earned from the ECB’s share of total banknotes in circulation would be retained and used to establish a provision against foreign exchange rate, interest rate and gold price risks.

¹ ECB Decision of 21 November 2002 (ECB/2002/9) on the distribution of the income of the European Central Bank on euro banknotes in circulation to the national central banks of the participating Member States.
CHANGES IN BALANCE SHEET ITEMS

ASSETS

1. Gold and gold receivables

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume of gold in fine troy ounces</td>
<td>4,457,807.456</td>
<td>4,449,617.608</td>
<td>8,189.848</td>
</tr>
<tr>
<td>Value (million euro)</td>
<td>1,938.5</td>
<td>1,430.8</td>
<td>507.7</td>
</tr>
</tbody>
</table>

The amounts reported above comprise the Bank’s gold holdings (3,472,207.371 oz) and gold receivables from the Greek State (985,600.085 oz) corresponding to Greece’s participation in the IMF (the gold component of Greece’s quota has been paid by the Bank of Greece on behalf of the Greek State).

The largest part of gold is held in simple deposit accounts with banks abroad. Gold sovereigns represent 2.76% of total gold holdings (95,946.875 oz).

Gold has been valued at its euro price per fine troy ounce as at year-end according to the ECB’s reference exchange rate, i.e. €434.856 on 30 December 2005 compared with €321.562 on 31 December 2004. This price is derived from the USD price of gold quoted on the London market on 30 December 2005 and the euro/USD exchange rate on that same date.

It should be noted that the price of gold in USD on the London market stood at $513 per ounce on 30 December 2005, compared with $438 per ounce on 31 December 2004, while the euro/USD exchange rate on 30 December 2005 was 1.797 compared with 1.3621 one year earlier.

The €507.7 million change in the value of gold was mainly due to revaluation at the year-end. Unrealised valuation gains (difference between the average acquisition cost and the market price as at 30 December 2005) reflect both the higher price of gold in US dollars and the appreciation of the US dollar against the euro in the course of 2005. These gains were transferred to the gold revaluation account (liability item 13).

In 2005, the Bank of Greece did not carry out any transactions in gold other than the usual retail over-the-counter sales and purchases of gold sovereigns.

2. Claims on non-euro area residents denominated in foreign currency

This item consists of: receivables from the IMF (in SDRs); balances on correspondent accounts; time deposits with banks abroad; securities holdings; and non-euro banknotes held at the Bank’s vaults.
2.1 Receivables from the IMF

These arise from Greece’s participation in the IMF and include the following:

- the Banks’ holdings of special drawing rights;
- the SDR component of Greece’s quota in the IMF. This has been financed by the Bank, which is entrusted with the management of the relevant assets. The euro component of Greece’s quota in the IMF, amounting to €853.3 million, is disclosed under liability item 5 “Liabilities to non-euro area residents denominated in euro”. Greece’s overall quota amounts to SDR 823 million and must remain unchanged (i.e. the euro component and the SDR component must always add up to SDR 823 million).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SDRs</td>
<td>euro</td>
<td>SDRs</td>
</tr>
<tr>
<td>Greece’s SDR quota</td>
<td>117.7</td>
<td>142.4</td>
<td>270.6</td>
</tr>
<tr>
<td>SDR holdings</td>
<td>20.3</td>
<td>24.6</td>
<td>17.4</td>
</tr>
<tr>
<td>Special non-interest-bearing deposit</td>
<td>5.4</td>
<td>6.6</td>
<td>5.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>143.4</strong></td>
<td><strong>173.6</strong></td>
<td><strong>293.4</strong></td>
</tr>
</tbody>
</table>

The change reported above was due to a shift in the composition of the quota, following a decrease in the SDR component that reflected amounts collected by the Bank from third countries in line with IMF instructions. This necessitated a commensurate increase in the euro component, in order to restore the overall Greek quota at a stable level.

Receivables from the IMF were valued at the SDR/euro exchange rate as at 30 December 2005, based on the ECB’s reference exchange rates, i.e. SDR 1.2099 per one euro, compared with 1.1396 at the end of 2004.

2.2 Balances with banks and security investments, external loans and other external assets

This item consists of claims on non-euro area residents denominated in foreign currency, e.g. deposits (mainly time deposits), debt securities and non-euro banknotes.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Deposits with foreign banks (mostly time deposits)</td>
<td>212.0</td>
<td>288.5</td>
<td>-76.5</td>
</tr>
<tr>
<td>Marketable debt securities (bonds - Treasury bills)</td>
<td>66.5</td>
<td>242.5</td>
<td>-176.0</td>
</tr>
<tr>
<td>Cash holdings of foreign currency</td>
<td>42.0</td>
<td>39.6</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>320.5</strong></td>
<td><strong>570.6</strong></td>
<td><strong>-250.1</strong></td>
</tr>
</tbody>
</table>

These assets as at 31 December 2005 consist predominantly of holdings denominated in US dollars that amount to $242.8 million (€205.8 million).

The significant decrease between 2004 and 2005 is due to a substitution of assets denominated in foreign currency with euro-denominated assets, as part of the Bank’s portfolio restructuring.

3. Claims on euro area residents denominated in foreign currency

This item consists mainly of claims on general government that stem from loans and, to a lesser extent, time deposits with correspondent banks in other euro area countries and holdings of marketable securities (bonds).

3.1 Claims on general government

These claims include:

- the long-term USD-linked government bond issue of 31 December 1993, whereby the balance of the account “Exchange rate valuation differences - Law 1083/80” was converted to formal debt;
- the long-term loan of £75 million granted to the Greek State on 6 September 1985;
- loans in SDRs to finance Greece’s participation in the IMF;
- loans in US dollars and gold-linked loans to finance Greece’s participation in international organisations.

These claims amounted to €857.7 million on 31 December 2005, down from €1,224.4 million on 31 December 2004.
The €366.7 million decrease stemmed primarily from the repayment of an old bond issue in JPY and, to a lesser extent, from the payment of the annual instalment for the repayment of the USD-linked bond issue.

3.2 Other claims

These claims predominantly consist of time deposits in foreign currency held with euro area correspondent banks and, to a lesser extent, holdings of foreign-currency-denominated bonds issued by euro area residents.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Time deposits</td>
<td>80.7</td>
<td>101.0</td>
<td>−20.3</td>
</tr>
<tr>
<td>Bonds</td>
<td>12.9</td>
<td>57.4</td>
<td>−44.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>93.6</strong></td>
<td><strong>158.4</strong></td>
<td><strong>−64.8</strong></td>
</tr>
</tbody>
</table>

The bulk of these claims as at 31 December 2005 is denominated in Swiss francs (equivalent to €45 million).

The significant decrease is due to the substitution of foreign-currency-denominated assets by euro-denominated assets, as part of the Bank’s portfolio restructuring.

4. Claims on non-euro area residents denominated in euro

4.1 Deposits with banks, securities and loans

This item mainly includes time deposits in euro with non-euro area correspondent banks, as well as holdings of euro-denominated Treasury bills and bonds issued by non-euro area residents.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Time deposits</td>
<td>620.5</td>
<td>567.8</td>
<td>52.7</td>
</tr>
<tr>
<td>Bonds</td>
<td>212.2</td>
<td>195.4</td>
<td>16.8</td>
</tr>
<tr>
<td>Treasury bills</td>
<td>421.6</td>
<td>432.8</td>
<td>−11.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,254.3</strong></td>
<td><strong>1,196.0</strong></td>
<td><strong>58.3</strong></td>
</tr>
</tbody>
</table>
The change was largely due to increases in time deposits and, to a lesser extent, in bond holdings. By contrast, holdings of Treasury bills decreased.

5. **Lending to euro area credit institutions related to monetary policy operations denominated in euro**

This item consists of outstanding balances of lending to credit institutions against collateral in the form of Greek government securities, through liquidity-providing operations, in the context of the single monetary policy.

