

BANK OF GREECE

ANNUAL REPORT 2000



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ANNUAL REPORT

2000

PRESENTED TO THE 68th GENERAL MEETING
OF SHAREHOLDERS ON 27 APRIL 2001
BY GOVERNOR LUCAS PAPADEMOS



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I. FINANCIAL RESULTS FOR 2000

The Bank's Profit and Loss Account for 2000 shows total gross revenue of 275.0 billion drachmas and total operating expenses of 107.8 billion drachmas. Therefore, net profits reached 167.2 billion drachmas, compared with 110.1 billion drachmas in 1999.

Out of these net profits, an amount of 2.0 billion drachmas, corresponding to 12% of the Bank's capital, will be distributed as dividend to shareholders under Article 71 of the Bank's Statute. Furthermore, the General Council proposes to the General Meeting of Shareholders that an additional dividend of 6.9 billion drachmas be distributed under the same Article. A total of 8.9 billion drachmas would thus be distributed as dividend, compared with 6.3 billion drachmas last year, the total dividend per share amounting to 1,000 drachmas, compared with 700 drachmas last year.

From the balance of net profits remaining after dividend distribution and income tax payment, 152.0 billion drachmas shall be paid to the government in accordance with Article 71 of the Statute, compared with 99.7 billion drachmas in 1999. The General Council, at its 14th meeting of 20 December 2000, approved the revaluation of the Bank's fixed assets, by virtue of Law 2065/92. This revaluation generated a surplus value of 3.7 billion drachmas, which appears in the special reserve account "Revaluation Difference (Law 2065/92)". This reserve will be capitalised in accordance with the same Law by 31 December 2002.

Total revenue from interest, commission fees and other receipts from domestic and foreign transactions – net of interest and commission payments – increased by 87.0 billion drachmas or 46.3% compared with 1999 and, as mentioned above, came to 275.0 billion drachmas.

Net interest and commission fees from transactions in drachmas between the Bank and the government amounted to 253.5 billion drachmas, compared with 236.0 billion drachmas in 1999, namely it increased by 17.5 billion drachmas or 7.4%. This increase was primarily linked to interest on loans with a foreign currency clause, as well as to interest accrued on government securities held by the Bank. Specifically, interest on claims with a foreign currency clause increased by 7.4 billion drachmas, as a result of the considerable rise in the relevant interest rates, and interest on government paper holdings grew by 5.6 billion drachmas, owing to the increase in the average stock of these holdings. Interest paid on government deposits with the Bank of Greece decreased by 6.1 billion drachmas. Interest on outstanding long-term loans fell by 2.9 billion drachmas as the outstanding stock of such loans has been diminishing from the time at which the Bank of Greece ceased to extend new credit to the government.

Commission fees on public entities' assets managed by the Bank of Greece and invested in government paper rose by 0.4 billion drachmas compared with 1999, while fees from the management of the book-entry securities system decreased by 1.4 billion drachmas, compared with 1999, and came to 8.3 billion drachmas. By contrast, commission fees received by the Bank of Greece for the government accounts it keeps and the government securities it manages increased by 1.3 billion drachmas, compared with a decline of 1.2 billion in 1999.

The Bank's revenue from interest on the financing of credit institutions, particularly through standing facilities, decreased by 3.3 billion drachmas, relative to 1999. This development is mainly associated with the abolition, as from 10 March 2000, of the interest-bearing overdraft facility, in the context of the harmonisation of monetary policy instruments with those of the European Central Bank. Net interest paid to banks due to the Bank's interventions in the interbank drachma market for the control of bank liquidity (aimed at keeping interest rates at levels compatible with the anti-inflationary policy pursued) was also lower. In this respect, interest payments related to the absorption of bank liquidity decreased by 127.4 billion drachmas compared with 1999, while interest income from liquidity-providing operations increased by 20.1 billion drachmas. Interest paid by the Bank on other types of credit institutions' deposits (not associated with interbank market interventions) fell by 2.9 billion drachmas, owing both to the lower rate of remuneration for reserve requirements and a change in the maintenance period.

The Bank's foreign exchange operations led to a net asset position of 157.0 billion drachmas, compared with 235.6 billion in 1999, implying a drop of 78.6 billion drachmas or 33.4%. This reflected a reduction in revenue from the management of foreign exchange reserves, which, at average levels, were considerably lower in 2000 than in 1999. Between the beginning and the end of the year, the Bank's foreign exchange reserves, including gold, declined by \$5.4 billion, compared with a \$0.8 billion increase in 1999, and reached \$13.6 billion at end-2000. It should be noted that the Bank's foreign exchange reserves, as calculated on the basis of the drachma/US dollar parity effective on 31 December 2000, namely 368.62 drachmas per US dollar (31 December 1999: 328.44 drachmas) fell by 1,272.3 billion drachmas. Gold has been valued at 65% of the average purchase price in US dollars in December 2000.

The Bank's total operating costs, excluding amortisation payments and provisions, amounted to 71.5 billion drachmas in 2000, having increased by 5.2 billion drachmas or 7.8% compared with 1999. Specifically, outlays for personnel remuneration and pensions rose by 4.0 billion drachmas or 9.2%, compared with 4.1 billion drachmas or 10.4% in 1999. This increase in the wage bill in 2000 was the result of grade and pay advancement and the implementation of the wage agreement covering 2000 as well. Contributions to employees' insurance funds rose by 0.7 billion drachmas, compared with an increase of 1.6 billion drachmas in 1999. Finally, a small increase of 0.5 billion drachmas was recorded in other operating costs, comprising outlays for the purchase of books and printed matter, the leasing of accounting machines, maintenance of the Electronic Secondary Securities Market (HDAT) equipment, as well as fees for the procurement of electronic data supply services.

In 2000, the Bank of Greece recruited 104 employees, 31 of whom are specialised in economics, financing, accounting and information technology, and 18 technicians, while in the same period 144 employees retired. On 1 January 2001, 3 more employees retired as they had reached the age limit. Consequently, the Bank's staff decreased by 40 employees within the year and on 1 January 2001 stood at 3,169 persons.

The required changes in the Bank's organisational structure continued also in 2000 and were aimed at ensuring greater operational efficiency in view of the Bank's integration into the Eurosystem upon Greece's entry into the Economic and Monetary Union (EMU) as from 1st January 2001. Specifically, in order to enable the Bank to respond better and in a timely manner to its obligations to the European Central Bank, Eurostat and other international organisations and bodies, a separate Statistics Department was established, comprising certain units that previously belonged to the Economic Research Department. Furthermore, within the Monetary Policy and Banking Department, an Office responsible for the oversight of payment systems was set up with the aim to secure the integrity and credibility of payment systems. Furthermore, two new sections were created in the Foreign Exchange Department, namely the Risk Management, Performance Measurement and Foreign Exchange Liquidity Section and the International Markets Research and Analysis Section, as well as three more services with the tasks of managing the ECB's reserve assets and monitoring the computer applications of the Foreign Exchange Department. Moreover, significant changes were made in the organisational structure of the Economic Research Department and the Legal Department.

In order to enable the smooth integration of the Bank of Greece into the Eurosystem, the introduction of the euro in scriptural form and the conduct of the single monetary policy as from 1 January 2001, a number of substantial adjustments were made in a considerable part of the Bank's operations. Specifically, the drachma balances of credit institutions' accounts with the Bank of Greece, which are associated with the conduct of the monetary policy, were converted into euro; the HERMES and the EURO-HERMES payment systems were merged in a single system; and, as from 1 January 2001, all inter-bank market operations are conducted in euro. Meanwhile, the Bank undertook major investment in technological equipment and adjusted its system for the management of foreign exchange reserves, whether held by the Bank of Greece or managed by the Bank on behalf of the ECB and according to its instructions. Furthermore, the Bank successfully completed the migration to the euro environment of its accounting systems and of the systems related to the management and trading of Greek government securities. Also, the Bank's systems of communication with the ECB were adjusted to the new environment, public debt was converted into euro and, as from 2 January 2001, HDAT operates in euro, ensuring high marketability of Greek government securities.

In the context of preparations for the cash changeover and the withdrawal of drachma banknotes and coins, the Bank has been participating in the information campaign launched by the ECB and the central banks of the 12 countries of the euro area in cooperation with the advertisement company Publicis. The campaign focuses on the external appearance, the denominations and the security features of the euro banknotes and coins which will be put into circulation on 1 January 2002, replacing the national currencies of the euro area Member States. In 2000 the improvement of the IETA premises and the completion of its machinery equipment continued, and a Quality Control Unit was established so that the euro banknotes and coins produced can fully

meet the high quality standards required by the ECB. Moreover, the Cash Department's equipment will soon be complemented and upgraded with state-of-the-art banknote counting and sorting machines.

In the area of personnel training, the Bank continued to hold training programmes for improving the skills of its staff. Particular emphasis was placed on issues related to the management, development and safety of information systems, familiarisation with, and use of, new information systems and the management of foreign exchange reserves.

With a view to contributing to the systematic research of the Greek economy, the Bank of Greece held, in cooperation with the Brookings Institution, in December 2000 a two-day conference entitled "Performance and Prospects of the Greek Economy". The topics addressed at the conference were related to the monetary and economic policies and the need for structural adjustments in the Greek economy. The papers were prepared jointly by Greek and foreign experts and, along with the findings of the conference, will be included in a book to be published by the Bank of Greece and the Brookings Institution.

In the past year, maintenance and remodelling works in the premises of the Bank's Head Office and branches continued, with a view to improving working conditions and enhancing physical security and safety of transactions. Specifically, the construction of the new premises of the Alexandroupolis branch was completed, the premises of the Patras branch will soon be finished and the construction of a second building for the Head Office in Athens is proceeding at a fast pace. Once this building is completed, the housing needs of the Head Office will be fully met.

In 2000, the Bank kept up its efforts to increase its efficiency in all its field of competence. In particular, it contributed decisively to the fulfilment of the criteria for Greece's entry into the euro area, as well as in the creation of favourable conditions in money and foreign exchange markets for a seamless transition to the single currency. Furthermore, it completed in time and successfully the required institutional changes and technical preparations for the introduction of the euro and for the Bank's integration to the Eurosystem. The culmination of these hard efforts was the recognition by our European Union partners that the whole venture of Greece's full integration into the European Union as from 1 January 2001 was accomplished in an exemplary manner, which in the future will serve as a model for accession countries. A key role in these achievements was certainly played by the Bank's staff, which worked with zeal, commitment and a high sense of responsibility.

By a Presidential Decree published in the Government Gazette on 23 March 2001, Mr. Antonios Mantzavinos was reappointed member of the Monetary Policy Council for a second six-year term. At today's 68th Annual General Meeting, in accordance with Article 21 of the Bank's Statute, the terms of office of General Council members Mrs Christina Sakellaridi and Mr. Ioannis Gozadinos expire. Consequently, the General Meeting of Shareholders will be called upon to elect two new General Council members, for a term of three years, namely until the Annual General Meeting for year 2004.

The outgoing General Council members are eligible for re-election.

II. THE GREEK ECONOMY IN THE EURO AREA

1. INTRODUCTION

The year 2000 was a landmark in the progress of the Greek economy. At the European Union Summit last June it was confirmed that Greece had met the convergence criteria required for joining the euro area as of 1 January 2001. The adoption of the single currency is the culmination of a long and arduous effort to stabilise the Greek economy. The high degree of macroeconomic stability achieved in recent years has brought multiple benefits and has contributed to the acceleration of the economy's growth rate, which, in 2000, overshot the euro area average for the fifth consecutive year.

The year under review was particularly important to the Bank of Greece as well. Monetary policy, which has played a decisive role in curbing inflation and establishing conditions of monetary and exchange rate stability over the last few years, had to ensure a smooth transition to the single currency through the gradual convergence of the current exchange rate of the drachma to its rate of conversion into euro, on the one hand, and of interest rates in the domestic money market to the corresponding lower rates in the euro area, on the other. The gradual adjustment of interest rates helped moderate inflationary pressures related to the inevitable easing of monetary conditions. At the same time, monetary policy had to reduce the impact of exogenous inflationary pressures on domestic prices, following the large increase in oil prices on the world market and the substantial appreciation of the US dollar against the euro. Moreover, many institutional, operational and technical adjustments were successfully made during 2000 with a view to introducing the euro into Greece as a unit of account and enabling the Bank of Greece to participate in the Eurosystem.

2. THE GREEK ECONOMY IN 2000

2.1 Global and European economic environment

Developments in the world economy were generally favourable in 2000. Their main characteristics were the particularly high rate of economic growth (4.8%, compared with 3.5% in 1999), the rather low average annual inflation (2.3% in the advanced economies, 1.4% in 1999) and the considerable expansion of world trade (12.4%, 5.3% in 1999). In the second half of 2000, however, economic growth decelerated worldwide. The slowdown was particularly noticeable in the United States, as a result of, *inter alia*, high fuel prices, a steep drop in stock market prices, as well as the deterioration of credit terms and of the prospects for business profits.

In the euro area, gross domestic product (GDP) grew by 3.4%, the highest rate in the last ten years, while the unemployment rate fell to 8.9%, from 9.9% in 1999.

Nevertheless, the steep rise in world oil prices and the appreciation of the US dollar against the euro in the course of the year led to a considerable acceleration of inflation in the euro area (2.3% on average in 2000, compared with 1.1% in 1999). Domestic inflationary pressures, however, remained moderate in the euro area; in fact, the growth rate of unit labour costs slowed down to 0.9% (1999: 1.2%).

The adverse short-term effects that the rise in oil prices and the depreciation of the euro had on inflation, combined with high rates of monetary and credit expansion in a period of fast-growing economic activity, were creating medium-term risks to price stability in the euro area. To deal with inflationary risks, the European Central Bank (ECB) raised its main refinancing rate six times, by a total of 1.75 percentage points to 4.75% during 2000. In the United States, the Federal Reserve Bank (FED) increased by 1 percentage point to 6.5% the interest rate-target in the interbank money market, so as to contain inflationary pressures, which were getting stronger owing to the rise in oil prices and the fast growth of domestic economic activity in the first half of 2000.

The Greek economy was favourably affected by the high growth rates of both the global and the European economy, as well as by the expansion of world trade. However, the rise in world crude oil prices and the weakening of the euro against the dollar caused inflationary pressures, contributed to the considerable broadening of the current account deficit and made the conduct of anti-inflationary monetary policy more difficult in the final stage of transition to the single currency. On the other hand, the rise in ECB interest rates facilitated the convergence of domestic interest rates to the corresponding euro area rates.

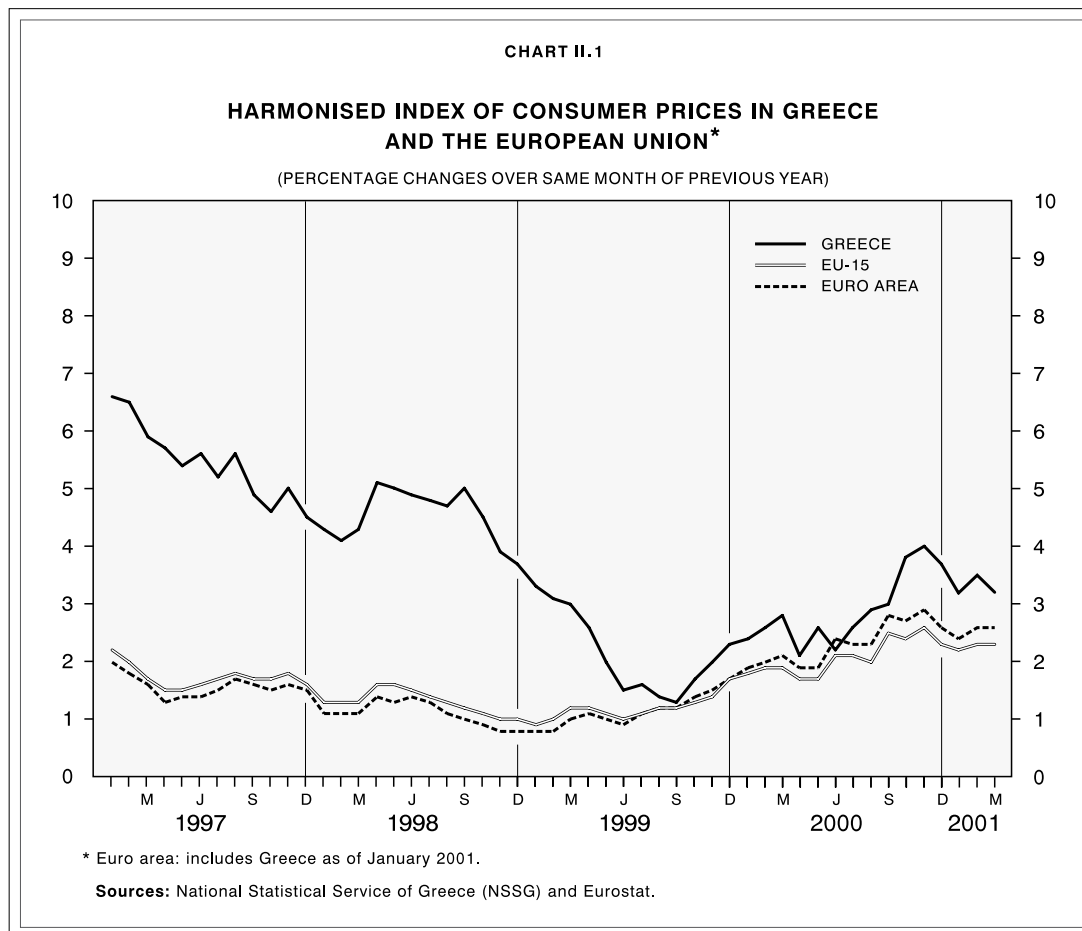
2.2. Inflation

A high degree of price stability was maintained in Greece until mid-2000, on the basis of the *average annual* rate of increase in the Harmonised Index of Consumer Prices (HICP) (see Chart II.1). This rate came to 2% in March 2000, making it possible to meet the relevant convergence criterion. However, as a consequence of continuing inflationary pressures due to the rise in crude oil prices and the appreciation of the dollar against the euro, the average annual HICP rate rose to 2.9% in 2000, while the annual inflation rate reached 3.7% in December. On the basis of the national Consumer Price Index (CPI), annual inflation ranged from 2.5% to 3.1% in the first half of 2000. Then, it accelerated to 4.2% in November, but fell slightly to 3.9% in December. This development reflects mainly the effect of the two exogenous factors mentioned above.

Core inflation, which is not directly affected by the rise in fuel prices,¹ initially showed a downward trend and remained below 2% until August 2000 (see Chart II.2). In September, however, it began to rise and eventually reached 3.4% in December. The ini-

1 Core inflation is measured by the annual rate of change in the CPI, excluding fuel and fresh fruit/vegetables.

tial containment of core inflation at a low level was mainly due to the anti-inflationary monetary policy pursued in recent years (the effects of which on prices appear mostly with a time lag), the reduction in the general government's deficit as a percentage of GDP, the slower growth of unit labour costs (particularly in the business sector), and stronger competition in the telecommunications sector. The rise in core inflation as of September was due not only to the phasing out of the favourable effects that some indirect tax cuts in 1999 had on prices, but also to the indirect effect of the rise in fuel and imported raw material



prices on the prices of domestic goods and services. Moreover, the appreciation of the dollar against the euro and, to a lesser extent, the depreciation of the drachma against the euro, had a direct effect on the prices of imported consumer goods. However, the average annual level of core inflation fell to 2% in 2000 (from 2.9% in 1999).

One of the factors that contributed to the initial containment of core inflation was, as mentioned above, unit labour costs, the growth rate of which declined slightly in the whole economy (2000: 2.6%, 1999: 2.8%). In the business sector the deceleration was more noticeable (2.1%, compared with 2.9% in 1999) and affected more directly inflation

on the cost side, contributing to the partial offsetting of the factors which pushed inflation upwards. However, the growth rate of unit labour costs in the whole economy remains considerably higher in Greece than in the euro area (where it rose by 0.9% in 2000, compared with 1.3% in 1999).