Liquidity is chiefly provided through main refinancing operations (MROs, with a maturity of one week) and to a lesser extent through longer-term refinancing operations (LTROs, with a maturity of three months).

<table>
<thead>
<tr>
<th>Type of operations</th>
<th>31 Dec. 2005 (million euro)</th>
<th>31 Dec. 2004</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>MROs</td>
<td>1,561.0</td>
<td>48.0</td>
<td>1,513.0</td>
</tr>
<tr>
<td>LTROs</td>
<td>793.0</td>
<td>153.4</td>
<td>639.6</td>
</tr>
<tr>
<td>Total</td>
<td>2,354.0</td>
<td>201.4</td>
<td>2,152.6</td>
</tr>
</tbody>
</table>

– MROs are regular open market operations executed by the Eurosystem in the form of reverse transactions, through weekly standard tenders. They have a maturity of one week and aim at providing liquidity to the credit system. The average amount of these operations during 2005 was €2,596.9 million, compared with €1,785.0 million during 2004.

– LTROs are regular open market operations executed by the Eurosystem in the form of reverse transactions, through monthly standard tenders. They have a maturity of three months and aim at providing additional liquidity to the credit system. The average amount of these operations during 2005 was €203 million compared with €46 million during 2004.

6. **Other claims on euro area credit institutions denominated in euro**

These claims mainly relate to time deposits in euro held by the Bank of Greece with correspondent banks in the euro area. They are not connected with monetary policy operations and serve purely investment purposes.
The significant increase in time deposits in euro is attributed to the fact that they were substituted for other holdings in foreign currency, as part of the restructuring of the Bank’s portfolio.

7. Securities of euro area residents denominated in euro

This item consists of the Bank’s holdings of euro-denominated bonds and Treasury bills issued by euro area residents other than the Greek government. From financial year 2004 onwards, Greek government securities purchased outright and held in the Bank’s investment portfolio until maturity are disclosed under asset item 11.3 “Other financial assets”.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonds</td>
<td>2,626.7</td>
<td>2,695.6</td>
<td>−68.9</td>
</tr>
<tr>
<td>Treasury bills</td>
<td>4,654.3</td>
<td>3,748.2</td>
<td>906.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7,281.0</strong></td>
<td><strong>6,443.8</strong></td>
<td><strong>837.2</strong></td>
</tr>
</tbody>
</table>

In financial year 2005, the Bank increased its holdings of euro-denominated Treasury bills, in substitution for securities denominated in foreign currency.

8. General government debt denominated in euro

8.1 Long-term debt

This item represents long-term loans extended to the Greek State up to 31, Dec. 1993:
Outstanding balance as at 31 Dec. 2005  . . . . . . . . . . . . . . . . . . . . . .  €1,527.1 million
Outstanding balance as at 31 Dec. 2004  . . . . . . . . . . . . . . . . . . . . . .  €1,668.8 million

Decrease  €141.7 million

The decrease stemmed from gradual loan repayment.

8.2 Loans for participation in the IMF

These are loans in euro extended by the Bank to the Greek State for the purpose of financing its euro-denominated participation in the IMF. The amount of this participation, which is deposited by the IMF with the Bank, is disclosed under liability item 5 “Liabilities to non-euro area residents denominated in euro”.

Outstanding balance as at 31 Dec. 2005  . . . . . . . . . . . . . . . . . . . . . .  €761.1 million
Outstanding balance as at 31 Dec. 2004  . . . . . . . . . . . . . . . . . . . . . .  €726.6 million

Increase  €34.5 million

The increase stemmed from revaluation following the depreciation of the euro against the SDR. This reflects the requirement, under an IMF decision, to revalue in line with any changes in the SDR/euro parity. Such revaluation leads to an adjustment of the Bank’s relevant claims on the Greek State.

8.3 Long-term loans and securities

This item comprises the long-term amortisation loan and the bond loan, denominated in euro, extended by the Bank of Greece to the Greek State on 31 December 1993, in settlement of the balance of the account “Exchange rate valuation differences – Law 1083/80”.

Outstanding balance as at 31 Dec. 2005  . . . . . . . . . . . . . . . . . . . . . .  €6,497.9 million
Outstanding balance as at 31 Dec. 2004  . . . . . . . . . . . . . . . . . . . . . .  €6,858.9 million

Decrease  €361.0 million

The decrease is attributed to partial repayment.
9. Intra-Eurosystem claims

9.1 Participation in the capital and reserves of the ECB

<table>
<thead>
<tr>
<th>(million euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ECB’s subscribed capital</strong></td>
</tr>
<tr>
<td>(applying to all 25 EU Member States)</td>
</tr>
<tr>
<td>Bank of Greece’s key for subscription to the ECB’s capital (capital key)</td>
</tr>
<tr>
<td><strong>ECB capital paid up by the 12 Eurosystem NCBs</strong></td>
</tr>
<tr>
<td>Bank of Greece’s subscribed capital key</td>
</tr>
<tr>
<td>Bank of Greece’s subscribed share of capital</td>
</tr>
<tr>
<td>Bank of Greece’s contribution to ECB’s reserves</td>
</tr>
<tr>
<td><strong>Bank of Greece’s total participation in the ECB’s capital and reserves as at 31 Dec. 2005</strong></td>
</tr>
</tbody>
</table>

According to Article 28 of the Statute of the European System of Central Banks, the national central banks of the ESCB are the sole subscribers to and holders of the capital of the ECB.

The subscription to the ECB’s capital is based on a key assigned to each NCB and is equal to the sum of 50% of the share of its respective Member State in the gross domestic product of the European Union and 50% of the share of its respective Member State in the population of the European Union (Article 29.1 of the ESCB Statute).

On 31 Dec. 2005, the participation of the Bank of Greece in the capital, reserves and the equivalent provisions of the ECB stood at €393.4 million.

The share of the Bank of Greece in the ECB’s capital is €150.6 million and has been paid up in full. It corresponds to 1.8974% (capital key) of the ECB’s total subscribed capital (25 NCBs of the ESCB), which after the adjustments that took place in 2004 amounts to €5,564.7 million, and to 2.65405% (weighted capital key) of the capital paid up by the 12 NCBs of the Eurosystem (€3,978.2 million).

The remaining amount (€287.8 million) relates to the Bank’s contribution to the reserves and provisions of the ECB. This contribution was paid up upon the entry of the Bank of Greece into the ESCB on 1 January 2001.

Under Article 29.3 of the Statute of the European System of Central Banks, NCBs’ keys for subscription to the ECB capital are adjusted every five years after the establishment of the ESCB.
9.2 Claims equivalent to the transfer of foreign reserve assets to the ECB

<table>
<thead>
<tr>
<th>Description</th>
<th>(millions euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total foreign reserve assets transferred to the ECB by the 12 NCBs of the</td>
<td>39,782.3</td>
</tr>
<tr>
<td>Eurosystem</td>
<td></td>
</tr>
<tr>
<td>Bank of Greece's subscribed capital key</td>
<td>2.65405%</td>
</tr>
<tr>
<td>Claims of the Bank of Greece arising from the transfer of foreign reserve</td>
<td>1,055.8</td>
</tr>
<tr>
<td>assets to the ECB</td>
<td></td>
</tr>
</tbody>
</table>

These claims stem from the transfer of foreign reserve assets to the ECB, in accordance with Article 30 of the Statute of the ESCB.

Out of the said foreign reserve assets, determined on the basis of the Bank’s share in the paid-up capital of the ECB, 85% were transferred in the form of assets denominated in USD and JPY and 15% in the form of gold.

These claims are expressed in euro taking into account the exchange rates prevailing at the time of transfer and are remunerated at the latest available marginal rate for the Eurosystem’s main refinancing operations (MROs), adjusted to reflect a zero return on the gold component.

10. Items in course of settlement

These are balances in course of settlement, of various intermediate accounts, which serve to monitor cheques in collection issued by banks abroad and cheques settled through clearing offices.