Another development related to the final level of core inflation was the convergence of the rates of increase in goods and services prices. In the past, services prices usually rose faster than those of goods, because the services sector was less exposed to



international competition than the goods production sector. In fact, 2000 was the first year in which services prices increased less than goods prices (average annual change: 2.8%, compared with 3.4%). Of course, this outcome reflects, *inter alia*, the fact that goods include fuel (the prices of which rose considerably in 2000), while services include public enterprises' rates (which, in general, have increased moderately in recent years). Nevertheless, the finding that the rates of increase in goods prices converge with those in services prices holds good even when the growth rates of goods prices excluding fuel and fresh fruit/vegetables are compared with the prices of services rendered by the pri-

vate sector (i.e. excluding public enterprises). As shown in Chart IV.1B (p. 95), there was a marked convergence in the course of 2000. The annual rate of increase in private sector services was steadily slowing down from the beginning of 1999 – reflecting the gradual establishment of a climate of price stability – and declined to 3.7% in December 2000. Market deregulation for telecommunications, energy and transport is expected to lead, in the medium term, to further cuts in services prices, while it tends to reduce the significance of distinguishing between services supplied by the private sector and those rendered by public enterprises.

Inflation also accelerated in almost all the other European countries in 2000. The best performance, in terms of price stability, was recorded by the United Kingdom (0.8%) and Sweden (1.3%) in the European Union and by France (1.8%), Austria (2.0%) and Germany (2.1%) in the euro area. By contrast, the highest inflation rates were observed in Ireland (5.3%), Luxembourg (3.8%) and Spain (3.5%) (see Chart II.3).

2.3 Economic activity and employment

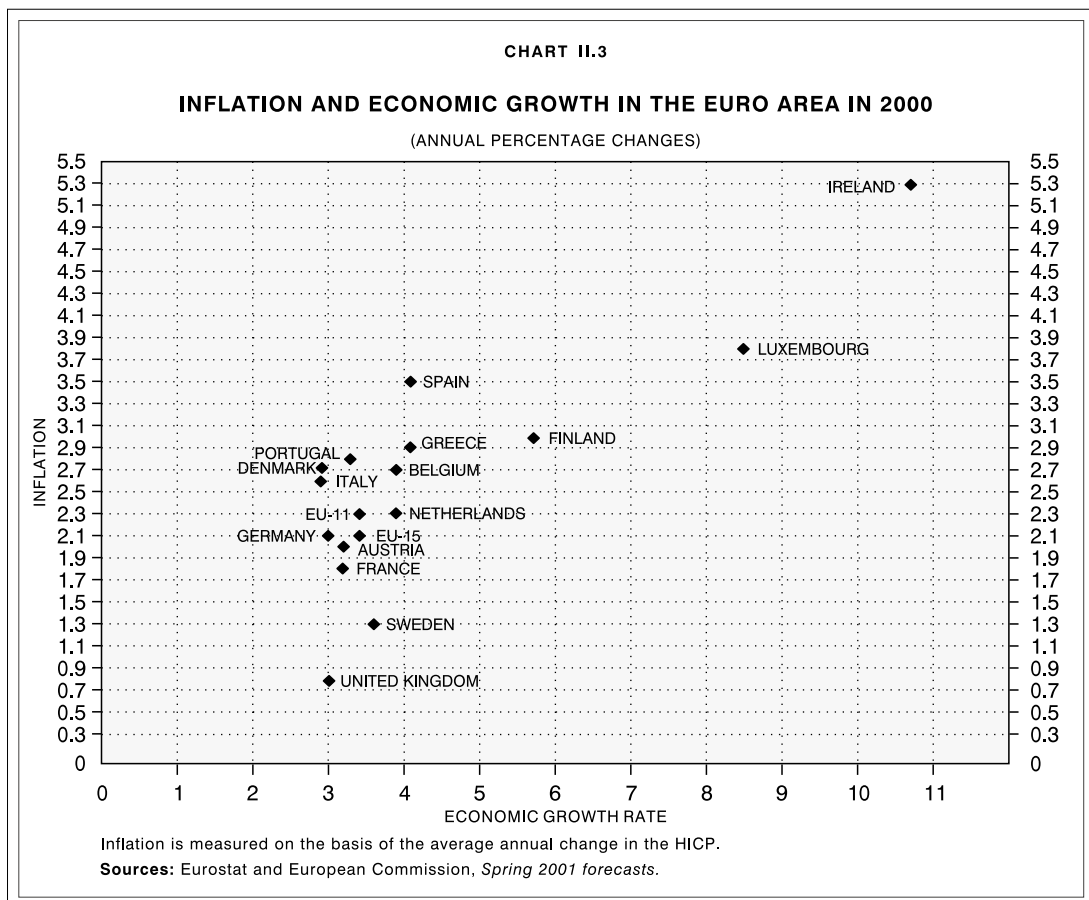
In Greece, the inevitable easing of monetary policy (particularly the reduction in interest rates) had counterbalancing effects on both consumption and investment demand, given that households and enterprises are, at the same time, lenders and borrowers and, in addition, interest rates also affect production costs. It is estimated, however, that the final outcome – if the drop in equity prices and the rise in real estate prices are also taken into account – was the strengthening of consumption and investment demand.

Indeed, economic activity growth accelerated in 2000 and overshot, for the fifth year in a row, the corresponding rate in the euro area and the European Union (see Chart II.4). GDP growth reached 4.1% (1993: 3.4%). The contribution of domestic demand to the GDP increase reached 4.6 percentage points in 2000 and stemmed almost equally from the expansion of investment demand and private consumption demand. In contrast, the contribution of the real external balance of goods and services was negative (–0.4 of one percentage point, see Chart II.5). On the supply side, the services sector continued to expand steadily, the increase in manufacturing output accelerated impressively, electricity production and construction activity grew at high rates and mining activity recovered.

The fast rise in investment (of the order of 9-10%) was mainly due to the growth of investment by private and public enterprises and, to a lesser extent, to investment by general government and to housing investment. Stronger investment activity in the private sector reflected a high degree of monetary stability and, in general, a climate of confidence in view of Greece's entry into the euro area, as well as the preparations being made to deal with increasing foreign competition. The investment programmes of public enterprises and central government are related to the execution of major infrastructure

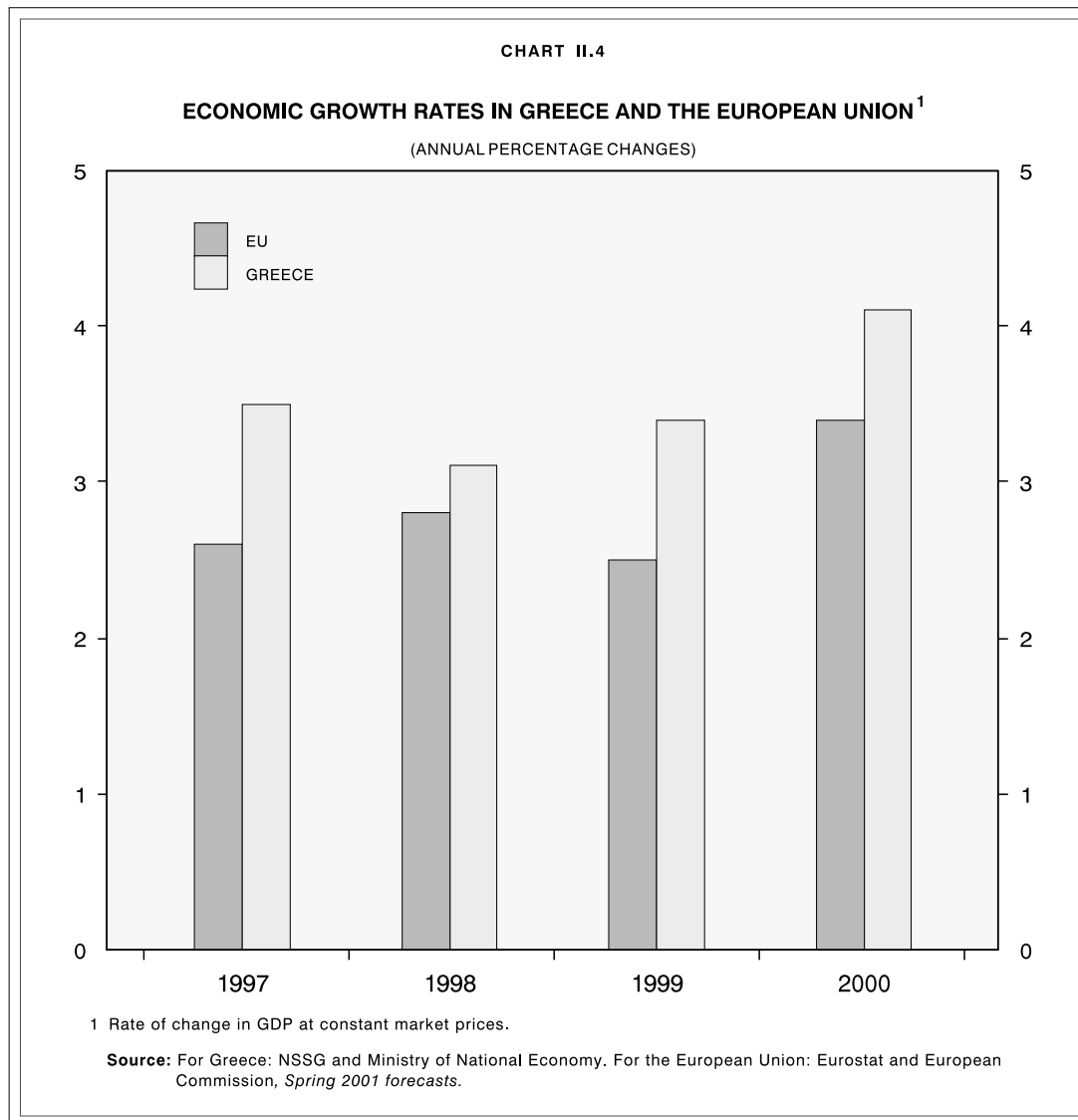
projects and – in the case of certain public enterprises – to the preparations for the “opening” of markets. The rise in private consumption (by around 3%) was consistent with, on the one hand, the larger than in 1999 increase in real disposable personal income (particularly of wage earners), partly due to tax relief, and, on the other hand, with faster credit expansion.

As stressed in the past, resources from the EU Structural Funds and the Cohesion Fund have contributed substantially to the considerable increase in public and private



investment during recent years. From this viewpoint, particularly interesting are the conclusions of the European Committee in the *Second Report on Economic and Social Cohesion*, published in January 2001. According to the Committee, transfers from the EU Structural Funds in the 1989-1999 period were equal to 3.5% of Greece’s GDP (the corresponding rates for Portugal, Spain and Ireland were lower) and to 10% of investment (the same as in Portugal). The Committee estimates that at the end of the above ten years Greece’s GDP was 9.9% higher as a result of the structural intervention, while the result, in terms of growth, was smaller in Portugal (8.5%), Ireland (3.7%) and Spain (3.1%).

It is interesting to note the changes in investment and savings on the basis of available national accounts data and estimates. The private sector's¹ average propensity to save, i.e. the proportion of gross disposable income not channelled into private consumption, remained almost unchanged in 2000, compared with 1999 (10.6%), according to Ministry of National Economy estimates. Over a longer period of time, the private sector's

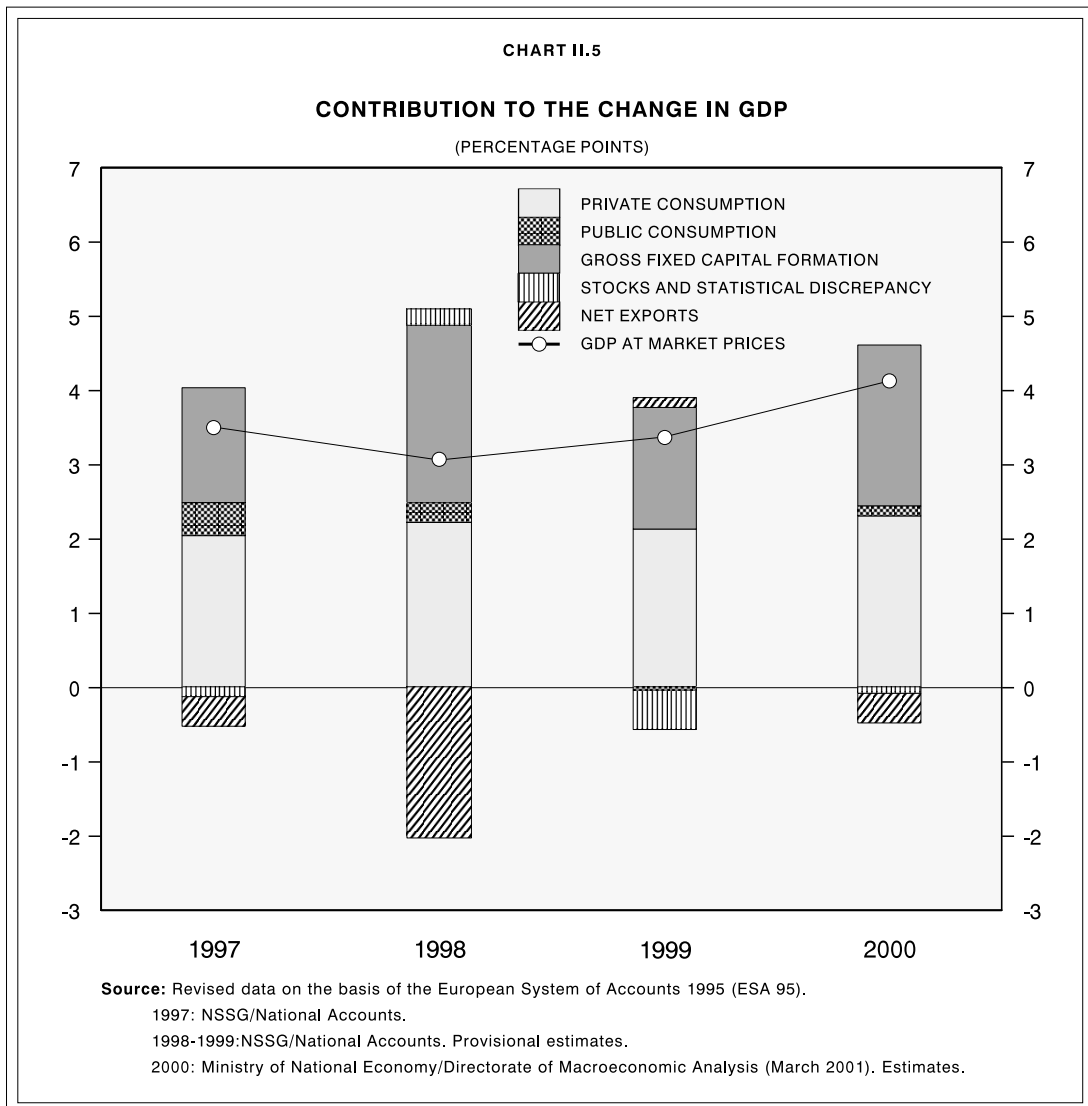


gross savings (including depreciation for business firms) decreased as a percentage of GDP (from 24.8% in 1995 to 17.0% in 2000), while total investment² increased (from

1 The private sector comprises households and all enterprises. Savings, as calculated in the specific case, do not include depreciation of fixed assets.

2 That is, gross fixed capital formation and changes in stocks.

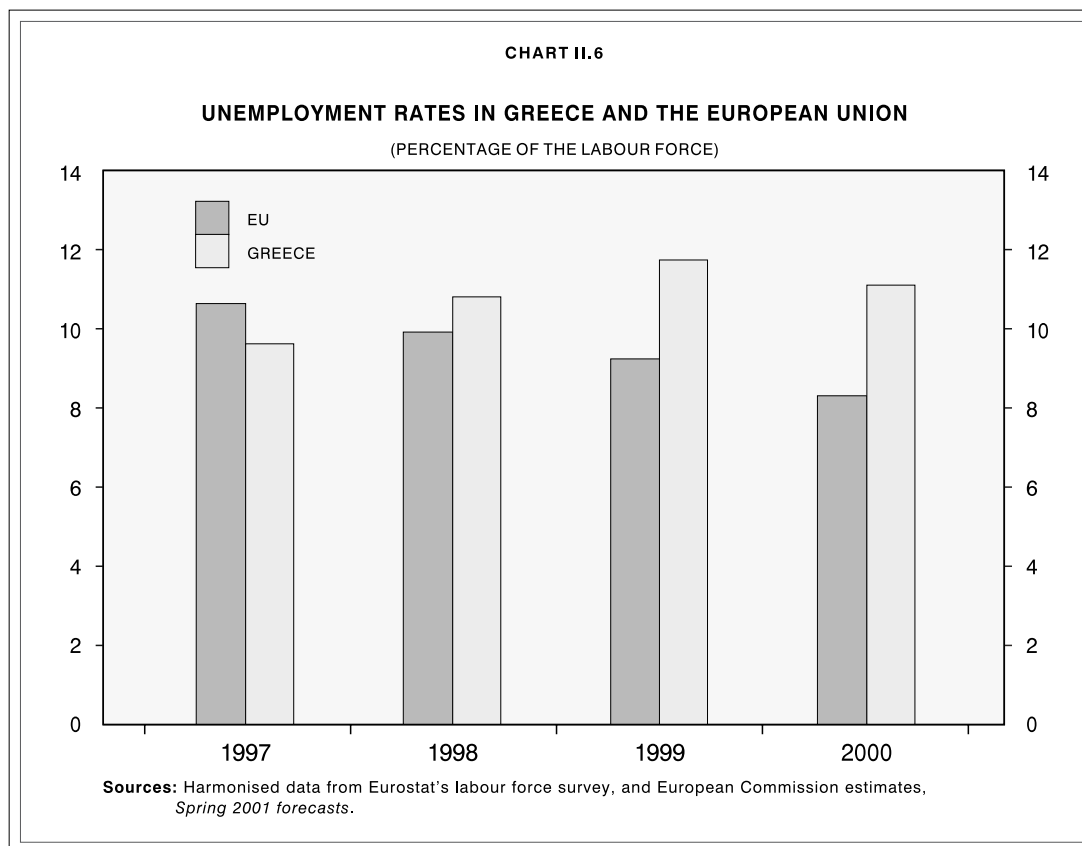
18.9% in 1995 to 23.9% in 2000). The decrease in the private sector's gross savings as a percentage of GDP was offset by the simultaneous increase in the general government's gross savings (which, being negative and equalling 6.8% of GDP in 1995, became positive and amounted to 2.9% of GDP in 2000), as well as by the inflow of foreign resources,



which financed the broadening of the current account deficit; the latter, on a national accounts basis, rose to 4.0% of GDP in 2000, from 0.9% of GDP in 1995.

In 2000, the rate of economic growth accelerated in most European Union countries (see Chart II.3). The highest rates were attained by Ireland (10.7%), Luxembourg (8.5%) and Finland (5.7%), while the lowest – albeit still satisfactory – rates were recorded in Denmark and Italy (2.9% in both countries).