Outstanding amount on 31 Dec. 2005 ......................................... €1.8 million
Outstanding amount on 31 Dec. 2004 ......................................... €0.4 million

Increase  €1.4 million

11. Other assets

11.1 Coins

This item reflects the value of coins issued by the 12 euro area countries and held by the Bank of Greece on the balance sheet date.
Coins put into circulation by the Bank of Greece are recorded in a special account of the Greek State.

Outstanding amount on 31 Dec. 2005: €34.7 million
Outstanding amount on 31 Dec. 2004: €33.3 million
Increase: €1.4 million

11.2 Tangible and intangible fixed assets

Fixed assets consist of: real estate (land — buildings and fixtures — buildings under construction), furniture, machinery, electronic equipment, software and the production cost of euro banknotes. Fixed assets, other than real estate which is valued at market prices determined by independent assessors, are valued at acquisition cost. The value of fixed assets as at 31 December 2005 is reported less accumulated depreciation.

Depreciation is calculated on a straight-line basis over the expected lifetime of the assets.

Undepreciated value of fixed assets

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>432.1</td>
<td>432.1</td>
<td>0.0</td>
<td>0%</td>
</tr>
<tr>
<td>Buildings and fixtures</td>
<td>185.2</td>
<td>186.1</td>
<td>-0.9</td>
<td>2.5%</td>
</tr>
<tr>
<td>Buildings under construction</td>
<td>29.6</td>
<td>27.8</td>
<td>1.8</td>
<td>0%</td>
</tr>
<tr>
<td>Other equipment</td>
<td>34.8</td>
<td>31.8</td>
<td>3.0</td>
<td>8%-24%</td>
</tr>
<tr>
<td>Capitalised expenses (R&amp;D, software, etc. costs)</td>
<td>8.9</td>
<td>10.4</td>
<td>-1.5</td>
<td>20%-24%</td>
</tr>
<tr>
<td>Banknote production costs</td>
<td>67.8</td>
<td>70.6</td>
<td>-2.8</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>758.4</strong></td>
<td><strong>758.8</strong></td>
<td><strong>-0.4</strong></td>
<td></td>
</tr>
</tbody>
</table>

11.3 Other financial assets

The largest part of this item represents the Bank’s investment portfolio of Greek government bonds and euro-denominated bonds issued by other euro area governments.

It also includes the Bank’s holdings in DIAS Interbanking Systems SA, the Hellenic Deposit Guarantee Fund (TEK), the Hellenic Exchanges Holding SA as well as in the Bank for International Settlements (BIS), denominated in SDRs.

These assets are valued at acquisition cost.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Greek government bonds</td>
<td>3,635.0</td>
<td>3,746.0</td>
<td>–111.0</td>
</tr>
<tr>
<td>Government bonds of other euro area countries</td>
<td>954.9</td>
<td>1,095.5</td>
<td>–140.6</td>
</tr>
<tr>
<td>Other participating interests</td>
<td>29.9</td>
<td>23.2</td>
<td>6.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,619.8</strong></td>
<td><strong>4,864.7</strong></td>
<td><strong>–244.9</strong></td>
</tr>
</tbody>
</table>

11.4 Accruals and prepaid expenses

The main component of this item is interest and other income accrued up to 31 December 2005, which is to be collected in the next financial year and stems from lending, securities holdings and deposits with banks, as well as from the foreign reserve assets transferred to the ECB. Also included is an amount of €254.2 million, corresponding to the estimated value of the drachma banknotes (General Council Decision 3/23 Feb. 2005) which will not be presented for exchange against euro banknotes by the deadline of 1 March 2012 and are treated as budgeted income for the Bank.

<table>
<thead>
<tr>
<th>Balance on 31 Dec. 2005</th>
<th>€576.7 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance on 31 Dec. 2004</td>
<td>€570.5 million</td>
</tr>
<tr>
<td><strong>Increase</strong></td>
<td><strong>€6.2 million</strong></td>
</tr>
</tbody>
</table>

11.5 Sundry

This item primarily consists of balances on the Bank’s suspense debit accounts, non-marketable gold and gold coins, as well as the outstanding balances of loans to the Bank’s personnel.

<table>
<thead>
<tr>
<th>Balance on 31 Dec. 2005</th>
<th>€434.5 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance on 31 Dec. 2004</td>
<td>€390.7 million</td>
</tr>
<tr>
<td><strong>Increase</strong></td>
<td><strong>€43.8 million</strong></td>
</tr>
</tbody>
</table>

The above change is mainly attributed to an increase in the value of non-marketable gold, stemming from a rise in the price of gold and from new purchases. This non-marketable gold, which the Bank has purchased from the private sector in the form of non-standard gold, in accordance with the Bank’s regulation for the purchase of gold, will be upgraded to standard gold bars.
L I A B I L I T I E S

1. Banknotes in circulation

Balance on 31 Dec. 2005 ........................................ €13,799.7 million
Balance on 31 Dec. 2004 ........................................ €12,238.2 million
Increase €1,561.5 million

This item consists of the Bank of Greece’s share of total euro banknotes in circulation, calculated on the basis of the banknote allocation key (2.4415%) (see “Banknotes in circulation” under “Accounting policies” above).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(million euro)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of euro banknotes that have actually been put into circulation by the Bank</td>
<td>15,032.0</td>
<td>12,655.1</td>
</tr>
<tr>
<td>Less:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Liability resulting from the ECB’s share in the total euro banknote issue (8%)</td>
<td>–1,200.1</td>
<td>–1,064.3</td>
</tr>
<tr>
<td>– Liability or claim resulting from the allocation of euro banknotes within the Eurosystem (CSM)</td>
<td>–32.2</td>
<td>647.4</td>
</tr>
<tr>
<td>Value of euro banknotes in circulation based on the banknote distribution key of the Bank of Greece</td>
<td>13,799.7</td>
<td>12,238.2</td>
</tr>
</tbody>
</table>

1 Recorded under liability item 9.2 “Net liabilities related to the allocation of euro banknotes within the Eurosystem”.

2. Liabilities to euro area credit institutions related to monetary policy operations denominated in euro

2.1 Current accounts (covering the minimum reserve system)

These accounts include credit institutions’ reserve holdings with the Bank of Greece, also used for the settlement of interbank payments.
Balance on 31 Dec. 2005 ............................................ €4,282.8 million
Balance on 31 Dec. 2004 ............................................ €5,233.4 million

**Decrease** €950.6 million

During 2005 aggregate holdings in these accounts averaged €3,195 million, compared with €2,787.9 million in 2004.

### 2.2 Deposit facility

This relates to the deposit facility offered by the Eurosystem to credit institutions. In more detail, it consists of overnight deposits placed by credit institutions with the Bank of Greece at a pre-specified interest rate, in the context of the implementation of the single monetary policy in the euro area.

Balance on 31 Dec. 2005 ............................................ €3.2 million
Balance on 31 Dec. 2004 ............................................ €0.8 million

**Increase** €2.4 million

### 3. Other liabilities to euro area credit institutions denominated in euro

These are non-interest-bearing, fixed-term deposits by credit institutions as a result of sanctions for infringements of credit rules. On 31 December 2005 these deposits amounted to €27.6 million.

### 4. Liabilities to other euro area residents denominated in euro

#### 4.1 General government

This item comprises deposits by the Greek State (central government), public entities and the Deposits and Loans Fund.

Balance on 31 Dec. 2005 ............................................ €1,085.9 million
Balance on 31 Dec. 2004 ............................................ €1,196.3 million

**Decrease** €110.4 million

The average balance of these deposits in 2005 was €1,101.5 million, compared with €770 million in 2004.
4.2 Other liabilities

This sub-item consists of various deposits, such as deposits by the insurance funds of the Bank’s staff etc.