Following the negative changes in employment recorded in the labour force survey conducted by the National Statistical Service of Greece (NSSG) in Greece in 1999 and the rise to 12.4% in the unemployment rate in the last quarter of that year, the first favourable indications emerged in 2000. More specifically, in the second quarter of the year total employment began to recover and its annual rate of change turned from negative to slightly positive (0.2%), reflecting stagnation of employment in the primary sector, a decrease in the secondary sector and a clear increase in the services sector. The total unemployment rate fell to 11.1% (from 11.7% in the second quarter of 1999), but

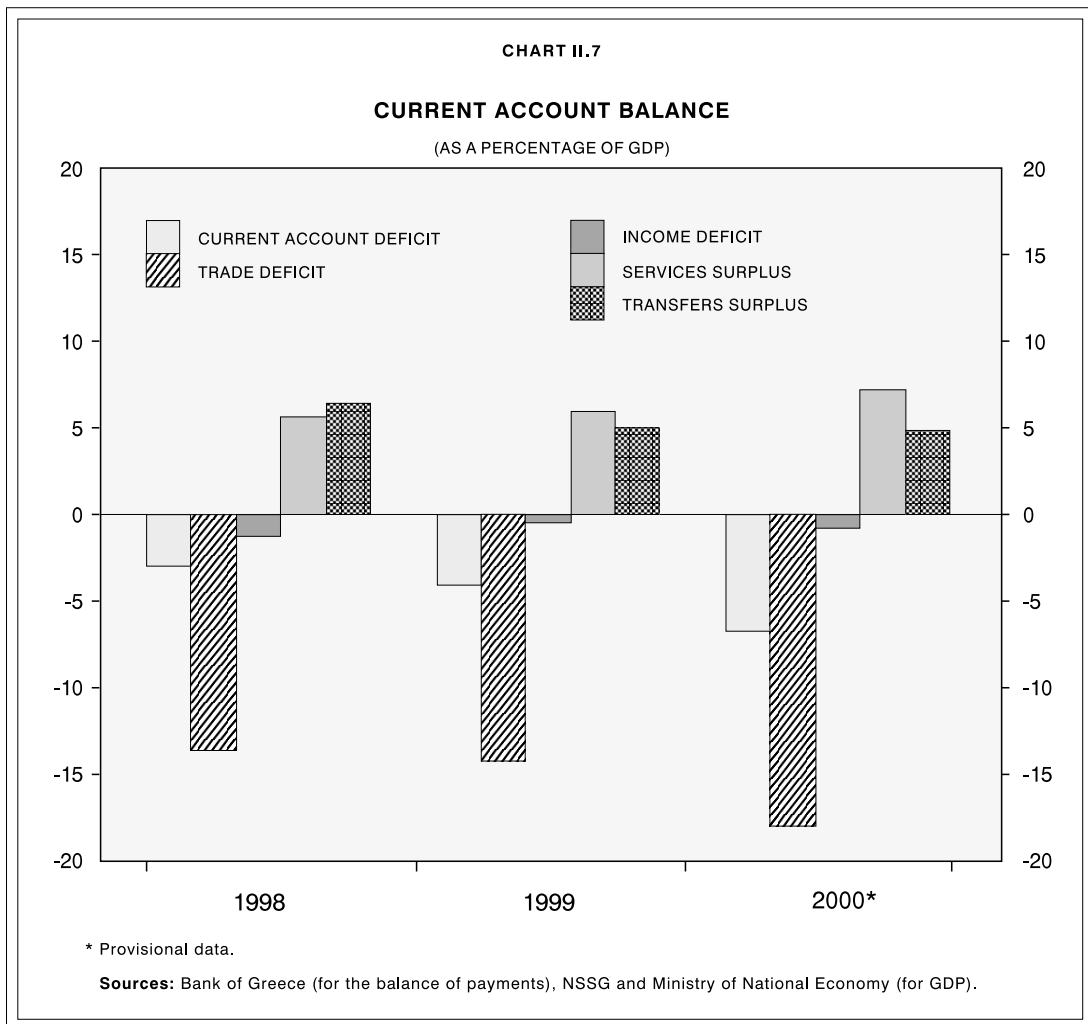


dropped more for young people (to 29.5% from 31.7%) and women (to 16.7% from 17.9%). A slight decrease was also observed in long-term unemployment as a percentage of total unemployment. It is interesting that the employment rate for those aged 45-64, who account for 36% of the total number of employed people, increased by one percentage point, following the general trend in the last ten years. This trend may reflect the effect of the legislative measures taken during this period, which were aimed at prolonging the average "real" age required for retirement and reducing premature retirement. According to existing indications, the implementation of employment-promoting programmes contributed to curbing unemployment in 2000, though the unemployment rate

in Greece remained higher than in the EU (see Chart II.6) and the second highest among EU countries, below Spain.

2.4 Balance of payments

The current account deficit increased by €3,571 million in 2000, compared with 1999, and stood at €8,371 million.¹ This was mainly due to the €5,039 million rise in the



trade deficit, as well as the €287 million decrease in EU transfers (owing to time lags) and the €329 million increase in the income account deficit. By contrast, the services surplus

¹ Bank of Greece data.

grew substantially (by €1,864 million). About half of the increase in the current account deficit, from 4.1% of GDP in 1999 to 6.9% in 2000 (see Chart II.7), was due to increased net fuel imports. The rest of the increase was connected chiefly with the high rate of economic growth, which in recent years has overshoot the corresponding rates in Greece's trading partners. In particular, the considerable rise in investment and private consumption led to a large increase in imports of capital goods and consumer durables.

The average annual level of the nominal effective exchange rate of the drachma declined by 6.2% in 2000. However, price competitiveness did not improve equally, owing to changes in relative prices. As already mentioned, the rates of inflation and unit labour cost growth were higher in Greece than in the euro area. Thus, competitiveness, as measured by the real effective exchange rate of the drachma deflated by unit labour costs (in manufacturing), the Consumer Price Index and the Wholesale Price Index, is estimated to have improved by 4.2%, 5.2% and 2.3%, respectively (at average levels). The fact that, despite this improvement, the current account deficit widened reflects the existence of time lags. Moreover, as the value of Greek imports is more than three times as high as that of exports, owing to the structural deficiencies of the Greek economy, the increase in both aggregates at high rates (as was the case in 2000) leads to a larger deficit. Lastly, it should be taken into account that the Greek economy lacks competitiveness in a broader sense, i.e. with regard to the quality of products and/or the factors (institutions and economic policies) that support high growth rates of *per capita* GDP.¹

With Greece's entry into the euro area on 1 January 2001, the importance of the current account deficit changed considerably, compared with the past. The financing of the deficit will no longer be – at least to the extent it was in the past – a restrictive factor directly affecting the conduct of economic policy. At the same time, the reduction in real interest rates, the improvement in expectations and easier access to credit are likely to lead to a rise in business firms' investment expenditure,² as well as to an increase in household expenditure for the purchase of consumer goods or dwellings. Besides, pressure from the competition and the effect of the policies emerging at European Union level can act as a catalyst for carrying out structural reforms. Thus, a rise in imports of capital goods and consumer durables is to be expected, but what really matters is for Greece to be able to finance the trade deficit partly from other current account items and partly from inflows of investment funds, without having to resort to excessive borrowing.

Changes in the current account, however, continue to be a useful indicator of the course and competitiveness of the economy. A widening of the current account deficit as a percentage of GDP implies, in general, a faster rise in investment than in savings. From the viewpoint of economic policy, this increased investment should lead to a rise in productivity and competitiveness of the economy (including the services sector, which is par-

1 See Section 7 below.

2 The elimination of exchange risk in the euro area leads to lower borrowing rates in euro for private and public sector enterprises.

ticularly important in the case of Greece). In this way, the increase in output will ensure the repayment of external liabilities. In the opposite case, the growth of consumer goods imports and an increase in foreign borrowing will make it necessary, in the long term, to adjust the economy, with adverse effects on real incomes and employment.

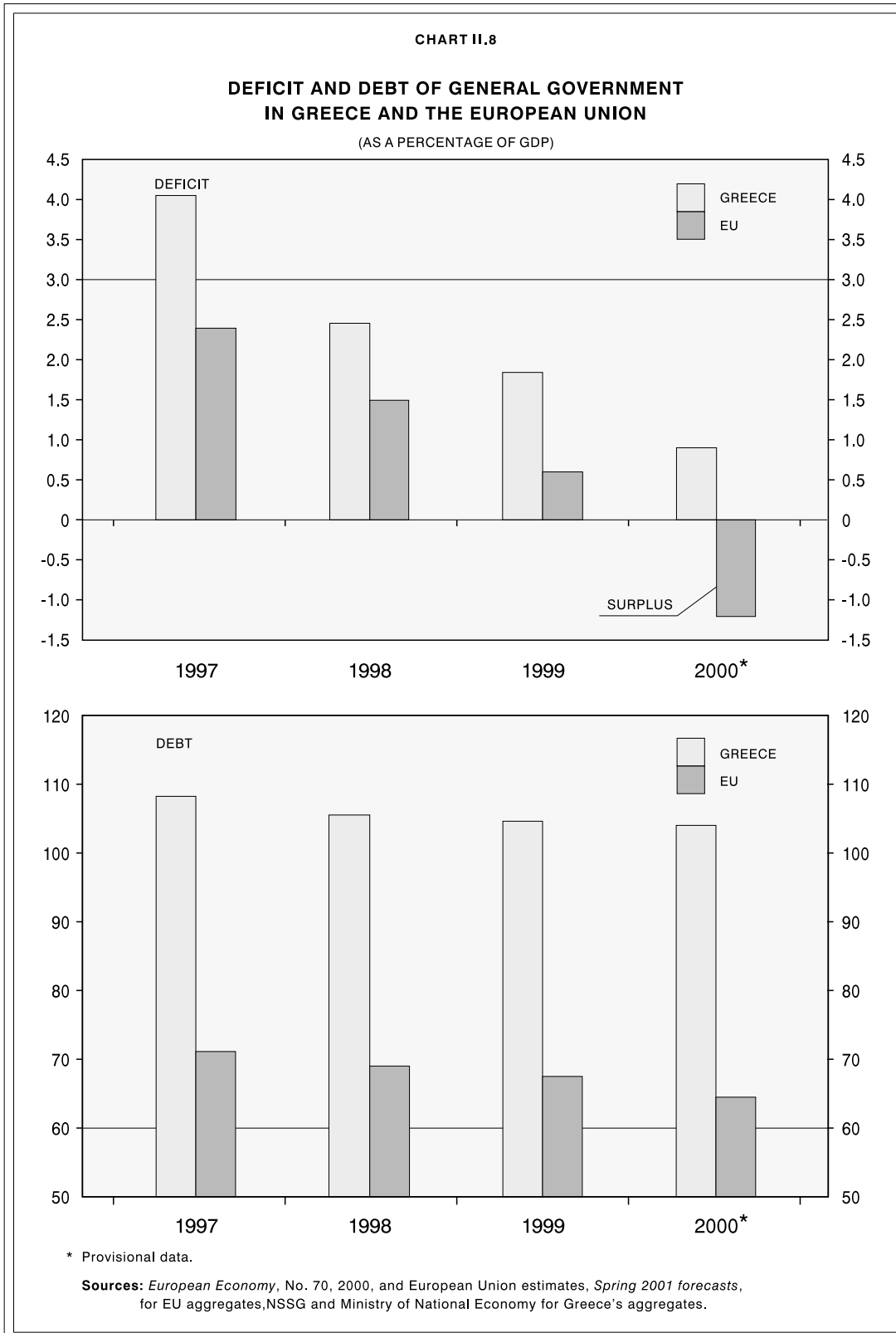
2.5 Public finance

Efforts to restore fiscal balance continued successfully in 2000 and contributed to maintaining macroeconomic stability in the last year before Greece's entry into the euro area. The general government's deficit, on a national accounts basis, was further reduced by almost one percentage point to 0.9% of GDP. Moreover, the consolidated debt of general government decreased by 0.7 percentage point to 103.9% of GDP, despite the considerable upward effect that the appreciation of the dollar and the yen had on that part of the debt which is denominated in foreign currency. However, the general government's debt-to-GDP ratio is still higher than the corresponding average in the EU (64.5% – see Chart II.8) and the euro area (69.7%).

The decrease in the general government's deficit stemmed from the increase of 0.6 percentage point in the primary surplus, on a national accounts basis, to 6.4% of GDP in 2000 from 5.8% in 1999; it also resulted from the reduction of 0.3 percentage point to 7.2% of GDP in the general government's interest payments (on a consolidated basis). The increase in the primary surplus was exclusively due to the sharp rise in revenue as a percentage of GDP, whereas it proved impossible to restrain primary expenditure, which increased as a percentage of GDP and offset to some extent the favourable effect of the rise in revenue.

The large increase in revenue was the main determinant of fiscal developments in 2000, as receipts overshoot government budget forecasts by 705 billion drachmas or 1.7% of GDP. This overrun was chiefly due to the particularly large amount of revenue from corporate income tax and, to a lesser extent, the increased revenue from personal income tax, value added tax and the special levy on car sales. To a considerable extent, these developments are due to changeable factors, such as the profitability of sociétés anonymes (which was high in 1999), the level of car sales (which rose significantly for a second year in a row), world prices of liquid fuel, and imports from non-EU countries (both increased in 2000); they also reflect, however, the fact that efforts to curb tax evasion are beginning to bear fruit.

Government budget expenditure grew by 7.5% and overshoot budget forecasts by 447 billion drachmas. The overrun was mainly due to primary expenditure (277 billion drachmas) and, to a lesser degree, to interest payments (170 billion). Upward pressure on government budget primary expenditure was exerted by public investment outlays, central government personnel outlays, the increase, as of 1 January 2000, in pensions granted by the Farmers' Insurance Fund (OGA) and in the social solidarity allowance (EKAS), as



well as by the fact that part of the social security contributions of minimum-wage earners was paid out of the government budget (as of 1 September 2000). Thus, ordinary budget primary expenditure rose to 21.1% of GDP, from 20.9% in 1999 and 20.7% in 1998.

2.6 Overall assessment

A brief examination of developments in 2000 shows that the Greek economy is already operating in a new environment with the following main features: First, inflation is much lower than in the past, even though it remains higher than the euro area average (2.6% in March 2001) and the level which is considered compatible with price stability (2%) Second, the fiscal situation is noticeably better, as the general government's deficit tends to become a surplus, while public debt is following a downward trend. Third, the rate of economic growth is higher than in the European Union and rising. However, some imbalances still exist, reflecting structural weaknesses. Although unemployment seems to be dropping at last, it is still high, implying that it is necessary to take mainly structural policy measures to deal with it. The increase in the current account deficit, whenever economic growth becomes faster, can be dealt with in the short term, but in the medium term points to the need for reforms aimed at improving competitiveness. In addition, the fact that public debt is still particularly high as a percentage of GDP, combined with unfavourable long-term demographic prospects, makes its reduction imperative.

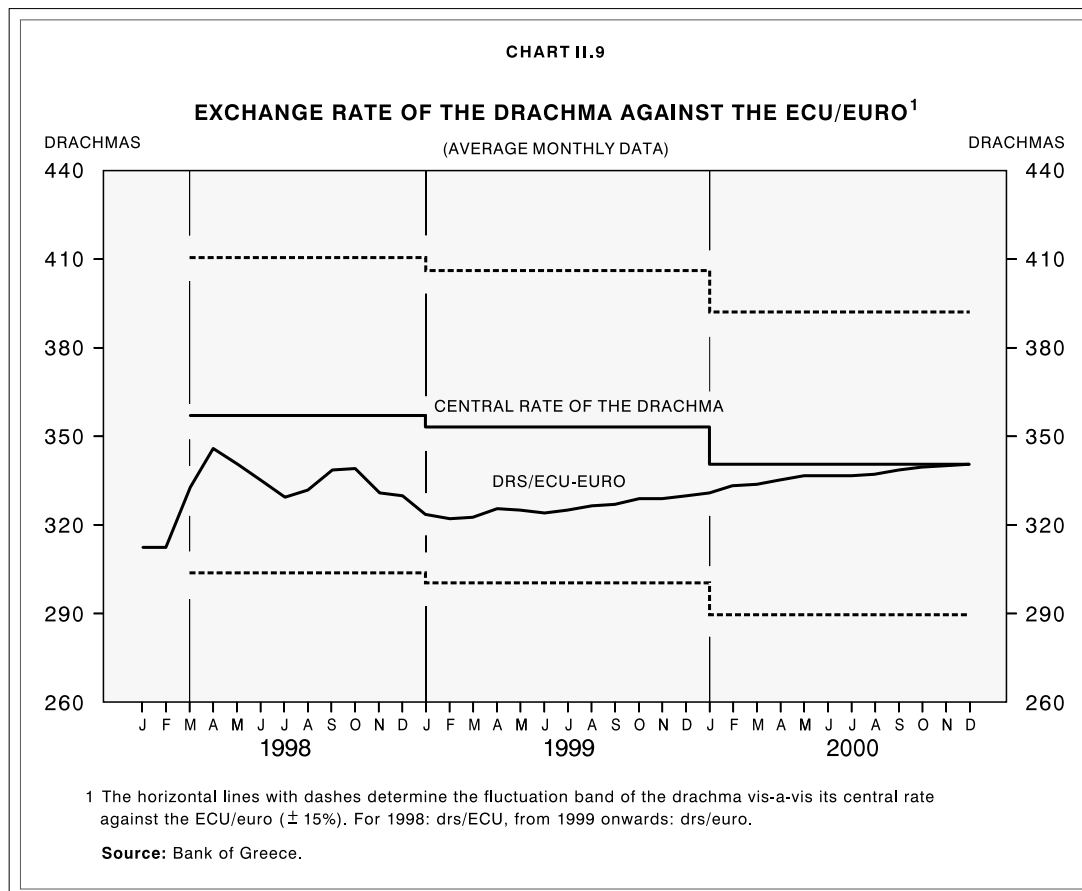
3. MONETARY POLICY IN 2000

Monetary policy had to face considerable challenges in 2000. In particular, in the first half of the year it was focused on meeting the convergence criterion for inflation, as well as the criteria concerning the stability of the exchange rate of the drachma and long-term interest rates. After it was decided that Greece would join the euro area, monetary policy was aimed at ensuring a smooth transition to the euro and containing exogenous inflationary pressures due to the rise in crude oil prices and the appreciation of the US dollar. The Bank of Greece pursued a policy of gradually lowering its interest rates towards corresponding ECB rates, full convergence on which had to be completed by the end of 2000, in conjunction with an appropriate policy of interventions in the foreign-exchange and money markets, so that the current exchange rate of the drachma could converge smoothly on its euro conversion rate by the end of the year.

The convergence of the current exchange rate of the drachma against the euro on the drachma's central rate in ERM II was one of the main objectives of monetary policy in 2000. Throughout the year, the exchange rate of the drachma against the euro remained appreciated in comparison with its central rate, towards which it converged gradually and smoothly. The exchange rate of the drachma against the euro depreciated by 3.1% in 2000,

while the 3.5% revaluation of the central rate on 17 January 2000 (from 353.109 to 340.750 drachmas per euro) reduced the required convergence of the current rate on the central rate. The limited adjustment of the current rate towards the central rate resulted in containing inflationary pressures caused by the necessary easing of monetary policy during 2000. The central rate was the irrevocable euro conversion rate of the drachma as of 1 January 2001, according to the ECOFIN Council decision of 19 June 2000.

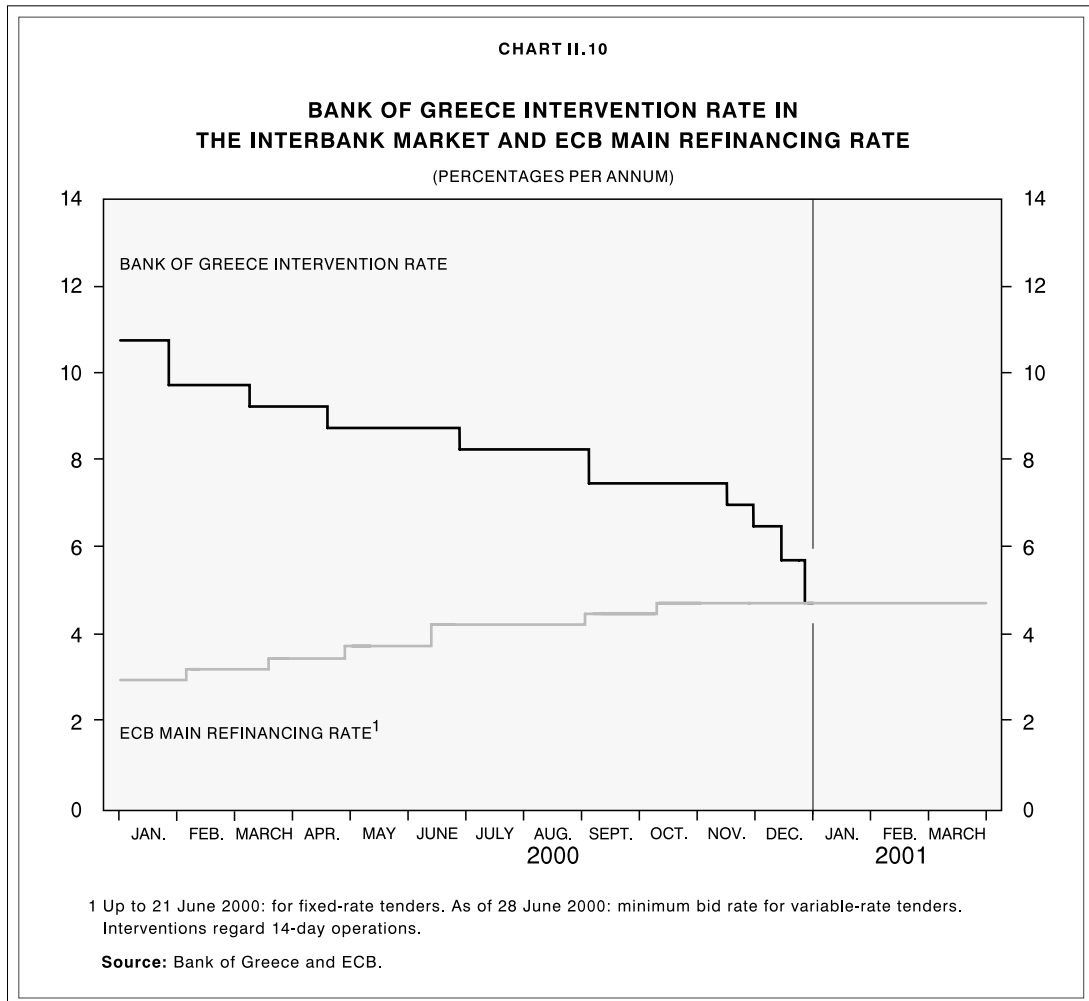
Towards the end of 1999 and in the early months of 2000, pressures of limited extent and duration were exerted in the foreign exchange market, mainly reflecting uncer-



tainties as to whether Greece could meet the Treaty criterion for inflation in time and, subsequently, as to whether the central rate of the drachma against the euro would constitute the drachma's euro conversion rate at the end of the year 2000. The ECOFIN Council decision in mid-June that the central rate would be the conversion rate stabilised market expectations and contributed to the creation of a climate which remained favourable until the year-end. Bank of Greece interventions in the foreign exchange market throughout 2000, which mostly concerned foreign currency sales, aimed at ensuring the smooth convergence of the exchange rate and reducing its fluctuations. The deviation

of the current rate from the central rate of the drachma was 6.5% at end-1999 and 2.9% in mid-January 2000 after the revaluation of the central rate; it was gradually reduced in the course of the year and was eliminated in mid- December (see Chart II.9).

The interest rate on Bank of Greece interventions in the interbank money market for 14-day operations was gradually cut, from 10.75% at the beginning of 2000 to 8.25% at end-June. In the second half of the year, the intervention rate continued falling, but



most of its adjustment took place in the last two months of the year. On 27 December it was set at 4.75%, equal to the ECB minimum bid rate on main refinancing operations (see Chart II.10). Similar adjustments were made to the Bank's standing facility rates. The increase in ECB interest rates during 2000 (by a total of 1.75 percentage points) reduced the necessary adjustment of Greek interest rates.

Interbank market rates, which are affected faster than other rates by changes in Bank of Greece rates, were reduced alongside those of the Bank. Following interest rate

cuts, the yield curve in the interbank market shifted downwards, tending to become flat at the end of 2000, when it almost tallied with the corresponding yield curve in the euro area. Commercial bank rates followed the drop in Bank of Greece rates, albeit with a longer time lag than interbank rates. However, the distribution of deposit rate cuts over time was not the same as that of lending rate cuts. Lending rates fell on average more than deposit rates. As a result, the spread between deposit and lending rates was reduced by about one percentage point at the end of the year. This reflects to a considerable degree strong competition in some segments of the banking market, such as consumer and housing credit.

The convergence of Greek government securities yields towards the lower level of yields on corresponding instruments in the euro area continued in 2000 and was faster for shorter maturities. Characteristically, the slope of the government paper yield curve was negative for the short end of the curve for most of the year, reflecting the high short-term interest rates required by the anti-inflationary monetary policy. Only in the last months of the year did the slope turn positive, as in the other euro area countries. The 10-year Greek government bond yield fell by 85 basis points between December 1999 and December 2000 and the spread over the corresponding German bond was reduced to 64 basis points in December 2000, compared with 124 basis points in December 1999. This spread shrank further in March 2001 to 59 basis points, reflecting the success of the stabilisation policy pursued.

The broad monetary aggregate M4N, which was used by the Bank of Greece in 2000 as an indicator of monetary conditions, increased by 10.5% at the year-end, against 5.5% at the end of 1999, exceeding the upper limit of the forecast range, 5-7%, set by the Bank of Greece. The faster increase in M4N was due to the shift of investors to assets included in M4N, such as repos and money market fund units. Increased demand for liquid assets was accounted for by, *inter alia*, the growth of nominal GDP in 2000 at a faster rate than initially forecast (7.2%, against an initial forecast of 6.3%). To these factors we should add the particularly low level of M4N in April-December 1999 and the increase, owing to foreign exchange valuation differences, in the outstanding balances of foreign currency deposits, which was due to the appreciation of the dollar and the depreciation of the drachma against the euro. Total credit expansion accelerated in 2000, contributing to the faster increase in M4N, while the external sector made a negative contribution to liquidity creation.

Total bank credit grew in 2000 at a faster rate than in 1999 (20.2%, against 12.2%), mainly because of the considerable acceleration of credit expansion to the private sector (2000: 28.5%, 1999: 14.2%) and, to a lesser extent, because of the acceleration of credit expansion to the public sector (2000: 16.1%, 1999: 11.3%). The doubling of the annual rate of increase in bank credit to the private sector was due to the fact that, at the end of March, when the measures taken by the Bank of Greece in 1999 to restrain credit expansion ceased to apply, banks satisfied the accumulated demand for credit; it was also due to the drop in bank lending rates (particularly on consumer loans) and the larger increase in nominal GDP in 2000. Especially strong was the demand for loans in euro (the share of

which in total loans in foreign currency approached 50% at the end of 2000), because interest rates on euro loans were 5 percentage points lower than those on drachma loans and incorporated a foreign exchange burden which was gradually reduced as the date of Greece's entry into the euro area was approaching. The faster increase in bank credit to the public sector was related to the larger PSBR (on a cash basis) in 2000 (1,717 billion drachmas, compared with 1,495 billion in 1999), but also to the fact that this requirement was covered to a rather greater extent in 2000 by monetary financial institutions and non-residents, while investment by the domestic private non-bank sector in government securities decreased significantly, compared with 1999.

Monetary policy achieved its main objectives, although it was implemented in a particularly unfavourable environment in 2000. The relatively slow and cautious reduction in Bank of Greece interest rates ensured the convergence of the exchange rate and interest rates in a way which reduced the inflationary pressures exerted mainly by exogenous factors and favourably affected inflationary expectations. Moreover, one of the factors which contributed to the smooth convergence of the current exchange rate of the drachma on its euro conversion rate were Bank of Greece interventions in foreign exchange and money markets.

4. FINANCIAL SECTOR

4.1 Developments in the banking system

The Greek banking system has entered a phase of transformation and of reorientation of its strategic goals and activities, particularly after Greece's entry into the euro area. The most important reasons are fast technological progress in the fields of communications and IT, increasing integration of international money and capital markets, as well as changes in firms' and households' needs for bank products and services. Growing competition reduces profit margins related to the supply of traditional bank services and induces banks to intensify efforts to diversify their products and expand into new markets, goals which require substantial investment in equipment and the acquisition of new skills by bank personnel. The introduction of the single currency and the pricing of all goods and services in euro from the beginning of 2002 will increase the transparency of bank transactions. It is estimated that this will accelerate the integration of financial markets and lead to the creation of larger banks or bank groups which will offer a broader range of financial products. The outcome will be a further strengthening of competition between banks, as well as an increase in their exposure to systemic risks that will no longer be confined within national borders, precisely because of the increased interdependence of financial markets.

During 2000, the major Greek banks put particular emphasis on completing, at operational level, the mergers and acquisitions which had taken place in the previous

two years. At the same time, Greek banks continued to expand their cooperation with foreign credit institutions (e.g. the Commercial Bank of Greece with the French Credit Agricole) and to enhance their presence in the Balkans through selective acquisitions of credit institutions. Three new banks began to operate in Greece in 2000, focusing on specific sectors, such as investment banking and consumer credit, and an agreement was announced recently, to the effect that EFG Eurobank Ergasias will acquire “Telesis Investment Bank.”

Despite a considerable increase in the number of bank branches in recent years (2000: 2,795, 1995: 2,103), the number of inhabitants per branch remains significantly higher than the euro area average (Greece: 3,875, euro area: 2,028).¹ However, modern technology, which has made remote and electronic banking possible, tends to reduce the importance of branch networks in customer service and in carrying out bank operations. Banks’ strategy regarding their network should therefore take this factor into account, so as to avoid the risk of accumulating idle productive capacity, the cost of which may have a considerable impact on their competitiveness. As suggested by the above remarks, and also given the low bank intermediation in relation to Greek GDP, the potential for the further growth of banking business does not necessarily relate to the expansion of bank networks.²

Increased competition in the Greek banking market is also reflected in the significant change observed in market shares over the 1999-2000 period. Major banks still dominate the market for deposits and loans, but the role of smaller banks has recently been enhanced. Specifically, taking into account that the share of foreign banks operating in Greece declined slightly (2000: 13.7%, 1998: 14.3%), while that of cooperative banks remained unchanged (0.3% in both 1998 and 2000), the share of the five largest Greek banking groups in total bank assets decreased by 4 percentage points during the above period (2000: 71.2%, 1998: 75.2%) to the benefit of medium-sized and small Greek banks (2000: 14.8%, 1998: 10.2%).³ Moreover, to the extent that the spread between bank lending and deposit rates is an indicator of the intensity of competition in the banking sector, it is interesting to observe that the spread was reduced by about 2.5 percentage points in the last two years, although it still remains at rather high levels (6.6 percentage points at

1 Data for Greece refer to 2000, while those for the euro area to 1999. Euro area data exclude Spain, Luxembourg and Portugal, i.e. countries for which comparable statistics on all relevant aggregates were not available (see OECD, *Bank Profitability*, 2000, and *Main Economic Indicators*, December 2000). It should be noted, however, that the average size, in terms of employed personnel, of a bank branch in Greece is considerably larger than the corresponding size in the euro area (number of employees per bank branch: Greece: 22, euro area:15).

2 The ratio of credit institutions’ assets to GDP in Greece is among the lowest in Europe: Greece: 126%, Belgium: 333%, France: 277%, Germany: 241%, Spain: 163%, Finland: 97% (see Chapter IX).

3 The change in banks’ market shares in the case of loans and deposits is similar. Banks’ shares in loans and deposits at the end of 2000 were the following (in parentheses the corresponding share at end-1998): Loans : five largest Greek banks: 74.5% (75.6%), other Greek banks: 15.4% (13.1%), foreign banks :9.4% (10.7%), cooperative banks: 0.7% (0.6%). Deposits: five largest Greek banks: 79.5% (81.3%), other Greek banks: 11.3% (8.5%), foreign banks: 8.9% (9.9%), cooperative banks: 0.3% (0.3%). It should be noted that these calculations do not take into account data on the Postal Savings Bank and the Loans and Deposits Fund, whose operation is governed by special rules.

the end of 2000). It should be noted, however, that the decrease was almost entirely due to the drop in interest rates on housing and consumer loans, a fact implying that competition has not yet reached all segments of the supply of bank credit. Characteristically, in virtually all other euro area countries the spread between deposit and lending rates is between three and four percentage points.

The profitability of Greek banks has been rising in the last five years, reflecting the expansion of bank operations, the shift to activities with larger profit margins, as well as increased intermediation in investment transactions in the stock market or over the counter. Bank profits reached a high level in 2000, but were lower than in 1999, when profitability had been particularly high owing to increased income from activities associated with the upsurge in business on the Athens Stock Exchange (ASE).¹

Traditionally, net interest income is the main income source of banks worldwide, even though its significance has been waning in recent years.² In the case of Greek banks, net interest income corresponds to a relatively smaller percentage of total income, but there is a clear tendency for interest income to increase as a percentage of both total income (2000: 54.6%, 1997: 51.6%) and total assets (2000: 2.51%, 1997: 2.18%). The relatively fast growth of this income category reflects the large increase in loans to the private sector, in the context of the portfolio restructuring policy pursued by banks, whereas, as mentioned above, the spread between deposit and lending rates has diminished. Following the gradual deregulation of the banking system, there has been a significant shift in bank credit towards the private sector, and households in particular, as these loans offer higher yields than government paper.³ In addition, the tendency of interest income to increase is expected to become stronger, given that a total of 4.3 trillion drachmas (12.5 billion euro) will be released by June 2002 following the reduction in the reserve requirement ratio with the Bank of Greece from 12% to 2% and the harmonisation of the reserve base with that adopted by the ECB for euro area credit institutions. Specifically, through the gradual release of banks' excess reserves in drachmas and foreign currency, the funds which banks manage freely will increase, solely for this reason, by 1.6 trillion drachmas in the first half of 2001 and 1 trillion drachmas in the second half and by a further 1.7 trillion drachmas in the first half of 2002.

1 As indicated by available data for the five largest Greek commercial banks, whose share in credit institutions' total assets amounts to 65% (or 80% of the total of commercial banks), their operational profits (which exclude extraordinary financial results-profits) came to 1.86% in 2000 as a percentage of average assets, compared with 2.46% in 1999 and 1.16% in 1998, i.e. they were among the highest in Europe.

2 On average, net interest income as a percentage of banks' operating income in EU countries gradually decreased to 58.4% in 1998 from 67.5% in 1995, while as a percentage of assets fell to 1.63% in 1998 from 1.96% in 1995. See ECB, *EU Banks' Income Structure*, April 2000

3 It should be noted that in the period 1995-2000, commercial bank's investments in government securities were slightly reduced as a percentage of total assets (2000: 27%, 1995: 30%), while the share of loans to the private and the public sector increased considerably (2000: 41%, 1995: 28%). Specifically, the share of loans to the whole of the private sector increased to 33% in 2000 as a percentage of assets, from 25% in 1995, while the corresponding share of loans to households (i.e. the total amount of housing and consumer loans) tripled in the same period (2000: 8.4%, 1995: 2.7%).

In contrast to interest income, income from commissions has been following a downward course in the last five years as a percentage of both total income (2000: 19%, 1995: 27%) and assets (2000: 0.88%, 1995: 1.14%). Commission income is of particular importance for the profitability of credit institutions, as it contributes to the further diversification of their income and thus reduces their dependence on net income from lending operations. Moreover, commission income is less volatile,¹ as it is affected by the economic cycle to a lesser extent than interest income, but is not affected by doubtful debts, given that relevant operations entail limited risks.

The ratio of operating expenses to banks' assets has been on a slightly downward course in recent years. Nevertheless, these expenses, personnel expenses in particular, are among the highest in the European Union as a percentage of assets. It should be noted, however, that banks' operating expenses have risen because of high management expenses, since the operating systems of merged banks have not yet been fully unified.

4.2 Supervision of the banking system

Banks have improved their capital structure considerably in recent years and their capital adequacy ratio stands at a generally satisfactory level. In the July 1999-June 2000 period, Greek commercial banks' "supervisory own funds"² increased by 35% and thus their capital adequacy ratio rose to 16.5% on the basis of end-June 2000 data, compared with 14.7% at the end of June 1999. At the same time, however, credit risks have also increased, as banks are more exposed to economic shocks, owing to the sharp rise in loans, particularly consumer loans.

The further integration of financial markets via the introduction of the euro, the expected tendency to create large and in many cases multinational financial groups, and the supply of similar products and services by different types of financial institutions have brought to the fore the role of national central banks in exercising prudential supervision over the banking system in euro area countries.

Regarding the supervision framework for financial groups, the European Commission has already elaborated a draft Directive which is to be adopted in 2001 and focuses mainly on determining capital adequacy, monitoring and controlling risk concentration at group level, and on establishing cooperation between the authorities supervising the individual firms of a financial group (banks, investment firms, insurance companies).

1 According to ECB estimates, the coefficient of variation which is used to measure volatility of net interest income, adjusted for provisions, stands at 23.5% for EU countries, while the corresponding rate for commission income is 20%. The data used for the calculation of the former rate cover the period 1980-1997 for most countries, while for the latter rate data cover the 1993-1998 period for all the countries in the sample. See ECB, *EU Banks' Income Structure*, April 2000, pp. 62 and 64.

2 As defined in Bank of Greece Governor's Act 2053/18 March 1992, by which Directive 89/299 EEC was transposed into Greek law.

An assessment of the supervisory schemes adopted by EU countries reveals that there is no such thing as an ideal supervisory scheme that would be most appropriate for all member countries, since the specific structural characteristics of each country's financial sector are different. The extent and significance of the supervision exercised by the competent authorities is therefore proportional to the size and importance of the individual sectors being supervised. In Greece, supervisory powers have been assigned to the Bank of Greece for credit institutions and to the Ministry of Development for insurance companies, while the competence to supervise investment firms lies with the Capital Market Committee.

As in other countries with comparatively less developed capital markets, the banking system in Greece holds a dominant position in the financial sector and is the main intermediary for the allocation of available funds to the various economic sectors. In addition, banks have expanded their activities over the whole range of financial services, by acquiring or establishing insurance subsidiaries or investment firms. Banks have opted to expand into these areas not only to benefit from synergies, but also as a defensive strategy, considering that they may lose income because of the activity of firms supplying similar products. It is characteristic that over 75% of the total amount of assets managed by investment funds and portfolio investment companies in Greece is with firms controlled by banks. Besides, about 46% of total transactions by brokerage firms is carried out by companies controlled by banks. The same is true of 37% of the turnover of insurance companies. Hence, the prudential supervision exercised on a consolidated basis by the Bank of Greece concerns, in addition to credit institutions, a considerable number of non-bank financial firms.

An examination of the various supervision schemes in the EU has revealed that, whenever this task is assigned to national central banks, the emphasis is on the conduct of macroeconomic supervision, with a view to identifying in good time risks which could disturb the stability of the financial system. On the other hand, when supervision is entrusted to other bodies, the emphasis shifts towards microeconomic supervision, mainly to protect depositors and investors. Even in countries where supervision has been separated from central bank activities (United Kingdom, Japan, Canada), the comparative advantage of the central bank in safeguarding the stability of the financial sector is acknowledged. Specifically, great importance is attached to the fact that, in the context of monetary policy conduct, central banks gather timely information by monitoring, on a day-to-day basis, the payments of individual credit institutions. As a result, the supervisory task of central banks is facilitated. Precisely because central banks attach great importance to the maintenance of systemic stability, they are in a position to assess better not only risks from possible shocks in domestic and international markets, but also the impact of factors affecting the whole range of financial groups' business activities. Moreover, it has been stressed in all relevant analyses that the know-how a central bank accumulates by performing its supervisory task over a period of years, combined with the establishment of its operational independence, guarantees that supervision of the financial sector can continue effectively and without shocks.

The exchange of views at the international level and the experience acquired from the impact of recent crises on economies or banking systems have led to conclusions which guide the supervisory authorities in individual countries in the direction of fuller cooperation and a broader exchange of information and expertise. Apart from the informal cooperation which already exists, EU countries in the main are setting up special bodies to improve coordination and cooperation between the various authorities at the national level; the shape of these bodies and the way they act are determined by the structure of the financial sector and the institutional framework in each country. Such coordination materialises via the signing of memoranda of cooperation or the elaboration of joint action plans. It is also seen that, owing to the constantly increasing cross-border activity of business firms, the risks that possible disturbances may extend beyond national borders are greater. Since national central banks traditionally focus on avoiding systemic risks and, as Eurosystem members, closely monitor developments in money and capital markets throughout the euro area, they are in a position to respond more effectively to possible disturbances related to the integration of financial markets and the further expansion of financial groups. It is therefore obvious, for this reason as well, that, within the framework of a body aiming to enhance cooperation and coordination of the actions of individual supervisory authorities, the presence of a central bank with increased supervisory powers will make it possible to benefit from the contact networks existing among supervisory authorities within the Eurosystem and will strengthen the safeguarding of systemic stability in the financial sector.

4.3 Capital markets

Developments in capital markets were characterised by diverging trends during 2000. In the market for Greek government securities, bond prices rose and bond yields converged gradually towards those of corresponding European securities, while equity prices followed a prolonged downward course.

The decrease in long-term securities yields, which entails capital gains for investors, reflects an improvement in macroeconomic aggregates and a reduction in the exchange risk, particularly after the decision that Greece would join EMU. Greek bond yields were also affected by developments in world markets and the shift of investors to fixed-income securities, especially in the US market. The yield on the Greek 10-year government bonds decreased by 85 basis points between December 1999 and December 2000. In the same period, average yields on corresponding German bonds fell by 25 basis points to 4.90% in December 2000, though these yields remained broadly stable during most of the year (see Chart II.11). This resulted in the narrowing of the yield differential between Greek and European bonds to 64 basis points in December 2000. In the United States, bond yields followed a downward trend almost throughout 2000, reflecting both estimates that economic activity was slowing down in that country, and worsening conditions in the

stock market. US bond yields decreased to 5.23% in December 2000 from 6.26% in December 1999. Lastly, bond yields in Japan remained stable between 1.6% and 1.9% over most of the year.