Balance on 31 Dec. 2005 ................................................... €20.7 million
Balance on 31 Dec. 2004 ................................................... €15.1 million
Increase ................................................................. €5.6 million

5. Liabilities to non-euro area residents denominated in euro

Balance on 31 Dec. 2005 ................................................... €863.3 million
Balance on 31 Dec. 2004 ................................................... €648.5 million
Increase ................................................................. €214.8 million

The bulk of these liabilities (€853.3 million) consists of deposits held by the IMF with the Bank in euro and corresponds to Greece’s euro-denominated participation in the IMF.

The €214.8 million increase largely stems from this component and reflects:
— amounts collected by the Bank from third countries according to IMF instructions. Greece’s SDR-denominated participation in the IMF (asset item 2.1 “Receivables from the IMF”), was reduced by an equal amount, in order to ensure that Greece’s total quota in the IMF remains unchanged;
— a valuation effect due to the depreciation of the euro against the SDRs.

6. Liabilities to euro area residents denominated in foreign currency

These liabilities mainly stem from interest-bearing deposits by public entities, denominated in foreign currency.

Balance on 31 Dec. 2005 ................................................... €164.0 million
Balance on 31 Dec. 2004 ................................................... €127.8 million
Increase ................................................................. €36.2 million

The change is due both to an increase in the volume of deposits and to the depreciation of the euro against the US dollar, the most common currency of denomination for these deposits.
7. Liabilities to non-euro area residents denominated in foreign currency

7.1 Deposits and other liabilities

The largest component of this sub-item is the long-term loan of £75 million raised on behalf of and assigned to the Greek State on 6 September 1985. The corresponding claim on the Greek State is disclosed under asset item 3.1 “General government”.

Balance on 31 Dec. 2005 ........................................ €109.8 million
Balance on 31 Dec. 2004 ........................................ €536.4 million
Decrease ............................................................. €426.6 million

This significant reduction reflects redemption of an old bond issue amounting to JPY 60 billion.

8. Counterpart of special drawing rights allocated by the IMF

This item comprises Bank’s liabilities to the IMF stemming from the cumulative allocation of special drawing rights (SDR 103.5 million) to Greece between 1970 and 1981.

Balance on 31 Dec. 2005 ........................................ €125.3 million
Balance on 31 Dec. 2004 ........................................ €118.0 million
Increase ............................................................. €7.3 million

The increase in the amount of these interest-bearing liabilities when expressed in euro terms is solely due to the depreciation of the euro against the SDR.

9. Intra-Eurosystem liabilities

9.2 Net liabilities related to the allocation of euro banknotes within the Eurosystem

This sub-item shows liabilities that stem from the allocation of euro banknotes within the Eurosystem (see “Banknotes in circulation” under “Accounting Policies”).

Balance on 31 Dec. 2005 ........................................ €1,232.2 million
Balance on 31 Dec. 2004 ........................................ €416.9 million
Increase ............................................................. €815.3 million
The balance on 31 December 2005 is broken down as follows:
— €1,200.1 million refer to the value of euro banknotes issued by the Bank of Greece on behalf of the ECB;
— €32.2 million represent an adjustment to the actual amount of euro banknotes in circulation, to equalise the bank's share in total euro banknotes in circulation (liability item 1) to its banknote allocation key.

9.3 Net liabilities related to transactions with the ESCB (TARGET)

These are net liabilities to the ECB, stemming from the Bank's cross-border transactions with the other NCBs of the European System of Central Banks and the ECB. These transactions are processed through the TARGET (Trans-European Automated Real-time Gross Settlement Express Transfer) system.

<table>
<thead>
<tr>
<th>TARGET account, year-end balances</th>
</tr>
</thead>
<tbody>
<tr>
<td>(million euro)</td>
</tr>
<tr>
<td>8,092.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TARGET account, average annual balances</th>
</tr>
</thead>
<tbody>
<tr>
<td>(million euro)</td>
</tr>
<tr>
<td>2001</td>
</tr>
<tr>
<td>7,447.2</td>
</tr>
</tbody>
</table>

The creation of these liabilities in 2001 and their continuous increase reflect the transfer of domestic credit institutions' excess liquidity to other EU countries. This excess liquidity was built up after Greece's entry into EMU on 1 January 2001 and the implementation of the single monetary policy of the Eurosystem, which led to the gradual release of credit institutions' reserve holdings (in euro and foreign currency) with the Bank of Greece.

That change has no effect on the Bank's financial results, since the amount of interest paid by the Bank to the ECB in respect of these liabilities has replaced the interest paid until 2001 to domestic credit institutions as remuneration of their reserve holdings.

During 2004 and 2005 these liabilities decreased, while banknotes in circulation increased, reflecting capital inflows effected by domestic credit institutions in
response to higher domestic demand for funding (associated with the Olympic Games and strong credit expansion to households — housing and consumer loans — and to non-financial corporations).

9.4 Other liabilities within the Eurosystem (net)

Other liabilities within the Eurosystem (net) amounted to €6.9 million on 31 December 2005 (31 December 2004: €3.4 million).

These liabilities are normally settled in the beginning of the next financial year.

The reported figure of €6.9 million was the net balance of the following claims and liabilities vis-à-vis the ECB:

— a €16.8 million liability related to the distribution of monetary income by the ECB to the Bank of Greece for the first three quarters of 2005. The distribution was subsequently reversed, following a decision of the Governing Council, in order to establish a provision against foreign exchange rate, interest rate and gold price risks; and

— a claim of €9.9 million corresponding to the Bank’s share from the pooling and distribution of monetary income in 2005.

10. Items in course of settlement

This item mainly consists of the value of cheques and payment orders whose settlement is pending, totalling €28.1 million on 31 December 2005 (31 December 2004: €27.5 million).

11. Other liabilities

11.1 Off-balance sheet instruments revaluation differences

This sub-item shows the net results (gains of €8,324 million) of the end-of-year revaluation of a forward foreign exchange swap operation (sale of US dollars and purchase of euro).

11.2 Accruals and income collected in advance

This sub-item represents write offs/write downs of premiums on securities, accrued interest expenses payable up to 31 December 2005 and other expenses. Such
expenses will be paid within 2006 and mainly involve tax on interest income from Greek government bonds and various categories of interest payable (on the outstanding balance of the TARGET account, on credit institutions’ reserve requirements and on other liabilities).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sundry</strong></td>
<td><strong>Euro</strong></td>
<td><strong>Euro</strong></td>
<td><strong>Euro</strong></td>
</tr>
<tr>
<td>Profit for the year</td>
<td>228.5</td>
<td>205.6</td>
<td>22.9</td>
</tr>
<tr>
<td>Value of drachma banknotes in circulation</td>
<td>263.3</td>
<td>273.1</td>
<td>-9.8</td>
</tr>
<tr>
<td>Liability to the Greek State (Greece’s SDR-denominated participation in the IMF)</td>
<td>142.4</td>
<td>308.3</td>
<td>-165.9</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>26.7</td>
<td>52.7</td>
<td>-26.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>660.9</strong></td>
<td><strong>839.7</strong></td>
<td><strong>-178.8</strong></td>
</tr>
</tbody>
</table>

The considerable change is mainly due to a decrease in the liability to the Greek State, reflecting a commensurate decrease in the Bank’s claim on the IMF.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision for future liabilities of the Bank to its personnel insurance funds</td>
<td>705.1</td>
<td>660.1</td>
<td>45.0</td>
</tr>
<tr>
<td>Provision for general risks under Article 71 of the Statute</td>
<td>25.7</td>
<td>12.1</td>
<td>13.6</td>
</tr>
<tr>
<td>Other provisions for doubtful claims</td>
<td>115.9</td>
<td>113.2</td>
<td>2.7</td>
</tr>
<tr>
<td>Provisions offset against monetary income representing the Bank’s contribution to the coverage of the ECB’s loss for financial year 2004</td>
<td>0</td>
<td>36.5</td>
<td>–36.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>846.7</strong></td>
<td><strong>821.9</strong></td>
<td><strong>24.8</strong></td>
</tr>
</tbody>
</table>

— In financial year 2005 the Bank retained profits amounting to €45 million, compared with €35 million in financial year 2004, and made an allocation to the provision for future liabilities to its personnel insurance funds.
— The provision under Article 71 of the Statute refers to credit risk in respect of doubtful claims and the risk of asset depreciation (foreign exchange rate, interest rate and gold price risks).
— Other provisions have been made to account for special cases of doubtful claims.

13. Revaluation accounts

In accordance with the accounting principles set out by the European Central Bank for the NCBs of the European System of Central Banks, in particular the principle of prudence, unrealised valuation gains on gold, financial instruments in foreign currency and securities are not recognised as income in the Profit and Loss Account but are transferred directly to revaluation accounts (functioning as reserves for these particular assets only). By contrast, unrealised valuation losses at year-end are recognised as expenditure and are taken to the Profit and Loss Account.

Valuation at end-2005 produced unrealised gains of €682.7 million (see breakdown in the table below), which were transferred to the corresponding revaluation accounts, and unrealised losses of €21.7 million, which were taken to the Profit and Loss Account.
Unrealised valuation gains at year-end stemmed for the most part from gold and, to a lesser extent, from assets denominated in foreign currency, reflecting the appreciation of the US dollar against the euro.

### 14. Capital and reserves

On 31 December 2005 the Bank’s own funds amounted to €648.2 million, compared with €626 million on 31 December 2004. The €22.2 million increase came from an increase in the ordinary reserve, following a transfer from the profit for the year 2005.

In more detail, the composition of the Bank’s own funds and their evolution between 2004 and 2005 are as follows:

#### 14.1 Capital


The capital increase took the form of issuance of 3,972,977 new shares of a par value of €5.60 each, which were allotted to existing shareholders free of charge in a proportion of one new share for every three old shares.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>on foreign currency-denominated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>assets</td>
<td>46.2</td>
<td>0.2</td>
<td>46.0</td>
</tr>
<tr>
<td>on securities</td>
<td>0.2</td>
<td>3.0</td>
<td>-2.8</td>
</tr>
<tr>
<td>on gold</td>
<td>636.3</td>
<td>120.7</td>
<td>515.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>682.7</strong></td>
<td><strong>123.9</strong></td>
<td><strong>558.8</strong></td>
</tr>
</tbody>
</table>

Unrealised valuation gains at 31 December 2005: 682.7 million euro; at 31 December 2004: 123.9 million euro; change: 558.8 million euro.
14.2 Ordinary reserve

The ordinary reserve amounts to €88,994,690. After the last capital increase of €22,248,671, the ordinary reserve was increased by an equal amount drawn from the profit for the year 2005, in accordance with Articles 10 and 71 of the Statute, so as to match the level of capital.

14.3 Special reserve from the revaluation of land and buildings under Law 3229/2004

This special reserve was created out of capital gains arising from the restate-ment of land and buildings at fair (market) value (as determined by an independent real estate assessor) on 31 December 2004, under Article 15 of Law 3229/2004.

Out of these capital gains that totalled €492,267,534, an amount of €22,248,671 was used to establish this special reserve, which thus came to €470,018,863 on 31 December 2005. Under Law 3229/2004 (Article 15, paragraph 1), this special reserve may be used by the Bank to offset future valuation losses on its portfolio.

14.4 Special reserves

Special reserves amount to €222,320 and represent the value of fixed assets (mostly buildings) transferred gratis to the Bank.
OFF-BALANCE SHEET ITEMS

These are memorandum accounts reflecting the following:

- Greek government securities, purchased with the pooled surpluses of public entities and social security organisations (“Common fund”, Article 3 of Law 2216/1994) (balance on 31 December 2005: €19,105.5 million, 31 December 2004: €15,218.5 million).
- Greek government securities owned by public entities, social security funds and private agents, which are managed and kept by the Bank acting as custodian (balance on 31 December 2005: €10,430.7 million, 31 December 2004: €8,723.3 million).
- Other off-balance sheet items totalling €5,256.5 million, compared with €2,606.9 million on 31 December 2004, specifically:
  -- Greek government securities delivered as collateral by the Bank’s counterparties in monetary policy operations (balance on 31 December 2005: €3,899.4 million, 31 December 2004: €1,401.8 million);
  -- forward sales of foreign currency against euro, guarantees provided by contractors, guarantees issued by the Bank, coins in storage etc. (balance on 31 December 2005: €1,357.1 million, 31 December 2004: €1,205.1 million).
The Bank’s net profit for financial year 2005 amounted to €228.5 million, having increased by 11.14% from €205.6 million in 2004.

A crucial contribution to this result came from financial transactions in foreign currency and securities (€155.4 million in 2005, compared with €99.5 million in 2004) and from the considerably lower valuation losses at year-end: €21.7 million in 2005 (2004: €71.2 million), of which €21.2 million (2004: €3 million) were valuation losses on securities and €0.5 million (2004: €68.2 million) were valuation losses on foreign currencies.

The strengthening of major foreign currencies (most importantly the US dollar) against the euro in 2005 generated unrealised valuation gains of €46.2 million at the year-end (compared with unrealised valuation losses of €68.2 million one year earlier), which were taken to the Profit and Loss Account. Unrealised valuation gains on gold were even higher (€636.3 million).

It should be noted that, in line with the accounting principles set out by the European Central Bank for the NCBs of the European System of Central Banks, in particular the principle of prudence, unrealised valuation gains on gold, financial instruments in foreign currency and securities are not recognised as income in the Profit and Loss Account but are transferred directly to revaluation accounts (functioning as reserves for these particular assets only). By contrast, unrealised valuation losses at year-end are recognised as expenditure and are taken to the Profit and Loss Account.

The Bank’s total net profit was slightly higher in 2005 than one year before (2005: €610.8 million, 2004: €598.6 million). It should be noted that the ECB retained all of its profits for the year 2005, including the income earned on its share (8%) of total euro banknotes in circulation, in order to establish a provision against foreign exchange rate, interest rate and gold price risks.

Developments in the Bank’s expenses in financial year 2005

- The Bank’s operating expenses (personnel outlays, pensions and allowances, administrative expenses, write-offs/write-downs) increased by €12.6 million or 4% (2005: €323.1 million, 2004: €310.5 million).
- Provisions decreased by €23.3 million (2005: €59.2 million, 2004: €82.5 million). This partly reflects a base effect as the previous years had been burdened with an additional provision of €36.1 million to cover the ECB’s losses in 2004. From the provisions made in financial year 2005, an amount of €45 million relates to provisions for future liabilities of the Bank to personnel social security funds (in 2004 the corresponding amount was €35 million).
## Detailed Income Statement