In the primary market for Greek government securities, increased demand for bonds led to a roughly 3:1 average ratio of capital supply to capital demand in 2000 as a whole. As regards the supply of securities, the government promoted the issuance of more securities maturing in 10 or 20 years and reduced the issuance of Treasury bills, with a view



to further prolonging the maturity of public debt. Securities were issued through regular tenders, mainly by the procedure of “reopening”, so that the government could take advantage of the favourable conditions that emerged in the secondary market. Characteristically, the reopening of securities issues corresponded to 80% of the total value of government securities auctioned off during 2000.

In the secondary market, apart from the decrease in yields, a significant characteristic was the reduction in bond price volatility and in the differential between offered and bid prices, a phenomenon which became more pronounced in the last two months of

the year, because of the large increase in transactions and the rise in the degree of market liquidity.

Share prices on the Athens Stock Exchange (ASE) followed a downward course with considerable fluctuations throughout 2000, after the very high level they had reached in September 1999; they were also affected by the decrease in stock market indices worldwide. Between end-December 1999 and end-December 2000, the composite ASE index of share prices fell by 38.8%. Fund-raising from the stock market remained high and stood only 9.5% lower than in 1999 (2000: 2,994 billion drachmas, 1999: 3,309 billion). The average daily value of transactions fell to 137 billion drachmas for the year as a whole, compared with 236 billion in 1999. The downward trend of share prices continued in 2001 as well and the composite share price index fell by 10.2% between end-December 2000 and end-March 2001. The drop in share prices caused the ASE P/E ratio to fall to about 14% at end-2000, i.e. to a level among the lowest worldwide, in contrast to its rather high level at the end of 1999.

The upward course of share prices in world stock markets since 1995 did not continue in 2000. On the contrary, share prices showed great volatility and decreased during the year, reflecting increased uncertainty as regards the short- and long-term profit prospects of business firms, particularly those of the advanced-technology sectors. In total, share prices in the euro area, as measured by the Dow Jones EURO STOXX index, were 6% lower at end-2000 than at the end of 1999. In the United States, Standard and Poor's 500 fell by 10% and Nasdaq by 39% in 2000, while in Japan the Nikkei 225 index fell by 27%.

The drop in share prices in 2000 affected the Greek mutual funds market as well. The main feature of this market was the substantial decrease (12%) in mutual fund assets, because of the fall in the prices of outstanding mutual fund units, which more than offset the small increase in the volume of units. Indeed, 61 new mutual funds were established in 2000, raising the total number of mutual funds to 269 at year-end. The decrease in fund assets chiefly concerned equity-type funds. By contrast, money-market and bond-type fund assets rose, indicating the shift of investors' interests to products combining low risk with comparatively satisfactory yields.

5. THE INTRODUCTION OF THE EURO: INSTITUTIONAL AND OPERATIONAL ADJUSTMENTS

In the course of 2000, the Bank of Greece adjusted its monetary policy framework and the technical parameters of its monetary policy instruments to those applied by the Eurosystem. This was done gradually, in order to avoid disrupting normal conditions in the money, foreign exchange and capital markets.

Specifically, in early 2000 the Bank of Greece implemented those changes that would not directly affect monetary conditions and which mainly concerned open market operations, the abolition of the upper limit to the standing facility of marginal lending

(Lombard facility), the adoption of a new valuation method for assets used as collateral in monetary policy operations and the unification of the non-remunerated and the remunerated part of banks' reserve accounts with the Bank of Greece. The remaining adjustments in the same category were completed in December 2000, following the formal adoption of the amendments to the relevant Regulations made by the Eurosystem.

On the other hand, the timing and modalities of certain other changes in the operational framework which would, directly or indirectly, affect the conditions in money and foreign exchange markets, were carefully designed by the Bank with a view to avoiding any unwarranted side-effects. These changes included:

First, the unification (effective as from June 2000) of the two tiers of the deposit facility, which took place in June 2000, after the reversal of the conditions of surplus liquidity that had generally prevailed in the interbank money market throughout the period from the entry of the drachma into ERM II in March 1998 to mid-May 2000.

Second, the effective harmonisation, as from June 2000, of the Bank's minimum reserve system with that applied by the Eurosystem. This involved the establishment of a reserve ratio of 2%, instead of the ratio of 12% applying until then, certain adjustments to the reserve base, and the introduction of averaging provisions. Also, as from December 2000 the reserve requirement (at a ratio of about 60% as of that month) on certain categories of foreign currency-denominated deposits held by seamen, emigrants etc. was abolished and such deposits are now subject to the same reserve requirement as all other categories. In order to smooth the effect on liquidity conditions in the domestic money market, the Bank decided that the excess reserves were to be held in fixed-term deposits maturing gradually over a period of 18 months. At the same time, due consideration was given to the need to secure adequate liquidity in the period shortly after the entry of Greece into the euro area. The total liquidity released and restored to banks' free management, as a result of the harmonisation of both the reserve ratio and the reserve base, amounts to about 4.3 trillion drachmas, of which 1.6 trillion drachmas had been released by the end of March 2001.

A sound and reliable real-time payment system that reduces settlement and systemic risk in large-value interbank payments is essential for the conduct of the Eurosystem's single monetary policy, given that monetary policy operations are exclusively processed by the respective national real-time gross settlement (RTGS) systems and TARGET.¹ After the Greek RTGS system for payments in euro, Hermes-euro,² had been launched by the Bank of Greece and linked to TARGET at the beginning of 1999, its drachma counterpart (Hermes-drachmas) became operative in March 2000. On 2 January 2001 the two systems merged into a single Hermes system settling in euro. This handles domestic and cross-border payments and facilitates the effective and smooth integration

1 Trans-European Automated Real-time Gross settlement Express Transfer system, consisting of the national RTGS systems of euro area Member States linked to each other for the execution of same-day cross-border payments.

2 "Hermes" is an acronym for Hellenic Real-time Money transfer Express System.

of domestic money and capital markets into the single European market, as well as efficient cash management by credit institutions.¹

The integration of the Bank of Greece into the Eurosystem also entailed the upgrading of IT applications in various fields of its activities. To this end, the Bank's chart of accounts was restructured and new accounting software was installed to enable efficient bookkeeping and to support foreign reserve management and foreign exchange operations in general. In addition, IT applications were developed to ensure faster delivery and processing of counterparties' bids and valuation of underlying assets in the Eurosystem's monetary policy operations. A major role in the successful introduction of these applications was played by extensive testing conducted during the fourth quarter of 2000 with the participation of both the European Central Bank and credit institutions.

The technical and operational preparations were completed in three days, from 30 December 2000 to 1 January 2001 and concerned, *inter alia*, the paying-up of the Bank's share in the subscribed capital of the ECB, its contribution to the capital and reserves of the ECB and the transfer of foreign reserve assets to the ECB by the Bank of Greece. They also concerned the successful migration of the Bank's accounting systems to the euro environment, the conversion of drachma balances on credit institutions' accounts with the Bank of Greece to the euro and the redenomination of Greek government securities. These adjustments enabled the inclusion of the accounts of the Bank of Greece in the consolidated balance sheet of the Eurosystem as from 1 January 2001.

Once Greece has entered the euro area, the Bank of Greece participates in all the committees and working groups of the Eurosystem. The committees which are responsible for the operational framework of monetary policy are closely monitoring developments in market practices and will propose any necessary changes in the framework; they are also assessing the efficiency of the instruments and procedures applied, taking into account the decentralised implementation of the single monetary policy.

6. THE SINGLE MONETARY POLICY IN 2001

As from 1 January, Greece follows the euro-wide single monetary policy defined by the Governing Council of the ECB. This policy is implemented in individual euro area countries by the respective national central banks which constitute a part of the Eurosystem and its primary objective is the maintenance of price stability in the medium term. As long as this primary objective is not jeopardised, the Eurosystem supports the

1 In the course of 2000 the Hermes system handled 961,425 payments, representing a total value of €3,947 billion; of which 39.3% in terms of volume and 3.4% in terms of value were customer payments (i.e. other than interbank payments). During the first two months of 2001, the average daily traffic in Hermes was 4,030 payments representing an average daily value of €12.3 billion or the equivalent of about 10% of GDP.

general economic policies of euro area Member States, so as to help achieve the objectives of the European Union.¹

The strategy for achieving price stability comprises three components: a quantitative definition of price stability and two pillars. Price stability is defined by the ECB as “year-on-year increases in the HICP for the euro area of below 2%” and is to be maintained in the medium term.

The first pillar of the strategy assigns a prominent role to money, which is signalled by the announcement of a reference value for the annual growth rate of broad money (M3), serving as a benchmark for assessing monetary developments. The conditions for announcing a reference value, namely i.e. a stable money demand relationship and satisfactory leading indicator properties of M3 for future inflation, are considered to be fulfilled for the euro area as a whole. Short-term monetary developments are assessed in relation to the reference rate and provide useful information about the outlook for price developments in the medium term. However, the concept of the reference value does not entail a commitment on the part of the Eurosystem to correct mechanistically any deviation of M3 growth from the reference value (e.g. by automatically adjusting interest rates).

The second pillar involves the analysis of a wide range of other variables which enable a broadly based assessment of the outlook for price developments and of the risks to price stability. These variables include wages, the exchange rate, real economic activity indicators, fiscal indicators, the bond yield curve etc.

At its meeting on 14 December 2000 the Governing Council of the ECB set the reference value at 4.5% for M3 for this year, i.e. at the same level as in the previous two years, as it saw no reason to revise the assumptions underlying its derivation. Specifically, the assumption of trend decline in M3 income velocity was maintained in the range of 0.5 to 1%, as derived from econometric models of money demand rather than from simple projections of past trends. Also, the maintenance of the assumption for trend potential output growth in the range of 2 to 2.5% should not be interpreted as a questioning on the part of the ECB of the beneficial effect of recent structural reforms in labour and product markets on the potential output growth rate.

The assessment of recent monetary developments under the first pillar points to an abatement of inflationary pressures, as the three-month moving average of the annual growth rate of M3 is approaching the reference value of 4.5% and for the December 2000-February 2001 period stood at 4.8%. This development has resulted from the dampening effect of the gradual increase in short-term interest rates during 2000 on the most liquid M3 component (M1). In addition, credit expansion to the private sector has slowed down, although it remains relatively strong (9.6% in February 2001).

1 Under Article 2 of the Treaty on European Union, “the Community shall have as its task (...) to promote throughout the Community a harmonious and balanced development of economic activities, sustainable and non-inflationary growth respecting the environment, a high degree of convergence of economic performance, a high level of employment and of social protection, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among Member States”.

As regards the second pillar, the latest available data also confirm that the risks to price stability have diminished, but have not disappeared. In particular it should be noted that GDP growth decelerated in the second half of 2000 and the external environment worsened. These developments imply a somewhat stronger decline in economic growth in the euro area this year than was expected earlier. Available forecasts suggest, however, that euro area GDP growth in 2001 will be in line with estimates of potential output growth.

Inflation, as measured by the HICP excluding the more volatile components of energy and unprocessed food prices, has been on an upward course since the summer of 1999. In part, this reflects the pass-through of the indirect effects of rising oil prices and the depreciation of the euro. These effects should gradually diminish over time, provided that wage demands remain moderate. In any case, wage developments are still a source of uncertainty.

Against this background, the Governing Council of the ECB at its meeting on 11 April 2001 decided to leave its main refinancing rate unchanged. At the same time, the ECB stressed that sustained non-inflationary economic growth can only be achieved if Member States commit themselves to the fiscal targets of the Stability and Growth Pact and press ahead with structural reform. Lastly, the ECB invites the social partners to take into account, in wage bargaining, the fact that inflation will remain above 2% only temporarily and to exercise wage restraint, so as not to jeopardise price stability.

7. ECONOMIC OUTLOOK AND CHALLENGES

Greece's prospects of faster economic growth combined with stability have improved now that the country has become a member of EMU and adopted the single currency. The implementation of the single European monetary policy in Greece will help the economy achieve a high degree of price stability. Estimations of a favourable outlook for strong and sustainable economic growth are based on several factors, such as anticipated price stability and the low investment costs it entails, the reduction in foreign exchange risk, the funds made available under the 3rd Community Support Framework (CSF) and the beneficial effects of the structural reforms being implemented or planned in the European Union in order to enhance the competitiveness of the European economy. The overall prospects of the Greek economy are now much more strongly related than in the past to the prospects of the European Union and especially of the euro area as a whole, owing not only to the closer links between the markets and the implementation of the single monetary policy, but also to the impact of other EU policies. The fiscal orientations of the Stability and Growth Pact and the reforms carried out at the national level by the other EU Member States affect current economic conditions and the formulation of economic policy in Greece, as well as the structures of the unified economic area Greece belongs to.

7.1 Short-term prospects

According to the latest forecasts by international organisations, euro area economic growth is estimated to slow to 2.4%-2.8% in 2001 (from 3.4% in 2000), as world GDP growth is expected to fall below 3.5% in 2001 from 4.8 % in 2000. This projection largely reflects the fall in the growth rate of the US economy below 2% in 2001 (from 5% in 2000), after its sharp drop in the second half of 2000 and the beginning of 2001. It also reflects the fact that the growth rate of economic activity in Japan fell below 1% in 2001 from 1.7% in 2000. These developments will evidently have a negative effect on euro area exports. However, owing to the greater contribution of internal demand, which has retained its dynamism, euro area GDP growth is expected to approach or even exceed the average growth rate of production capacity in recent years.

In spite of the slowdown in international and euro area economic activity, the growth rate of the Greek economy is expected to pick up this year, mainly as a result of the faster expansion of private and public sector investment. This outlook is based on such factors as the climate of stability created by full participation in EMU, the easier monetary conditions, the continuing substantial inflow of resources from the EU Structural Funds, the intense activity of Greek enterprises in the Balkan region and the accelerating execution of works related to the 2004 Athens Olympic Games. However, the slowdown in world economic growth and certain domestic economic developments in the fourth quarter of 2000 and the first quarter of 2001 seem to indicate that Greek GDP growth, while remaining high, may end up slightly lower than 4.5%, i.e. less than the rate projected in the Greek Stability and Growth Programme (5%). According to the latest forecasts by international organisations, Greek GDP will increase by between 3.8% and 4.4%. Meanwhile, the decrease in the unemployment rate in the second quarter of 2000 (latest available data) should continue in 2001, reflecting the cumulative effect of strong growth in recent years and of the policy adopted on employment.

Inflation in the euro area, after picking up in 2000, mainly as a result of exogenous factors, is expected to gradually slow to less than 2% in the course of 2001. The average annual rate of increase in the HICP should therefore fall slightly below the corresponding rate in 2000 (2.3%).¹ While average annual oil prices in the world market are expected to decline this year compared with 2000, the indirect impact of last year's rise is still showing up in the prices of final goods and services, causing an increase in euro area core inflation through March 2001. The steady drop in the rate of monetary expansion towards the reference range and the projected slowdown in GDP growth are expected to help mitigate domestic inflationary pressures and lower inflation to a level compatible with price stability.

The main determinants of inflation in Greece are expected to have a favourable overall effect in 2001. It is estimated that the annual rate of inflation will gradually fall below 3% in the course of 2001 and, based on certain assumptions regarding exogenous

¹ The HICP rate rises to 2.4% if, for reasons of comparability, Greece is included in the euro area.

factors and policy conduct, converge towards a level compatible with price stability in 2002. This deceleration of inflation is anticipated for the following reasons: First, the fixed exchange rate of the drachma against the euro (after the single currency was introduced on 1 January 2001), combined with the prospect of a stable, if not stronger, euro against the US dollar, as well as the projected decline in average annual oil prices in the world market and the substantial deceleration of world price increases for imported raw materials and manufactured goods, should markedly reduce the impact of imported inflation on the prices of domestic final goods. Second, the rate at which unit labour costs rise is expected to pick up only slightly in the business sector and to slow down in the economy as a whole. Third, fiscal management is expected to yield a general government surplus, in accordance with the commitments of the Stability and Growth Programme. Finally, competition should increase in certain sectors of the economy.

The change in monetary conditions, as a result of the switchover to the single monetary policy, is bound to affect prices. Although this effect cannot be determined accurately, it will probably be limited for the following reasons: First, as the reduction in interest rates during 2000 was gradual, part of its impact on prices was felt within the year. Second, the expansionary effect on demand due to the reduction in interest rates will be partly offset by the fact that net annual interest income will be less than in 2000, since Greek households are net creditors, considering that the outstanding balance of their deposits and other fixed income liquid assets is much greater than their liabilities from borrowing. Third, the decrease in interest income coincides with a drop in the current value of shares, which has a restraining effect on domestic consumer demand. Fourth, as in 2000, a substantial part of the increase in demand is expected to be channelled towards imported goods, thereby mitigating pressures on the prices of domestic products, while interest rate cuts and high credit expansion may have a stronger impact on the demand for fixed assets and, thus, on real estate prices, without having a marked effect on consumer prices.

There are, however, elements of uncertainty. The exact magnitude of the impact of easier monetary conditions, the final rate of increase in unit labour costs and oil price developments could adversely affect inflation, as compared with the basic forecast. These uncertainties, as well as the course of core inflation during the first quarter of 2001, call for vigilance and – considering that the means used in the conduct of national monetary policy are no longer available – create certain obligations that national economic policy and the social partners will have to meet. Although the single monetary policy certainly helps consolidate a climate of stability and influences the expectations of economic agents accordingly, its purpose is to secure a low rate of inflation in the euro area as a whole, and not in individual countries. The social partners in Greece will therefore have to ensure that wage increases and pricing policies remain compatible not only with price stability, but also with the maintenance and enhancement of competitiveness. At the same time, the consistent conduct of fiscal policy must ensure the attainment of fiscal objectives and contribute in a flexible way towards containing inflationary pressures generated by demand, while offsetting unpredictable inflationary pressures on the supply side. Finally, the social partners must

cooperate in increasing the adaptability of the labour market and its efficient functioning, while the government should speed up the implementation of structural reforms aimed at raising productivity and strengthening competition in the domestic market.

7.2 Long-term objectives

The primary objective of economic policy in the current decade is to achieve a consistently high economic growth rate, so as to speed up the real convergence of the Greek economy and reduce the high rate of unemployment. Faster economic growth must of course be pursued in conjunction with price stability and the completion of fiscal consolidation, if the increase in real income is to be sustainable. The Greek Stability and Growth Programme anticipates an average growth rate of 5.3% from 2001 through 2004, a decline in the unemployment rate to 7.5% and a decrease in the debt/GDP ratio to 84% by the end of 2004. In order to achieve real convergence within a reasonable time horizon, even higher growth rates will be needed.

The wider policy framework within which the Greek economy is called upon to develop was determined in March 2000 by the Lisbon European Council, which set as a strategic target for the current decade that the European Union must become “the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion”. Two more specific objectives were to maintain the average growth rate at 3% over the decade and increase the overall employment rate¹ (men and women) to 70% and the female employment rate to 60% by 2010.² These objectives for the EU economy require a constant improvement in competitiveness and a strengthening of its production potential³ and are equivalent to a significant reduction in unemployment leading to full employment.

The economic performance of the European Union has improved markedly in recent years, with the growth rate accelerating from 1.6% in 1996 to 3.4% in 2000 and the unemployment rate falling from 10.7% to 8.3%.⁴ These results are attributable to monetary stability and fiscal consolidation, as well as to economic policy coordination and the acceleration of structural adjustments in the EU Member States. Specifically, the introduction of the euro and the integration of the single market have strengthened competition, which had already intensified owing to market globalisation and progress in the fields of information technology

1 Defined as the percentage of employed, aged between 15-64 years, in the population of the same age group.

2 In March 2001, the Stockholm European Council, after noting that the EU employment rate had reached 63.3% overall and 53.5% for women in 2000, set intermediate targets of increasing the overall employment rate to 67% and the female employment rate to 57% by January 2005. It also set a new target of increasing the employment rate of older workers aged 55-64 years to 50% by 2010 (from 37.4% in 2000).