### Net Operating Income

<table>
<thead>
<tr>
<th>2005 (euro)</th>
<th>2004 (euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. NET INTEREST INCOME</td>
<td>311,925,536</td>
</tr>
<tr>
<td>1.1 Interest income</td>
<td>683,455,834</td>
</tr>
<tr>
<td>a. Interest on lending to credit institutions</td>
<td>59,583,776</td>
</tr>
<tr>
<td>b. Interest on securities and on deposits with foreign credit institutions</td>
<td>212,840,569</td>
</tr>
<tr>
<td>c. Interest on lending to enterprises and individuals</td>
<td>2,330,416</td>
</tr>
<tr>
<td>d. Remuneration of claim on the ECB in respect of foreign reserves transferred</td>
<td>18,847,998</td>
</tr>
<tr>
<td>e. Interest on long-term claims against the Greek State</td>
<td></td>
</tr>
<tr>
<td>I. Interest on long-term loans to the Greek State granted before 31 Dec. 1993</td>
<td>6,244,528</td>
</tr>
<tr>
<td>II. Interest on long-term loans to the Greek State (conversion of debit balances on 31 Dec. 1993)</td>
<td>51,921,472</td>
</tr>
<tr>
<td>III. Interest on long-term bond issues in euro (conversion of debit balances of accounts of exchange rate valuation differences on 31 Dec. 93)</td>
<td>36,432,200</td>
</tr>
<tr>
<td>IV. Interest on long-term USD-linked bond issues (conversion of debit balances of accounts of exchange rate valuation differences on 31 Dec. 93)</td>
<td>17,227,224</td>
</tr>
<tr>
<td>V. Interest on a long-term euro-denominated loan (conversion of debit balances of accounts of exchange rate valuation differences on 31 Dec. 93)</td>
<td>110,219,547</td>
</tr>
<tr>
<td>VI. Interest on long-term USD-denominated claims</td>
<td>83,422</td>
</tr>
<tr>
<td>f. Interest on deposits and participations in the IMF</td>
<td>6,391,059</td>
</tr>
<tr>
<td>g. Interest on Greek government securities</td>
<td>161,312,941</td>
</tr>
<tr>
<td>h. Other interest income</td>
<td>20,682</td>
</tr>
<tr>
<td>1.2 Interest expense</td>
<td>–371,530,298</td>
</tr>
<tr>
<td>a. Interest on overdrafts on correspondent accounts</td>
<td>–50,392</td>
</tr>
<tr>
<td>b. Interest on intra-ESCB balances (TARGET)</td>
<td>–252,143,262</td>
</tr>
<tr>
<td>c. Interest on net liabilities related to the allocation of euro banknotes within the Eurosystem</td>
<td>–26,089,166</td>
</tr>
<tr>
<td>d. Interest on banks’ deposit accounts in the context of monetary policy implementation</td>
<td>–67,113,649</td>
</tr>
<tr>
<td>Description</td>
<td>2005</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>e. Interest on deposits by the Greek State</td>
<td>–18,414,751</td>
</tr>
<tr>
<td>f. Interest on deposits by public entities in foreign currency</td>
<td>–4,498,050</td>
</tr>
<tr>
<td>g. Interest on the allocation of SDRs</td>
<td>–3,213,891</td>
</tr>
<tr>
<td>h. Other interest expense</td>
<td>–7,137</td>
</tr>
<tr>
<td>2. NET RESULT OF FINANCIAL OPERATIONS, WRITE-DOWNS AND RISK PROVISIONS</td>
<td>133,713,007</td>
</tr>
<tr>
<td>3. NET INCOME FROM FEES AND COMMISSIONS</td>
<td>124,906,121</td>
</tr>
<tr>
<td>4. INCOME FROM EQUITY SHARES AND PARTICIPATING INTERESTS</td>
<td>3,476,715</td>
</tr>
<tr>
<td>5. NET RESULT OF POOLING OF MONETARY INCOME</td>
<td>9,874,431</td>
</tr>
<tr>
<td>6. OTHER INCOME</td>
<td>26,903,702</td>
</tr>
<tr>
<td>TOTAL NET INCOME</td>
<td>610,799,512</td>
</tr>
</tbody>
</table>
NOTES ON NET OPERATING INCOME ACCOUNTS

The Bank’s net income totalled €610.8 million in 2005, which is €12.2 million or 2% higher than in 2004 (€598.6 million).

An item-by-item analysis and comparison with the previous year are provided below:

1. Net interest income

Net interest income (interest income less interest expense) rose by €10.4 million relative to the previous fiscal year and reached €311.9 million (2004: €301.5 million). This change was mainly due to the €9.8 million increase in interest income (2005: €683.4 million, 2004: €673.6 million). Interest expense fell slightly by €0.6 million (2005: €371.5 million, 2004: €372.1 million).

More specifically, the individual categories of interest are as follows:

1.1 Interest income

a) Interest on lending to credit institutions

This refers to the financing of domestic credit institutions through open market operations, in the context of the single monetary policy of the Eurosystem. The largest part of this sub-item relates to main refinancing operations (with a maturity of seven days) and the remainder relates to longer-term refinancing operations (with a maturity of three months).

In financial year 2005, this category showed a significant increase of €21.2 million or 55.2%, largely as a result of the higher volume of main refinancing operations (average outstanding amount in 2005: €2,596.9 million, 2004: €1,785 million) and longer-term refinancing operations (average outstanding amount in 2005: €203 million, 2004: €45 million). Moreover, the increase in interest rates also contributed to this development, albeit to a lesser extent (average MRO rate 2.07% in 2005 compared with 2.02% in 2004 and average LTRO rate 2.17% in 2005 compared with 2.08% in 2004).

<table>
<thead>
<tr>
<th>Interest on lending to credit institutions</th>
<th>2005 (million euro)</th>
<th>2004</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>MROs</td>
<td>55.1</td>
<td>36.8</td>
<td>18.3</td>
</tr>
<tr>
<td>LTROs</td>
<td>4.5</td>
<td>1.0</td>
<td>3.5</td>
</tr>
<tr>
<td>other lending</td>
<td>0</td>
<td>0.6</td>
<td>–0.6</td>
</tr>
<tr>
<td>Total</td>
<td>59.6</td>
<td>38.4</td>
<td>21.2</td>
</tr>
</tbody>
</table>
b) Interest on securities and deposits with foreign credit institutions

This sub-item consists of interest on securities and deposits with euro area and non-euro area credit institutions, both in euro and in foreign currency.

<table>
<thead>
<tr>
<th>Interest by type of assets</th>
<th>2005 (million euro)</th>
<th>2004 (million euro)</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>– on securities</td>
<td>172.5</td>
<td>173.7</td>
<td>–1.2</td>
</tr>
<tr>
<td>– on time deposit accounts and current accounts</td>
<td>40.3</td>
<td>49.1</td>
<td>–8.8</td>
</tr>
<tr>
<td>Total</td>
<td>212.8</td>
<td>222.8</td>
<td>–10.0</td>
</tr>
</tbody>
</table>

The small decrease of €10 million shown above was more than offset by a significant rise in profits from financial operations (item 2 of the profit and loss account).

c) Interest on lending to enterprises and individuals

This interest, which mainly stems from housing and personal loans to the Bank’s personnel, fell by €0.5 million to €2.3 million in 2005 from €2.8 million in 2004.

d) Remuneration of claims arising from the transfer of foreign reserves to the ECB

This sub-item refers to interest on the Bank’s euro-denominated claim on the ECB in respect of foreign exchange reserves transferred, which is remunerated at 85% of the latest marginal MRO rate. In 2005 this category recorded a small increase of €0.3 million relative to the previous year and stood at €18.8 million (2004: €18.5 million).

e) Interest on long-term claims against the Greek State

This sub-item refers to interest on loans granted by the Bank of Greece to the Greek State until 31 December 1993.

In 2005 this interest totalled €222.1 million, having fallen by €4.2 million from 226.3 million in 2004, as a result of partial loan repayment.

f) Interest on deposits and participations in the IMF

This sub-item comprises interest on Greece’s SDR-denominated participation in the IMF and on the Bank’s SDR holdings with the IMF. This category of interest income rose by €0.7 million relative to 2004 and reached €6.4 million (2004: €5.7 million).
The change was due to a significant increase in SDR interest rates, while Greece’s SDR-denominated participation in the IMF declined to the benefit of its euro-denominated participation.

g) Interest on Greek government securities

Interest on the Bank’s holdings of Greek government securities rose by €2.3 million to €161.3 million in 2005, from €159 million in 2004, owing to an increase in average yields which more than offset a decline in the level of holdings (31 December 2005: €3,635.0 million, 31 December 2004: €3,746.0 million).

h) Other interest income

This sub-item declined to €20,682 in 2005 from €46,053 in 2004.