3 As measured by the growth rate of “potential output” (the growth rate of the total supply of goods and services, which can be maintained in the long term without inducing inflationary pressures).

4 The growth rate in the euro area rose from 1.5% to 3.4%, while the unemployment rate fell from 11.4% to 8.9% over the same period.

and telecommunications. Furthermore, policies aimed at improving competitiveness were promoted across the EU. Consequently, certain EU countries have achieved impressive economic restructuring, which has been conducive to a significant improvement in their competitiveness. According to recent estimates,¹ four small EU countries are among those with the highest growth in competitiveness, while, according to another indicator, two large EU countries and three smaller ones are among the eight countries with the highest productivity and competitiveness in the world. The ability of the economy to adjust and the prospects of attaining long-term growth and employment objectives in the EU are therefore generally favourable.

However, as described in the resolutions passed at the recent summits of the European Council, serious challenges lie ahead. Specifically, efforts to achieve the overall objectives mentioned above imply, *inter alia*, a competitive utilisation of the latest technologies and a decisive promotion of structural reforms across the EU. Furthermore, the economic performance of the EU over the coming years will be affected by two other important factors: the enlargement procedure and adverse demographic developments. At the end of 2002, the EU will be ready to welcome as members those of the 12 candidate countries that will qualify for EU entry and it is likely that the first new members will be admitted in 2004. In addition, the EU must address the population ageing issue, which increases the need, on the one hand, to modernise the European social model, so as to strike a balance between flexibility, efficiency and security, and, on the other, to reform the social welfare systems.

The Greek economy's real convergence on the European economy within a reasonable time limit (e.g. within a decade, as set in Lisbon for achieving EU growth objectives) is certainly a desirable, albeit ambitious, goal. The numerous benefits from Greece's full participation in EMU and from the opportunities it offers will help Greece achieve this objective. However, the environment of stability entailed by euro area membership is a necessary but not sufficient condition for real convergence. To achieve real convergence requires persistent, strong and concerted efforts in several areas: implementation of appropriate fiscal and structural policies, faster modernisation and more efficient operation of both the public and the private sector.

The amount of effort Greece must make to achieve real convergence and an increase in employment is shown more clearly by specific data related to the gap between Greece and its European partners, as well as by anticipated developments in the EU. First, Greece's GDP per capita in 2000, as measured in current prices and in units of equivalent purchasing power, amounted to 67.3% of the EU average. The employment rate (of the 15-64 years age group) was 55.8% in Greece, compared with 63.3% in the EU and the objective of 70% for 2010,² while the unemployment rate was almost three percentage

1 World Economic Forum, *Global Competitiveness Report 2000*, September 2000.

2 See European Commission, *Realising the EU's potential: Consolidating and extending the Lisbon Strategy (Annex 2: Structural Indicators)*, submitted to the Stockholm European Council, in February 2001. The employment rate in Greece was estimated on the basis of the latest NSSG data from a work force survey. As mentioned in the National Plan of Action for Employment in 2001 (released on 18 April 2001), Greece has, in the light of the European Council's resolutions, set itself the ambitious target of raising the overall rate of employment to 61.5% by 2005 and to 64.5% by 2010.

points higher than in the EU. Second, Greece's convergence will be impeded by low productivity and a high debt/GDP ratio. Greek productivity, as measured by GDP per hour worked, amounted to 62% of the EU average;¹ Greece's debt/GDP ratio was over 100% (in all other EU countries, except Belgium and Italy, public debt, if not already below 60%, is expected to reach that level soon). Generally speaking, the structural weaknesses of the Greek economy, such as the rigidity of certain markets and the inefficiency of public administration, are also hindering the convergence process. Third, as mentioned above, the EU has also set itself the strategic objective of accelerating growth and increasing employment; the relevant performance of the EU will therefore constitute a "moving target" towards which Greece will have to keep converging. Fourth, the growth rate of the Greek economy will be affected in the long run by EU enlargement, as well as by the ageing of the population and the fiscal strain it will entail. The need for Greece to improve its competitiveness will be more pronounced within the enlarged EU, while the availability of resources from the Structural Funds (in an amount roughly equivalent to 2.5% of GDP per year through 2006²) will inevitably be reduced. Furthermore, in conjunction with the present state of the social security system, the demographic problem, which, as mentioned above, is a major preoccupation in all EU countries, is particularly acute in Greece.

7.3 Challenges facing economic policy

The preceding discussion does not call into question Greece's ability to achieve real convergence and full employment in the coming years. It does, however, serve to stress the effort that has to be made to attain these objectives within a reasonable length of time, as well as the need to tackle the factors and conditions adversely affecting the economy's growth prospects. Economic policy makers and the social partners must focus their efforts on securing two basic prerequisites for rapid and sustainable growth within the intensely competitive environment of the European Union – i.e. two intermediate objectives: first, a continuous increase in productivity and competitiveness and, second, the completion of the fiscal consolidation process.

Reducing the debt/GDP ratio is necessary not only to ensure fiscal stability in the long run, but also to enable the rechanneling of funds to strengthen employment and entrepreneurial motivations and to upgrade economic and social infrastructure.³ The consequences for competitiveness and growth would be positive. The low marginal costs of servicing public debt, following Greece's accession to the euro area, the planned tax reform

1 The relatively high percentage of part-time employment in the EU lowers the average productivity rate when the measurement is based on GDP per worker. That is why it is more rational to measure productivity on the basis of GDP per hour worked. Greek productivity, measured on the basis of GDP per worker, stood at 78.4% of the EU average.

2 This estimate concerns the community fund allocations under the 3rd CSF.

3 The availability of rechannelable funds could serve not only to finance expenditures, but also to grant tax reductions.

and the restructuring of the expenditure control system can and must be used to advantage to generate the necessary surpluses and reduce the debt/GDP ratio at a satisfactory pace.

The main factor with serious long-term effects on fiscal balance is the social security system, particularly the combined impact of its present state and adverse demographic prospects. Should the basic characteristics and the internal parameters of the Greek social security system (mainly the pension system), such as contribution and benefit ratios and levels, age limits and organisational fragmentation, remain unchanged, then the fiscal burden will increase, so long as the projections regarding the age composition of the population prove to be correct. According to recent demographic projections, the “elderly dependency ratio”, i.e. the number of people aged 65 and over as a percentage of the working age population (aged 20-64), will be increasing in Greece at a gradually faster pace and should more than double by 2050.¹ In such an instance, public expenditures for pensions, health-care and welfare for the elderly would increase excessively as a percentage of GDP.²

These “dependency ratio” and expenditure projections are based on the assumption that the terms of the equation (internal parameters of the social security system and external factors determining long-term demographic trends, employment and productivity) and, generally speaking, macro-economic and structural policies remain unchanged. The solutions to be examined include the implementation of policies that boost the employment rate and favour an increase in productivity.³ Specific policy orientations could, for instance, involve the more extensive and permanent inclusion of immigrants in the labour market and the social security system, the elimination of certain features of the Greek tax and social security systems which tend to encourage employment in the informal sector of the economy, and the granting of additional benefits to workers with family obligations. Furthermore, containing contribution evasion will help mitigate the problem and must be given top priority. On the other hand, ensuring the viability of the social security system will require interventions in the existing system’s internal parameters, as well as in the basic social security “pillars”⁴ and the way in which the resources of the various social security funds are managed.

1 See European Union, Economic Policy Committee, *Progress report to the ECOFIN Council on the impact of ageing populations on public pension systems*, November 2000, as well as the study submitted by the Government Actuary’s Department (UK) to the Greek Government in April 2001.

2 According to the previously mentioned report of the Economic Policy Committee, Greece ranked fifth in 1998 in terms of gross public expenditures for pensions as a percentage of GDP (12.1%). This ratio was higher in Austria (14.6%), Italy (14.2%), France (12.7%) and Germany (12.4%).

3 A faster increase in productivity can bring about a decrease in the percentage of GDP allocated to pensions, considering that wages, on which insurance contributions are reckoned, follow the rise in productivity, while pensions (benefits) increase at a slower pace.

4 International experience and proposals so far considered point to the need to address two major issues: the role of the State (i.e. its partial funding of social security costs out of the general tax revenue) and the choice of an appropriate mix of the three broad options, i.e. the pay-as-you-go system (in which the pensions of the currently retired are financed by contributions of current workers), the funded system (in which there is a strict relation between contributions and benefits at an individual or occupational/branch level), and supplementary private insurance. The partially state-funded, pay-as-you-go system, which is predominant in Greece (and in the EU as a whole), depends directly on the ratio between the number of working individuals and the number of retirees, and thus on demographic prospects. The funded system, on the other hand, is only indirectly affected by demographic prospects.

Responsibility for the final choice of the specific parameters or standards for the reform of the social security system lies, of course, with the government, which has already formulated its initial proposals and has invited the social partners and political parties to formulate theirs, so that progress can be made in the relevant debate in the months to come. It is not within the field of competence of the Bank of Greece to propose ways of resolving the problem; it is, however, its obligation to point out the severity of the problem and the need for its timely resolution, so that fiscal balance can be ensured in the long run and the competitiveness of the economy can be enhanced. In this respect, the following clarifications should be made: the previous remarks illustrate just how serious and complex the problem is and how radical the corrective interventions must be. These interventions will furthermore have to be carried out gradually to ensure a smooth transition. The final changes should be adopted after a fruitful dialogue, focusing on a better understanding of the problem and a thorough examination of all the proposals. This will enable a consensus to be reached on basic options. The solutions finally chosen will be more effective and socially more acceptable if the problem is tackled in a more comprehensive light, with employment and tax policies serving to increase the number of people insured, as their contributions are the main source of the system's resources. Finally, the reform of the social security system must not only be based on a sound theoretical approach, but also ensure efficient operation in practice.

In any case, the ageing of the population and the reform of the social security system (or, at least, the financing of the transitional arrangements that must necessarily and inevitably accompany the reform) will call for the allocation of additional public funds.¹ The possibility, however, of drawing on projected budget surpluses will be limited, since reducing public debt will be given priority at least in the immediate future. This restricting factor implies that fiscal policy must systematically seek to contain non-productive expenditures in the coming years, as it would be inadvisable to increase the tax burden, because of the adverse effects this would have on the competitiveness of the economy. Hence, the necessary increase in tax revenue must come from a rise in economic activity and a reduction in tax evasion.

A substantial and continuous enhancement of competitiveness is the main means of achieving a steady increase in real income and employment in the long run. Since domestic demand in Greece is not strong enough to support a consistently high rate of increase in real income, foreign demand and import substitution take on greater importance, as does the need for the competitive presence of Greek products on international and domestic markets, with products and services that will be in demand in the future. Ensuring competitiveness calls for an increase in productivity, from its present relatively low level, so as to reduce production costs. It also calls for investments oriented towards exports and import substitution, i.e. investments that will enable the production of goods

1 According to the central projection of the Government Actuary's Department, government expenditure for pensions will increase from 4.8% of GDP in 2000 to 16.8% in 2050. On the basis, however, of a *combination of favourable alternative assumptions* regarding demographic developments, the rise in employment, the decrease in unemployment and the increase in real wages, this percentage would increase much less but would still reach 9.3% in 2050, which is almost twice as high as in 2000.

and services of the quality indicated by foreign and domestic demand. Attracting foreign direct investment and developing the “new economy” are two –largely interlinked– processes which can contribute to this end, as they promote the technological modernisation of enterprises and the introduction of more efficient management and administration methods, in which the average Greek enterprise is lacking.

The EU countries, which have achieved high competitiveness, are characterised by fast export growth and a significant inflow of foreign direct investments, while public expenditures for education and research, as well as business outlays for research, account for a sizeable share of GDP. Other indicators are also high, such as the Internet access rate or the number of applications for new patents. Greece clearly lags behind in all of these indicators, as shown in a number of official EU publications.¹ Specifically, the inflow of foreign direct investments, which is linked to acquisitions and mergers, did not exceed 1% of GDP in 2000, although foreign participation in the own funds of certain enterprises has increased markedly in recent years. In addition, according to a recent report on world competitiveness, Greece ranks last among all EU countries.²

A substantial improvement in competitiveness should be brought about by the continuous and considerable increase in business investment and public sector infrastructure investment observed in recent years, and by the ongoing deregulation of the telecommunications and energy markets (which has spurred rapid development in the former and strong investment interest in the latter). Similar effects are expected from the promotion of institutional reforms that will facilitate the establishment of new firms,³ improve the legislation governing acquisitions and mergers (by making it simpler and clearer) and encourage the introduction of innovations and the development of the “knowledge-based society”, thus boosting business activity. These factors will also serve to attract foreign investments, especially if the tax and social security systems are made more competitive and if changes in the educational system improve the quality of the labour supply.

Although the significant enhancement of competitiveness will make a decisive contribution to the faster growth of GDP and employment, additional policies will be required to deal with the issue of unemployment. Full utilisation of the workforce is a central goal of economic policy, as it is a basic social option, leading to an increase in real income and ensuring fiscal stability. The problem is of equal severity in the EU as a whole and in Greece: high unemployment (especially of the younger age group); low rate of employment (particularly among women); large regional differences; an insufficient

1 See (1) European Commission, *Realising the EU's potential: Consolidating and extending the Lisbon Strategy (Annex 2: Structural indicators)*, submitted to the Stockholm European Council in February 2001, (2) European Union, Economic Policy Committee, *Annual report on structural reforms*, March 2001, (3) European Commission, *Report on the implementation of the 2000 broad economic policy guidelines*, March 2001.

2 See World Economic Forum, *Global Competitiveness Report 2000*, September 2000. This report comprises various indicators that have been elaborated regarding the performance of roughly 60 countries, for the purpose of comparing the competitiveness of their economy, competitiveness being defined as the total of institutions and economic policies that support high growth rates of GDP *per capita*.

3 E.g. the draft law simplifying the establishment of sociétés anonymes and limited liability companies.

labour supply in certain skills. The problem is serious in the EU, and even more so in Greece, at least as regards some crucial aspects. Specifically, while the unemployment rate has been falling in the EU in recent years, in Greece it rose until 1999 and still remains higher than the EU average. The unemployment rates of young people and women are also higher than in the EU,¹ and the employment rate is lower. By contrast, mainly because of the considerable inflow of migrants, specific labour supply shortages do not appear to be worse than in the rest of the EU.

European experience over the last twenty years leads to the following conclusions regarding the main causes of high unemployment and the factors that have contributed to its significant reduction in several countries.² Unemployment rate developments can be attributed initially to economic shocks and changes in economic policy, such as changes in the cost of capital and in productivity and real wage growth. The more permanent repercussions of these factors on the “equilibrium” unemployment rate, which is *also* compatible with price stability, depend on the interaction of these factors with institutional features of the labour market (including the collective bargaining system) and the commodity market. This is because these features affect the adjustment of employment to economic shocks and to changes in economic policy. The degree of labour market flexibility explains in part the variations over time in the unemployment rate and the differences in unemployment levels between countries. Structural reforms that increase labour market flexibility can help reduce the rate of unemployment. An examination of developments in countries which have succeeded in markedly reducing unemployment reveals that in some instances *cohesion* between individual institutional measures or practices and macroeconomic policy has contributed to faster growth and less unemployment.³ It is worth stressing two points: First, the strategy adopted by the European Council is essentially based on this sort of approach, as it pursues cohesion between macroeconomic policy, structural adjustments, employment policies and the process of determining wage increases. Second, the implementation of this strategy is expected to lead to a reduction in the unemployment rate compatible with low inflation, thereby facilitating the conduct of the single monetary policy in order to secure price stability.

The steps taken in other EU countries are obviously of value in increasing the employment rate and addressing the issue of unemployment in Greece. Mention must, however, be made of certain specific policy orientations aimed at boosting labour supply

1 Greece has the second highest overall unemployment rate and female unemployment rate in the EU (after Spain), but the unemployment rate among men is very close to the EU average (2000 data).

2 The biggest reductions in the unemployment rate in the EU during the last decade were effected by Ireland (-11 percentage points), Spain (-10 percentage points) and Finland (-7 percentage points) followed by Denmark and the United Kingdom (-5 percentage points each).

3 The Netherlands is a typical example of this specific type of “cohesion”. The trilateral Wassenaar agreement, reached by the labour unions, employers and the government in 1982, led to a moderation in workers’ wage claims, to an increase in labour demand and business investments, to greater labour market flexibility and to a reduction in taxation by the government. This resulted in an almost uninterrupted 18-year decline in unemployment (from 11% in 1982 to roughly 3 % in 2000). Such agreements, however, are not at all easy to reach, as illustrated by the negative experience of other countries (e.g. Spain).

and demand, in terms of both quality and quantity. Law 2874/2000 includes relevant and useful measures, but proper utilisation of its provisions regarding working hour flexibility will mainly depend on the initiatives and response of the social partners. As mentioned above, changes in the income tax and social security systems are of major importance, if these systems are to become friendlier towards salaried employment in the “official” sector of the economy. Equally important is the more permanent and effective inclusion of immigrants in the labour markets, which requires appropriate educational and training programmes. As regards the overall training system, it is necessary to improve government programmes, which should be facilitated by the planned restructuring of the Manpower Employment Agency (OAED), and to boost in-house training over the long run.

Generally speaking, an upgrading of the educational system can foster faster economic growth in various ways, especially when the economy is knowledge-based. The reform of general education is of particular importance, so that, *inter alia*, students can acquire learning skills that will offer them flexibility in an environment of ever-changing knowledge and technologies. At the same time, computer literacy must be promoted, meaning that all students and workers should be given the opportunity to acquire computer-user skills, while Internet access should be made easier and less expensive. Significant steps are already being taken in this direction, although additional ones are required, as educational reform and the dissemination of new knowledge will upgrade the quality of the labour supply and create the necessary conditions for greater productivity, increased entrepreneurial initiatives and an improvement in business administration and management methods.

Real convergence is a long-term prospect. To illustrate this point, it is worth mentioning that, according to simple mathematical calculations, if GDP in the Union steadily increases at an annual rate of 3% (the Lisbon objective) and Greek GDP at a rate of 5%, then GDP per capita in Greece will take roughly 20 years to converge on that of the EU. Higher growth rates are therefore required to shorten the convergence period. This, in turn, would necessitate the immediate promotion of structural reforms, so as to increase productivity and market efficiency, upgrade the material and human resources of the economy, speed up the modernisation of public administration and the business sector, and attract foreign investments. It would also presuppose a completion of the fiscal consolidation process, including a timely resolution of the social security issue. Meanwhile, the social partners should be made aware of the size of the effort required to attain real convergence within a reasonable length of time and of the need for consensus on all decisions. This would consolidate a climate of stability and growth in Greece.

Only a few years ago, Greece’s nominal convergence by the year 2000 and subsequent entry into EMU might have seemed to be a particularly ambitious, if not entirely unattainable, goal. This difficult venture was, however, successfully completed, thanks to the conduct of an appropriate policy, the efforts made by the social partners and widespread social acceptance. If the aims and actions of the social partners and the government are imbued with the vision of real convergence and full employment, which should normally enjoy the widest possible acceptance, then also this vision will become a reality.

III. ECONOMIC ACTIVITY AND EMPLOYMENT

1. EXPENDITURE AND NATIONAL INCOME

The growth rate of gross domestic product (GDP) accelerated to 4.1% in 2000, from 3.4% in 1999, according to Ministry of National Economy¹ estimates (see Table III.1). The increase is attributable – roughly to the same extent – to investment and private consumer demand. By contrast, the contribution of the real external balance of goods and services was negative, while in 1999 it was slightly positive. Besides, on the supply side, GDP increased faster than in 1999 in the secondary and the tertiary sector, while its growth rate remained basically unchanged in the primary sector.

Private consumption increased by 3.2%, compared with 2.9% in 1999. The real increase in the gross disposable income of the private sector² was similar (3.1%) and, as a result, the average propensity to save remained stable. The considerable increase in wage earners' disposable income contributed to the growth of total disposable income, while consumer demand was affected (positively or negatively, depending on the case) by the increase in consumer loans, the drop in stock prices and the rise in real estate (dwellings) prices.³ These estimates are corroborated by the available short-term indicators (see Chart III.1). Specifically, the volume of retail sales (excluding cars) increased in 2000 by 5.4%, i.e. more than twice as fast as in 1999 (2%), reflecting similar increases in almost all individual components. Although the annual rate of growth of retail sales volume slowed down in the last quarter of 2000, it remained high in December (5.3%). Besides, new passenger car registrations increased at a high annual rate (12.7%), which was considerably lower than in 1999 (46.8%), as was expected given the relative saturation of demand, while in the last quarter of 2000 it turned negative.⁴ Nevertheless, the index of business expectations in retail trade remained virtually unchanged in 2000 (–0.5%), as in 1999 (+0.1%). This index improved noticeably until September, but fell significantly in the last quarter of 2000.

Total investment demand rose by 9.4%, compared with 7.3% in 1999 (see Table III.1). Specifically, the growth rate of general government investment remained high, but declined from the very high level of 1999. By contrast, investment in “other sectors” increased faster than in 1999. It should be noted that: (a) total gross fixed capital formation as a percentage of GDP came to about 24% in 2000,⁵ compared with 18.6% in 1995,

1 Macroeconomic Analysis Directorate, March 2001. Data for 1999 have been revised by the NSGG.

2 Available national accounts data do not distinguish between households and enterprises. Therefore, the “private sector” comprises households, as well as private and public enterprises.

3 See Chapter IV, Sections 1.2 and 2.

4 Indirect taxation on passenger cars was reduced as from 6 September 1999, resulting in a very high level of sales in the fourth quarter of 1999.

5 23.7% at current prices, 24.3% at 1995 constant prices.

TABLE III.1
GROSS EXPENDITURE OF THE ECONOMY AND GROSS DOMESTIC PRODUCT
(Constant market prices of year 1995)

	Billion drachmas ¹	Annual percentage changes			
	1995	1997	1998	1999	2000
1. Consumption	24,075.7	2.8	2.8	2.4	2.8
1.1 Private	19,901.6	2.8	3.1	2.9	3.2
1.2 Public	4,174.1	3.0	1.7	-0.1	0.8
1.2.a Individual consumption expenditure	1,600.7	1.3	2.3	-0.4	0.8
1.2.b Collective consumption expenditure	2,573.4	4.1	1.3	0.1	0.9
2. Gross fixed capital formation	5,066.0	7.8	11.8	7.3	9.4
2.1.a By investor: General government	864.0	10.4	10.5	14.7	9.1
2.1.b Other sectors	4,202.0	7.3	12.1	5.8	9.5
2.2.a By type: Construction	3,210.5	7.4	6.5	9.0	9.0
2.2.b Equipment	1,594.5	8.3	24.3	1.8	11.0
2.2.c Other investment	261.0	8.6	-17.0	41.6	2.0
3. Change in stocks and statistical discrepancy (percentage of GDP)	85.7	0.2	0.4	-0.1	-0.2
4. Domestic final demand	29,227.4	3.6	4.7	2.9	4.1
5. Exports of goods and services	4,800.2	18.2	5.9	6.5	13.7
5.1 Exports of goods	2,843.2	5.9	8.4	2.3	8.5
5.2 Exports of services	1,957.0	34.7	3.3	11.2	19.0
6. Final demand	34,027.6	5.7	4.9	3.5	5.7
7. Imports of goods and services	6,792.4	13.9	11.3	3.9	10.7
7.1 Imports of goods	6,162.4	9.9	11.6	-0.9	8.0
7.2 Imports of services	630.2	56.9	9.8	39.9	25.0
8. Balance of goods and services	-1,992.2	...	...	...	...
9. GDP at market prices	27,235.2	3.5	3.1	3.4	4.1

	Contribution to GDP growth			
1. Consumption	2.5	2.5	2.1	2.4
1.1 Private	2.0	2.2	2.1	2.3
1.2 Public	0.5	0.2	0.0	0.1
1.2.a Individual consumption expenditure	0.1	0.1	0.0	0.0
1.2.b Collective consumption expenditure	0.4	0.1	0.0	0.1
2. Gross fixed capital formation	1.5	2.4	1.6	2.2
2.1.a By investor: General government	0.3	0.4	0.5	0.4
2.1.b Other sectors	1.2	2.1	1.1	1.8
2.2.a By type: Construction	0.9	0.8	1.1	1.2
2.2.b Equipment	0.6	1.8	0.2	1.0
2.2.c Other investment	0.1	-0.2	0.3	0.0
3. Change in stocks and statistical discrepancy (percentage of GDP)	-0.1	0.2	-0.5	-0.1
4. Domestic final demand	3.9	5.1	3.2	4.5
5. Exports of goods and services	3.2	1.2	1.4	2.9
5.1 Exports of goods	0.6	0.9	0.3	0.9
5.2 Exports of services	2.6	0.3	1.1	2.0
6. Final demand	7.1	6.3	4.6	7.5
7. Imports of goods and services	-3.6	-3.3	-1.2	-3.3
7.1 Imports of goods	-2.4	-2.9	0.2	-2.1
7.2 Imports of services	-1.3	-0.3	-1.4	-1.2
8. Balance of goods and services	-0.4	-2.0	0.2	-0.4
9. GDP at market prices	3.5	3.1	3.4	4.1

Source: Revised data on the basis of the European System of Accounts (ESA 95).

1995-97: NSSG/National Accounts.

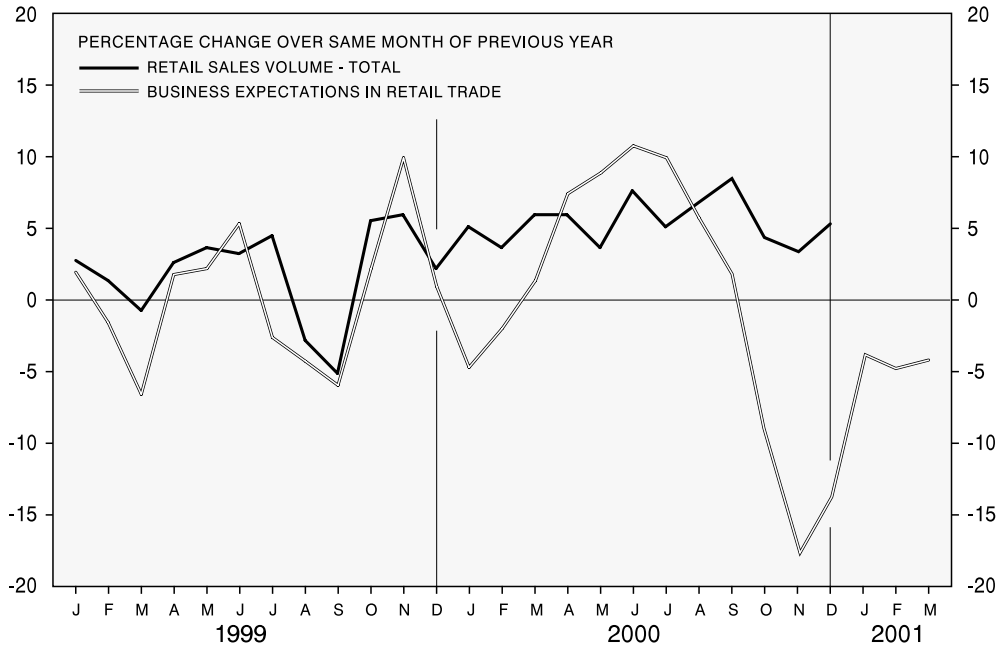
1998-99: NSSG/National Accounts. Provisional estimates.

2000: Ministry of National Economy/Directorate of Macroeconomic Analysis (March 2001). Estimates.

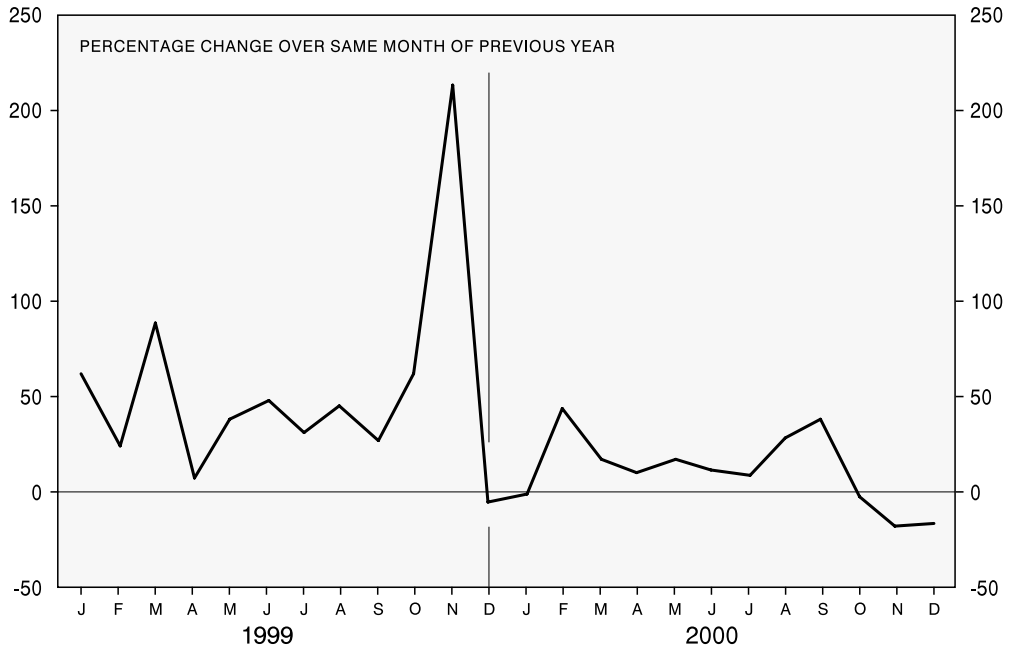
CHART III.1

CONSUMER DEMAND

A. RETAIL SALES VOLUME AND BUSINESS EXPECTATIONS



B. NEW PASSENGER CAR REGISTRATIONS



Sources: Calculations based on data from the NSSG (retail sales and cars) and the Foundation for Economic and Industrial Research (IOBE) (expectations). The index of business expectations is calculated on the basis of business firms' estimates on sales and stocks, as well as of forecasts on business activity over the next 6 months.

(b) business investment (private non-residential investment) is estimated to have increased by 10.9% in 2000 (after rising by 5.4% in 1999), contributing by 1.5 percentage point to the increase in GDP, and (c) there are indications that the growth rate of residential investment has accelerated.¹ In more detail (see also Chart III.2):

Regarding the increase in business investment, the production of capital goods rose by 7.6% in 2000 (compared with a 0.6% decrease in 1999), while – according to an industrial investment survey conducted by the Foundation for Economic and Industrial Research (IOBE) in October and November 2000 – private enterprises estimate that their investment outlays (at current prices) rose in 2000 by 14.4%, after rising by 20% in 1999.² Apart from the overall improvement in the climate of confidence and the need to prepare for increased international competition, the rise in business investment is accounted for by the following factors: First, the decline of lending rates.³ Second, the rise in industrial firms’ operating profits.⁴ Third, fund-raising from the Athens Stock Exchange. The funds raised through the ASE by non-financial enterprises came to 2,155 billion drachmas in 2000, compared with 1,525 billion drachmas in 1999,⁵ and corresponded to almost 38% of business investment (excluding residential investment), compared with about 31% in 1999. Fourth, investment subsidisation on the basis of “operational programmes” partly financed by the EU Structural Funds. According to Ministry of National Economy data, in the year 2000 investment plans worth 209.1 billion drachmas were approved for subsidisation – pursuant to Law 2601/1998 – (grants amounted to 67.9 billion drachmas), compared with respective approvals of 139.5 billion drachmas in 1999 (grants amounted to 45.3 billion drachmas).

As regards residential investment, estimates (and forecasts) of firms constructing dwellings demonstrated a clear upswing from April 2000 – according to the IOBE’s business survey – and were generally positive in 2000 (while in 1999 they were negative). Furthermore, the volume of private construction activity (based on permits), which decreased considerably in 1999, recorded only a slight increase in January-August 2000 but increased sharply in September. Cement production as well recorded a clear upturn. The increase in residential investment is attributable to the drop in the interest rates on housing loans in 2000 and the continuing rise in real estate prices at a rate higher than both the inflation rate and the growth rate of construction costs.⁶

1 According to National Statistical Service of Greece (NSSG) and Ministry of National Economy national accounts data (March 2001), residential investment rose by 6.0%, compared with 6.9% in 1999. Nevertheless, short-term indicators (see below) *prima facie* suggest an acceleration of the growth rate.

2 These growth rates (which at constant prices correspond to an increase of 10.6% in 2000, compared with 16.6% in 1999) are among the highest in the EU. See also “Autumn Investment Survey”, *European Economy, Supplement B*, January 2001.

3 See Chapter IV.1.2.

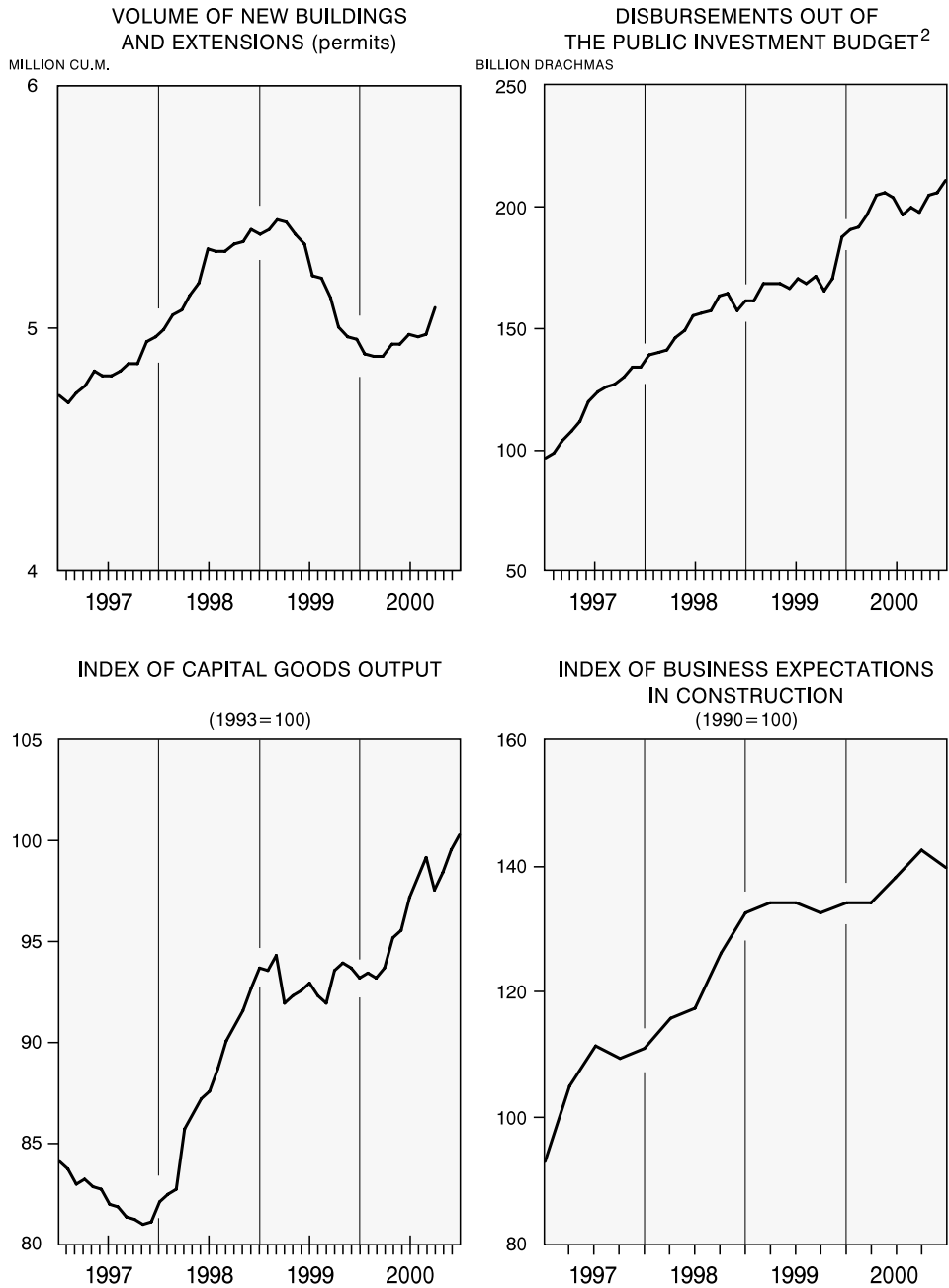
4 See Chapter IV.3.

5 See Bank of Greece, *Monetary Policy 2000-2001*, March 2001, Table IX, page 42 (in Greek). Specifically, industrial firms raised 649 billion drachmas, compared with 390 billion in 1999.

6 See Chapter IV.1.2.

CHART III.2

MAIN INDICATORS OF INVESTMENT ACTIVITY¹



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.

Finally, disbursements under the Public Investment Programme (which are associated mainly with public construction activity) increased at a high rate (12.7%), albeit lower than in 1999 (18.8%). This development is reflected in the data of the IOBE business survey concerning the estimates and forecasts of firms involved in public works. Furthermore, compared with the first eight months of 1999, public works auctioned off in the first eight months of 2000 concerned a number of projects smaller by 3.4%, while the total budget of the projects auctioned off was lower by 25.9%. According to market assessments, this reduction is associated with the fact that the period examined marked the transition from the 2nd to the 3rd Community Support Framework.

2. PRIMARY AND SECONDARY PRODUCTION

2.1 Overview

According to estimates by the NSSG and the Ministry of National Economy, the GDP of the primary sector increased in 2000 (see Table III.2) at almost the same rate as in 1999 (1.5% compared with 1.4%), while the GDP of the secondary sector grew at a faster pace (6.9% compared with 4.7%). The higher growth rate of GDP in the secondary sector was due to a marked acceleration of the rate of increase in manufacturing output and the recovery of mining activity, while the growth rates of electricity production and construction activity remained high (see Table III.3).

2.2 Agricultural production

According to estimates by the Ministry of National Economy, corroborated by provisional data from the Ministry of Agriculture, primary sector GDP increased by 1.5 per cent (1.4 per cent in 1999). This was mainly due to the production of sugar-beet (volume: +34.5%), olive-oil (+20%) and peaches (+10%), as well as milk (+5.1%) (see Table III.4). According to NSSG data, the index of producer prices rose noticeably faster than in 1999 (3.9% compared with 0.6%). The largest increase was recorded in livestock product prices (6.4%, as against no change in 1999), while plant product prices rose by 2.9% (0.6% in 1999 – see Table III.5). An even faster increase was recorded in input prices paid by producers, from 1.9% in 1999 to 5.4% in 2000. This acceleration stemmed mainly from the prices of “consumables”, particularly those paid for energy and lubricants. Between December 1999 and December 2000 the rise in energy and lubricant prices reached 19.9%, compared with an increase of a mere 5.9% in the prices of all consumables. As a result of these developments, “terms of trade”¹ for producers deteriorated by 1.4%.

1 Ratio of the rate of change in prices received to that of prices paid.

It is also worth noting that, according to annual estimates released by Eurostat in December 2000,¹ the real net value added of the Greek agricultural sector at factor cost² fell in 2000 by 2.1%. However, as labour input fell by 2.2% (measured in annual full-time-equivalent units of labour), “real agricultural income per unit of labour” remained unchanged (as in the previous year),³ while for the European Union as a whole it increased by 1.3%. According to another Eurostat survey, which is based on comparable

TABLE III.2
VALUE ADDED AT BASIC PRICES, AND GROSS DOMESTIC PRODUCT AT MARKET PRICES

	Billion drachmas	Annual percentage changes (constant prices of year 1995)				
	1995	1996	1997	1998	1999	2000
1. Primary sector (agriculture)	2,479.7	-3.3	0.7	2.6	1.4	1.5
2. Secondary sector	5,639.2	2.2	4.9	3.0	4.7	6.9
2.a Mining and quarrying	162.1	-3.0	1.0	-0.8	-9.2	3.5
2.b Manufacturing	3,261.5	3.9	1.4	1.3	1.5	5.0
2.c Electricity - Town gas - Water supply	596.6	-2.4	3.1	9.8	12.1	11.0
2.d Construction	1,619.0	1.0	13.2	4.2	9.0	9.0
3. Tertiary sector	17,048.1	2.4	3.5	3.4	2.2	3.1
3.a Trade	3,413.7	5.9	4.6	5.7	4.8	5.5
3.b Hotels - Restaurants	1,642.7	4.0	4.9	10.1	0.2	3.0
3.c Transport - Communications	1,696.3	-5.6	5.5	1.5	5.0	4.0
3.d Financial intermediaries	1,060.4	8.2	3.0	3.0	2.7	3.2
3.e Real estate management and other activities	4,285.6	1.7	1.4	1.8	1.5	2.0
3.f Public administration - Security	1,808.8	7.0	-1.3	0.5	-0.9	0.2
3.g Health	1,123.8	-1.9	3.1	1.4	1.2	1.5
3.h Education	1,313.7	-3.8	8.8	2.3	1.9	2.5
3.i Other activities	703.1	3.2	7.0	3.5	1.3	5.0
4. Gross value added	25,167.0	1.8	3.5	3.3	2.7	3.8
5. Imputed banking services	-741.3	3.3	4.8	4.7	2.2	-4.3
6. Gross value added at basic prices	24,425.7	1.8	3.5	3.2	2.7	4.1

Source: Revised data on the basis of the European System of Accounts (ESA 95).