1.2 Interest expense

a) Interest on overdrafts on correspondent accounts

Interest on debit balances on current accounts with correspondent banks amounted to €50,392, compared with €23,946 in 2004.

b) Interest on intra-ESCB balances (TARGET)

<table>
<thead>
<tr>
<th>(million euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2001</strong></td>
</tr>
<tr>
<td>320.9</td>
</tr>
</tbody>
</table>

This interest is calculated on the basis of the daily balances of the account dedicated to the transactions of the Bank of Greece with the other NCBs of the ESCB within the TARGET system.

In the first two years after the Bank joined the ESCB (2001 and 2002), this interest increased significantly, owing to the transfer of excess liquidity from domestic credit
institutions to other EU countries, while gradual declines have been seen thereafter. The decline of 2003 was exclusively due to the reduction of the interest rate (marginal MRO rate), as the average annual balance of the account increased.

The declines of 2004 and 2005 reflected a fall in the balance on the TARGET account, in the absence of significant changes in the interest rate over the same period (the interest rate increase of 6 December 2005 from 2% to 2.25% had a negligible impact).

It should be noted that this interest expense replaced the interest paid by the Bank until 2001 to domestic credit institutions on their required reserve holdings.

c) Interest on net liabilities related to the allocation of euro banknotes within the Eurosystem

This interest expense did not change significantly (2005: €26.1 million, 2004: €25.1 million) and is calculated on the basis of:
- the Bank’s liability corresponding to the ECB’s share of total euro banknote issue;
- the intra-Eurosystem claim/liability corresponding to the value of euro banknotes put into circulation by the Bank of Greece, adjusted to ensure that the Bank’s share of total euro banknotes in circulation is equal to its banknote allocation key;
- the amount of adjustment. From 2002 to 2007, intra-Eurosystem balances related to the allocation of euro banknotes are adjusted, in order to avoid sharp fluctuations in the monetary income of Eurosystem NCBs (see “Banknotes in circulation” under “Accounting Policies” above).

d) Remuneration of credit institution’s required reserve holdings

This sub-item discloses interest on banks’ mandatory deposits (minimum reserves) in the context of the Eurosystem single monetary policy.

Between 2004 and 2005 there was a considerable increase of €10.4 million (2005: €67.1 million, 2004: €56.7 million), due mainly to a decline in the level of reserve holdings and, to a lesser extent, to a rise in interest rates (average MRO rate during the reserve maintenance period).

e) Interest on deposits by the Greek State

This sub-item rose by €6 million to €18.4 million in 2005, from €12.4 million in 2004, as a result of an increase in the amount of deposits.
f) Interest on deposits by public entities in foreign currency

This category of interest expense increased significantly by €2.4 million to €4.5 million in 2005 from €2.1 million in 2004, mainly as a result of the higher interest rates of the US dollar, the most common currency of denomination for these deposits.

g) Interest on the allocation of SDRs

Interest on the Bank’s liabilities from the allocation of IMF special drawing rights (SDRs) increased by €0.9 million (2005: €3.2 million, 2004: €2.3 million), due to a rise in SDR interest rates.

h) Other interest expense

This sub-item stood at €7,137 at the end of 2005, compared with €27,740 at the end of the previous year.

2. Net result of financial operations, write-downs and risk provisions

This item includes realised gains/losses from transactions in foreign exchange, debt instruments and SDRs, as well as the corresponding unrealised valuation losses at year-end.

The net result from financial operations in 2005 was €133.7 million, compared with €28.3 million in the previous financial year.

A detailed breakdown is provided below.

<table>
<thead>
<tr>
<th></th>
<th>2005 (million euro)</th>
<th>2004 (million euro)</th>
<th>Change (million euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Realised gains/losses from financial operations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– transactions in foreign exchange</td>
<td>81.7</td>
<td>71.9</td>
<td>9.8</td>
</tr>
<tr>
<td>– transactions in securities</td>
<td>69.5</td>
<td>29.6</td>
<td>39.9</td>
</tr>
<tr>
<td>– transactions in SDRs</td>
<td>4.2</td>
<td>–2.0</td>
<td>6.2</td>
</tr>
<tr>
<td>Total</td>
<td>155.4</td>
<td>99.5</td>
<td>55.9</td>
</tr>
<tr>
<td>2.2 Write-downs of financial assets and positions (unrealised losses)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– from the valuation of foreign exchange</td>
<td>–0.5</td>
<td>–68.2</td>
<td>67.7</td>
</tr>
<tr>
<td>– from the valuation of securities</td>
<td>–21.2</td>
<td>–3.0</td>
<td>–18.2</td>
</tr>
<tr>
<td>Total</td>
<td>–21.7</td>
<td>–71.2</td>
<td>49.5</td>
</tr>
<tr>
<td>Grand total</td>
<td>133.7</td>
<td>28.3</td>
<td>105.4</td>
</tr>
</tbody>
</table>
The significant increase of €105.4 million shown in the above table mainly stems from the higher realised gains from transactions in securities (2005: €69.5 million, 2004: €29.6 million) and from very low unrealised losses (2005: €0.5 million, 2004: €68.2 million) from the valuation of foreign exchange. The latter reflected the strengthening of major foreign currencies, in particular the US dollar and the SDR, against the euro.

On the other hand, the year-end valuation of foreign securities denominated in euro resulted in unrealised losses of €21.2 million (compared with €3.0 million in 2004).

3. Net income from fees and commissions

Net income from fees and commissions amounted to €124.9 million, compared with €141.6 million in 2004.

<table>
<thead>
<tr>
<th>Fees and commissions</th>
<th>2005 (million euro)</th>
<th>2004 (million euro)</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Income from fees and commissions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– from the management of Greek government debt</td>
<td>32.7</td>
<td>39.3</td>
<td>–6.6</td>
</tr>
<tr>
<td>– from payments and receipts on behalf of the Greek State</td>
<td>57.8</td>
<td>65.4</td>
<td>–7.6</td>
</tr>
<tr>
<td>– from the management of the “Common Fund” (surpluses of public entities and social security organisations)</td>
<td>27.7</td>
<td>22.0</td>
<td>5.7</td>
</tr>
<tr>
<td>– other income from fees and commissions</td>
<td>7.7</td>
<td>15.7</td>
<td>–8.0</td>
</tr>
<tr>
<td>Total</td>
<td>125.9</td>
<td>142.4</td>
<td>–16.5</td>
</tr>
<tr>
<td>3.2 Expenditure for fees and commissions</td>
<td>–1.0</td>
<td>–0.8</td>
<td>–0.2</td>
</tr>
<tr>
<td>Grand total</td>
<td>124.9</td>
<td>141.6</td>
<td>–16.7</td>
</tr>
</tbody>
</table>

The €16.7 million decrease shown in the table mainly reflects a drop in income from commissions on operations carried out by the Bank on behalf of the Greek State. By contrast, the significant increase of €5.7 million recorded under commissions from the management of surpluses of public entities and social security organisations resulted from the increased amount of the “Common Fund”.

xlv
4. Income from equity shares and participating interests

Income from equity shares and participating interests amounted to €3.5 million in financial year 2005 (2004: €2.5 million).

This income corresponds to dividends collected from the Bank for International Settlements (€2.2 million), DIAS Interbank Systems SA (€0.4 million) and Hellenic Exchanges SA (€0.9 million, of which €0.6 million was refund of capital).

2005 was another year when the ECB retained the full amount of its net profits, including income from its share (8%) of total euro banknotes in circulation, in order to establish a provision against foreign exchange rate, interest rate and gold price risks.

5. Net result of pooling of monetary income

Monetary income is the income accruing to the national central banks of the euro area in the performance of the Eurosystem’s monetary policy function.

The amount of each NCB’s monetary income is determined by measuring its actual income derived from its assets held against a “liability base”.

The liability base consists of the following liability items:
– banknotes in circulation;
– deposit liabilities to euro area credit institutions in euro, related to monetary policy operations;
– net intra-ESCB liabilities (TARGET); and
– net intra-Eurosystem liabilities related to the allocation of euro banknotes.

Any interest paid by an NCB on items included in the liability base is deducted from the monetary income of that NCB.

The assets that are held against the liability base (“earmarkable assets”) are the following:
– loans to euro area credit institutions related to monetary policy operations denominated in euro;
– intra-Eurosystem claims equivalent to the transfer of foreign reserves to the ECB;
– net intra-ESCB claims resulting from TARGET transactions;
– net claims related to the allocation of euro banknotes within the Eurosystem;
– a minimum amount of gold reserves for each NCB, according to its allocation key.

Gold is considered to generate no income.

Where the value of an NCB’s earmarkable assets exceeds or falls short of the value of its liability base, the difference is offset by applying to the value of the difference the average rate of return on the earmarkable assets of all NCBs taken together.

At the end of each financial year, the pooled monetary income of the Eurosystem is allocated to NCBs in proportion to their paid-up shares in the capital of the ECB.
The difference between the monetary income (€250.3 million) accrued to the Bank of Greece during 2005 and the amount to be allocated to it (€260.2) in proportion to its paid-up share in the ECB’s capital is the Bank’s net monetary income, which in 2005 was €9.9 million, compared with €10.8 million in 2004.

The above method for allocating monetary income was established by ECB Decision No. 16/2001 and will apply until 2007 (Accounting and Monetary Income Committee – AMICO, 30 June 2004).

6. Other income

Other income amounted to €26.9 million, compared with €113.9 million in the previous financial year.

The most important category under this heading is income from the activities of the Banknote Printing Works (IETA) of the Bank of Greece (€24 million). A much smaller category comprises income from the sale of useless materials and old equipment, including vehicles, from surpluses at the cashier’s, etc.

The observed significant decline reflects the fact that in the previous year an amount of €91.4 million was recognised as income, being the last portion of a total amount of €254.2 million corresponding to the value of the drachma banknotes that according to the Bank’s estimates (General Council Decision No. 3/23 February 2005) will not be presented for exchange against euro banknotes by the deadline of 1 March 2012; this value was transferred gradually to the Profit and Loss Accounts for the financial years 2002, 2003 and 2004.
OPERATING COSTS, DEPRECIATION AND PROVISIONS

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STAFF COSTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wages and salaries</td>
<td>132,282,005</td>
<td>126,350,375</td>
</tr>
<tr>
<td>Basic wages and salaries, benefits</td>
<td>122,606,661</td>
<td>117,193,818</td>
</tr>
<tr>
<td>Other allowances</td>
<td>9,675,344</td>
<td>9,156,557</td>
</tr>
<tr>
<td>Employer’s contributions and other levies</td>
<td>68,528,483</td>
<td>65,463,505</td>
</tr>
<tr>
<td>Contribution to the ATPSYTE (Bank of Greece employees’ healthcare fund)</td>
<td>13,127,745</td>
<td>12,246,167</td>
</tr>
<tr>
<td>Contribution to the Pension Fund</td>
<td>31,874,676</td>
<td>29,739,637</td>
</tr>
<tr>
<td>Contribution to the MTYTE (supplementary pension fund of Bank of Greece employees)</td>
<td>13,197,772</td>
<td>12,186,812</td>
</tr>
<tr>
<td>Contribution to other social security funds and other levies</td>
<td>10,328,290</td>
<td>11,290,889</td>
</tr>
<tr>
<td>PENSIONS AND BENEFITS</td>
<td>49,036,451</td>
<td>46,562,364</td>
</tr>
<tr>
<td>ADMINISTRATIVE AND OTHER EXPENSES</td>
<td>39,460,857</td>
<td>37,552,145</td>
</tr>
<tr>
<td>DEPRECIATION OF TANGIBLE AND INTANGIBLE FIXED ASSETS</td>
<td>33,803,564</td>
<td>34,613,846</td>
</tr>
<tr>
<td>PROVISIONS</td>
<td>59,228,907</td>
<td>82,476,430</td>
</tr>
<tr>
<td>TOTAL EXPENSES</td>
<td>382,340,267</td>
<td>393,018,665</td>
</tr>
</tbody>
</table>

BREAKDOWN OF OPERATING COSTS

The Bank’s operating costs (staff costs, pensions and benefits, administrative expenses, depreciation) increased by €12.6 million or 4% (2005: €323.1 million, 2004: €310.5 million).

In more detail:
- Outlays for wages and salaries (basic wages and salaries, benefits) increased by €5.4 million or 4.6% (2005: €122.6 million, 2004: €117.2 million).
- Outlays for other allowances increased by €0.5 million or 5.4% (2005: €9.7 million, 2004: €9.2 million).
- Employer’s contributions and other levies rose by €3 million or 4.6% (2005: €68.5 million, 2004: €65.5 million).
- Pensions and benefits increased by €2.4 million or 5.2% (2005: €49.0 million, 2004: €46.6 million).
Administrative and other expenses rose by €1.9 million or 5% (2005: €39.5 million, 2004: €37.6 million).

Depreciation declined by €0.8 million or 2.3% (2005: €33.8 million, 2004: €34.6 million).

As from financial year 2005, the annual depreciation of the Bank’s buildings is calculated at a 2.5% rate against 5%, on the basis of the estimated lifetime of buildings (40 years). Moreover, the annual depreciation of the banknote production cost is calculated at a rate of 20% over the average lifetime of banknotes (5 years).

**Total provisions** made in 2005 amounted to €59.2 million compared with €82.5 million in the previous year (a reduction of €23.3 million). This reduction reflects the fact that the year 2004 was burdened with an additional provision of €36.1 million in order to cover the ECB’s loss for that year.

<table>
<thead>
<tr>
<th>Breakdown of provisions</th>
<th>2005</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>– Provision under Article 71 of the Statute</td>
<td>14,000,000</td>
<td>11,152,473</td>
</tr>
<tr>
<td>– Provision against future liabilities of the Bank to personnel social security funds</td>
<td>45,000,000</td>
<td>35,000,000</td>
</tr>
<tr>
<td>– Provision deducted from monetary income</td>
<td>0</td>
<td>36,095,050</td>
</tr>
<tr>
<td>– Other provisions according to decisions of the General Council</td>
<td>228,907</td>
<td>228,907</td>
</tr>
<tr>
<td><strong>Total provisions</strong></td>
<td><strong>59,228,907</strong></td>
<td><strong>82,476,430</strong></td>
</tr>
</tbody>
</table>
**NET PROFITS**

Net profits after provisions amounted to €228.5 million in 2005, compared with €205.6 million in 2004, i.e. they increased by €22.9 million or 11.14%.

**ALLOCATION OF NET PROFIT**  
(*Article 71 of the Statute*)

The General Council proposes to the General Meeting of Shareholders that the net profit be allocated as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividend on capital, €0.67 per share on 15,891,909 shares (this dividend</td>
<td>€10,647,579</td>
</tr>
<tr>
<td>corresponds to 12% of the share capital)</td>
<td></td>
</tr>
<tr>
<td>To the ordinary reserve</td>
<td>€22,248,671</td>
</tr>
<tr>
<td>Additional dividend €1.73 per share on 15,891,909 shares</td>
<td>€27,493,003</td>
</tr>
<tr>
<td>Tax payment (32% of distributed profits, Article 6 of Law 3296/2004)</td>
<td>€17,948,509</td>
</tr>
<tr>
<td>To the Government</td>
<td>€150,121,483</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>€228,459,245</strong></td>
</tr>
</tbody>
</table>

The General Council proposes to the General Meeting of Shareholders that a total dividend of €2.40 per share be distributed to shareholders. This would be 12.15% higher than the total dividend of €2.14 per share (adjusted to take into account the new number of shares) distributed in 2004.

 Athens, 22 March 2006

For the General Council

THE CHAIRMAN

NICHOLAS C. GARGANAS

GOVERNOR OF THE BANK OF GREECE