1995-97: NSSG/National Accounts.

1998-99: NSSG/National Accounts. Provisional estimates.

2000: Ministry of National Economy/Directorate of Macroeconomic Analysis (October 2000). Provisional estimates.

1997 data,⁴ the Greek agricultural labour force (again measured in annual full-time-equivalent units of labour) represents 8.5% of the respective labour force in the EU. Of the

1 See Eurostat, *Statistics in Focus*, Theme 5-22/2000, December 2000.

2 In order to calculate this aggregate, changes in the volume of production and “real” agricultural prices (namely agricultural prices deflated by the change in consumer prices) are taken into account; intermediate consumption, capital consumption and production taxes are deducted and subsidies are added.

3 See Ministry of Agriculture, *Cost of agricultural production inputs and measures to strengthen incomes for the 2000-2001 farming period*, November 2000 (in Greek).

4 Eurostat, “Thirty years of Community agriculture summarized in figures”, press release, 8 December 2000.

TABLE III.3
INDUSTRIAL PRODUCTION (1993=100)

	Weights (1993)		Average annual percentage changes					2000 level* (1993=100)
			1996	1997	1998	1999	2000*	
INDUSTRY	100.0	100.0	1.3	0.7	6.9	2.8	7.7	124.2
1. Mining and quarrying	4.7	100.0	4.0	-1.0	-1.5	-6.0	13.6	114.7
Coal and lignite extraction		42.2	4.0	-1.8	3.6	1.6	5.3	125.5
Oil wells and extraction of natural gas		9.1	13.5	-8.9	-32.3	-94.3	1,469.9	49.1
Ores extraction		15.9	1.4	0.8	-6.4	-4.8	12.0	113.4
Other extraction and quarrying activities		32.8	3.4	1.1	0.4	-4.6	14.6	119.6
2. Manufacturing	76.9	100.0	0.2	0.7	5.6	0.6	6.1	115.0
3. Electricity - Natural gas - Water supply	18.4	100.0	4.4	1.1	13.8	11.6	11.3	163.2
Electricity		90.6	3.8	0.4	6.7	7.1	8.7	141.6
Natural gas		0.2	23.9	105.2	1,587.1	79.8	34.3	9,618.3
Water supply		9.2	9.7	5.4	8.4	4.6	8.0	156.2
INDUSTRY	100.0	100.0	1.3	0.7	6.9	2.8	7.7	124.2
Basic categories								
Energy		25.0	6.7	0.6	12.8	4.6	13.0	158.2
Intermediate goods		29.4	0.1	0.6	2.3	1.6	7.8	117.0
Capital goods		9.8	-6.4	-2.3	14.0	-0.6	7.6	100.3
Consumer durables		1.9	10.6	4.3	15.7	7.3	16.1	172.6
Consumer non-durables		33.9	-1.2	1.1	3.7	2.5	1.7	107.9

* Provisional data.

Source: NSSG.

TABLE III.4
PRODUCTION OF BASIC AGRICULTURAL PRODUCTS
(Thousand tonnes)

Products	1995	1996	1997	1998	1999 ¹	2000 ¹
Soft wheat	758	630	580	612	621	455
Durum wheat	1,384	1,132	1,269	1,300	1,400	1,315
Maize	1,520	1,800	2,050	2,000	1,850	1,850
Tobacco	120	126	126	123	123	125
Cotton (natural)	1,250	962	1,059	1,170	1,320	1,250
Tomatoes						
for processing	1,130	1,162	1,220	1,226	1,226	1,080
Sugar beet	2,600	2,352	3,095	1,970	2,160	2,906
Olive oil	330	337	453	473	350	420
Lemons	140	161	166	143	135	139
Oranges	820	979	1,001	801	1,040	903
Apples	323	335	324	332	336	330
Peaches	745	897	273	500	1,002	1,102
Meat, total	510	525	522	493	490	492
Milk, total	1,834	1,786	1,821	1,821	1,838	1,931

¹ Provisional data.

Source: Ministry of Agriculture.

TABLE III.5
PRODUCER PRICES AND INPUT PRICES* (1995=100)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
	Percentage changes in producer prices (output prices)								
Plant production	0.3	10.8	12.8	11.9	10.2	1.7	-2.4	0.6	2.9
Livestock production	11.8	8.6	0.6	16.0	-0.6	3.5	3.4	0.0	6.4
<i>General producer price index</i>	3.5	10.1	9.1	13.0	6.9	2.3	-0.8	0.6	3.9
	Percentage changes in input prices								
Consumables	12.3	11.2	6.9	5.7	7.7	2.1	0.9	1.9	6.2
Fixed capital	11.1	14.1	7.8	11.2	7.1	3.0	6.5	1.9	2.3
<i>General input price index</i>	12.1	11.8	7.1	7.0	7.6	2.2	2.0	1.9	5.4

* As from 1995, output prices do not include subsidies on products.

Source: NSSG.

Greek agricultural labour force, 87.6% consists of the farmers themselves and their family members (compared with 79.2% in the EU), 1.1% represents other fully employed persons and 11.3% persons not employed on a regular basis (9.3% in the EU). Of the “family” labour force and the other fully employed persons, 46.5% are 55 years old and over (EU total: 38.3%). Finally, between 1987 and 1997 the agricultural labour force in Greece decreased by 30%, i.e. by about as much as in the EU (29%).

2.3 Manufacturing

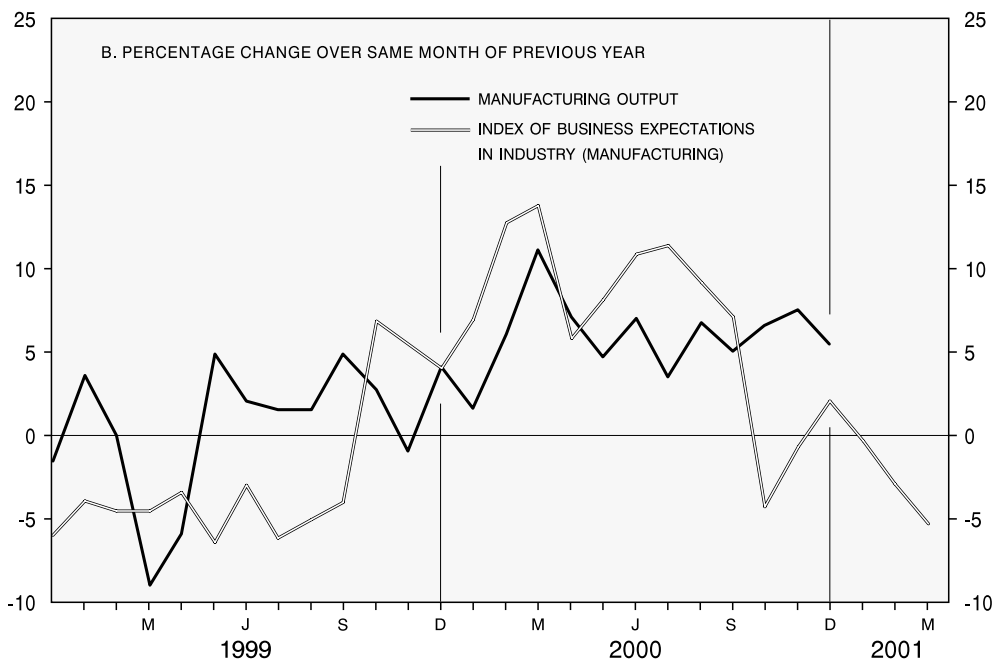
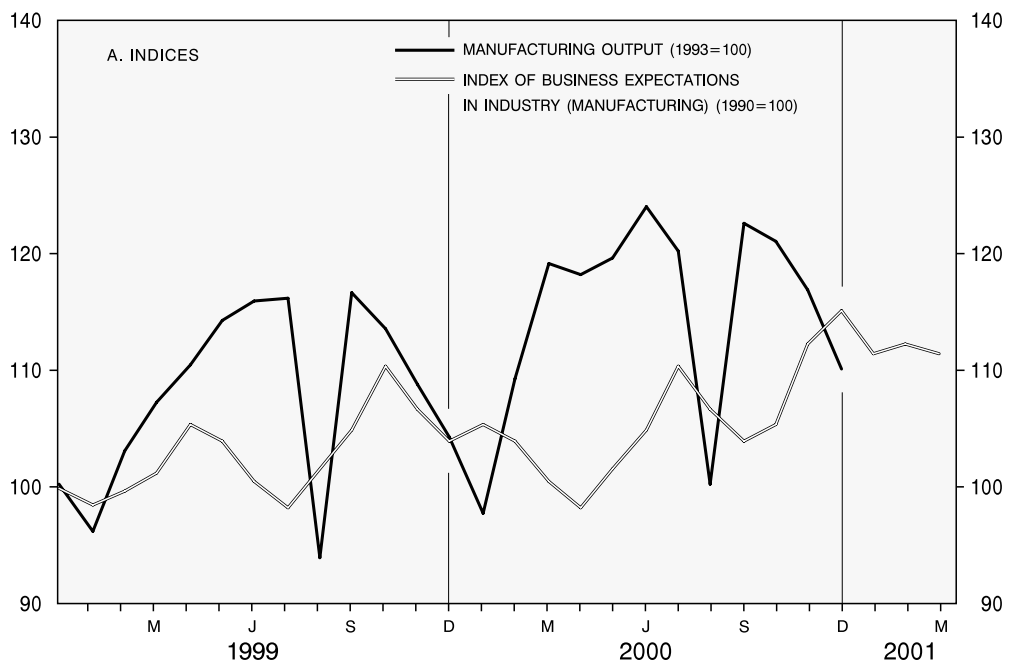
Total industrial production¹ grew by 7.7% (2.8% in 1999), reflecting the acceleration of output growth in all basic goods groups with the exception of consumer non-durables (see Chart III.4), as well as the strong recovery of mining activity (see Table III.3). The largest contribution to this outcome was made by the production of energy goods (3.9 percentage points) and of intermediate goods (2.2 percentage points).

Manufacturing production increased by 6.1% in 2000 (1999: 0.6%). At the same time, in the period up to September the rise in the business expectations index (which is compiled by IOBE and reflects estimates of the current situation as well as forecasts – see Chart III.3) was particularly strong, while the rate of capacity utilisation also increased (see Chart III.4). However, in the last three months of 2000, business estimates of current aggregate demand and the amount of reserves led to a drop in the expectations index, although estimates and forecasts of production as well as forecasts of demand remained robust.

¹ The new industrial production index (1993=100) covers the following sectors: manufacturing, mines-quarries, electricity-natural gas-water. The sub-indices of energy, intermediate goods, consumer durables and consumer non-durables cut across total industrial production, not only manufacturing production.

CHART III.3

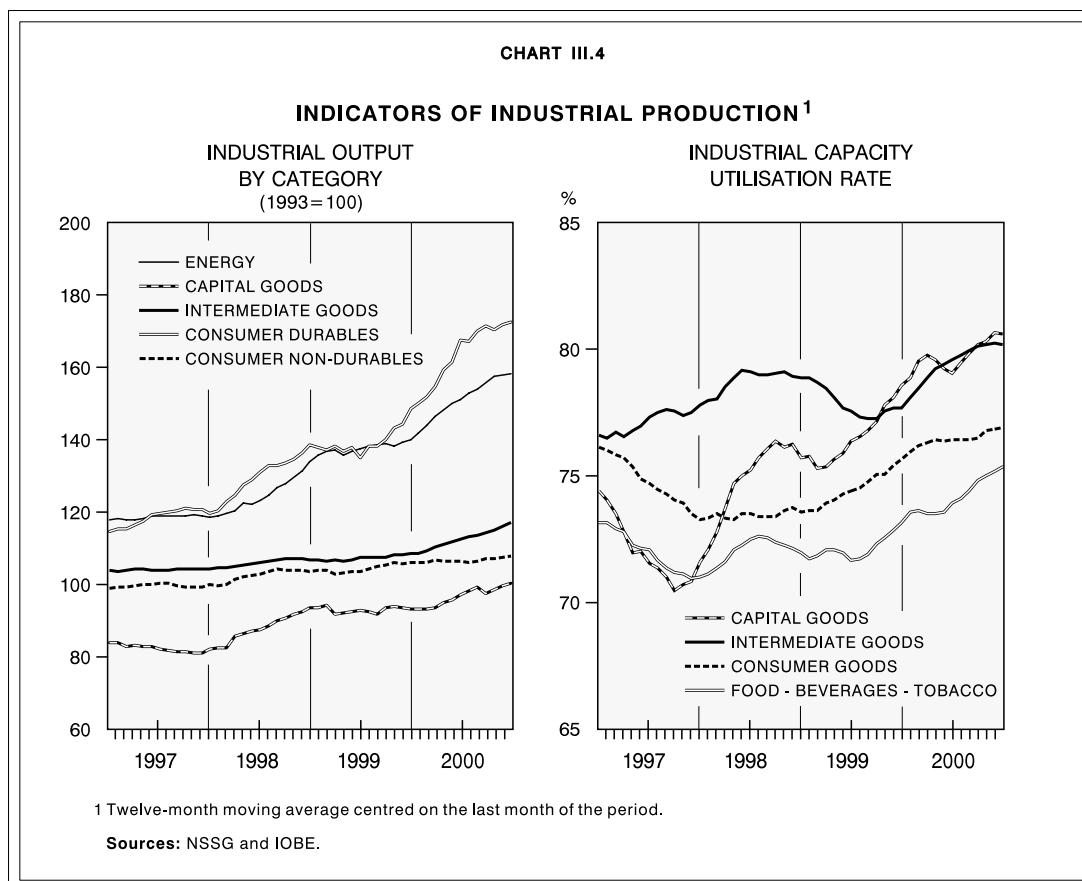
OUTPUT AND BUSINESS EXPECTATIONS IN MANUFACTURING



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

Eventually, however, the annual growth rate of manufacturing production – according to revised data – remained at a satisfactory level in the last quarter of the year as well.

An examination of developments in manufacturing production throughout 2000 (see Table III.6) and of detailed data from NSSG trade statistics (available for the nine-month period January-September) leads to certain interesting conclusions. The most important conclusion is that once more the existence of a sector of dynamic enterprises



is confirmed, while the distinction between dynamic and non-dynamic enterprises is observed not so much between branches as within the branch. However, certain industries – which produce high-technology products – improved their export performance (i.e. the exported share of their output) noticeably in 2000. What is more, this improvement was usually accompanied by a considerable increase in output. The most typical cases are the oil and coal derivatives industry¹ and the group of industries producing

¹ Production volume in 2000 grew by 18.3%, while the drachma value of exports in the nine-month period from January to September 2000 increased by 159.8%. Even if the steep rise in the prices of oil derivatives is taken into account, the increase in the volume of exports is considerable.

TABLE III.6
MANUFACTURING PRODUCTION (1993=100)

	Weights (1993)	Average annual percentage changes					2000* Level (1993=100)
		1996	1997	1998	1999	2000*	
Manufacturing	100.0	0.2	0.7	5.6	0.6	6.1	115.0
Food-beverages	22.4	-0.8	7.2	3.0	0.8	3.6	119.5
Tobacco	1.7	-8.8	-2.9	-13.5	7.7	1.3	110.8
Textiles	8.4	-0.4	-9.7	-2.2	-1.2	8.9	84.5
Clothing	6.8	-8.1	-3.8	-2.7	-4.3	-1.7	67.0
Leather-footwear	1.8	-3.8	-16.4	-18.4	5.4	0.9	67.2
Wood and cork	2.0	-1.3	-22.7	-17.3	-0.5	63.1	100.4
Paper and paper products	3.1	-6.9	-13.1	50.7	1.1	-15.2	116.3
Printing and publishing	3.4	7.9	-8.4	-4.7	10.6	11.6	112.3
Petroleum and coal products	5.6	17.7	2.2	13.8	-15.2	18.3	162.3
Chemicals	9.1	3.6	4.6	5.5	3.7	1.7	128.9
Rubber and plastics	3.7	0.9	-3.6	31.7	7.9	0.6	148.7
Non-metallic minerals	7.1	2.7	5.4	0.8	0.2	1.5	114.7
Basic metals	4.9	-2.8	12.6	-5.9	7.8	12.5	137.7
Metallurgical products	4.1	4.5	0.8	1.3	16.8	0.9	120.8
Machinery and appliances, excluding electrical	3.5	6.1	3.9	5.8	-6.2	18.3	152.1
Office appliances – PCs	0.1	-67.4	722.0	-60.4	-22.9	107.7	38.4
Electrical machinery, appliances etc.	2.4	-1.0	0.1	5.2	3.9	11.7	121.1
Radio, television and telecommunication appliances	2.1	-25.9	4.2	138.9	-12.2	30.5	121.3
Medical tools and precision instruments	0.3	12.8	8.0	-16.2	-3.0	29.7	157.8
Vehicles	0.7	-29.7	1.8	70.7	46.4	9.8	112.3
Other transport equipment	4.7	-5.1	-10.6	-5.1	-5.5	-5.8	68.9
Furniture – other industries	2.0	-8.7	6.9	17.9	7.2	8.7	126.0
Contributions by branch to changes in total manufacturing production (in percentage points)							
Manufacturing		0.21	0.72	5.57	0.63	6.05	
Food-beverages		-0.20	1.64	0.73	0.20	0.85	
Tobacco		-0.20	-0.06	-0.27	0.12	0.02	
Textiles		-0.03	-0.71	-0.15	-0.07	0.53	
Clothing		-0.45	-0.19	-0.13	-0.19	-0.07	
Leather-footwear		-0.07	-0.27	-0.25	0.06	0.01	
Wood and cork		-0.03	-0.44	-0.26	-0.01	0.73	
Paper and paper products		-0.23	-0.41	1.37	0.04	-0.59	
Printing and publishing		0.26	-0.29	-0.15	0.30	0.37	
Petroleum and coal products		1.17	0.17	1.09	-1.29	1.30	
Chemicals		0.35	0.46	0.57	0.39	0.18	
Rubber and plastics		0.04	-0.14	1.19	0.37	0.03	
Non-metallic minerals		0.19	0.40	0.07	0.01	0.11	
Basic metals		-0.15	0.65	-0.34	0.40	0.68	
Metallurgical products		0.18	0.03	0.05	0.65	0.04	
Machinery and appliances, excluding electrical		0.25	0.17	0.26	-0.27	0.76	
Office appliances – PCs		-0.01	0.04	-0.03	0.00	0.01	
Electrical machinery, appliances etc.		-0.02	0.00	0.12	0.09	0.28	
Radio, television and telecommunication appliances		-0.32	0.04	1.29	-0.26	0.56	
Medical tools and precision instruments		0.05	0.04	-0.08	-0.01	0.11	
Vehicles		-0.12	0.01	0.21	0.22	0.07	
Other transport equipment		-0.23	-0.45	-0.19	-0.19	-0.18	
Furniture – other industries		-0.16	0.12	0.33	0.15	0.19	

* Provisional data.

Source: Calculations based on NSSG data.

machinery and equipment items, office appliances and computers, electrical machinery and appliances, radio, television and communication appliances, as well as medical instruments and precision instruments.¹ The industries of paper-printing-publishing, chemicals-rubber-plastics and – to a lesser degree – those of basic and final products from metal as well as non-metallic minerals managed to improve their export performance. By contrast, the industries producing food-beverages, tobacco, textiles, footwear, clothing, leather, wood, cork and furniture recorded a decline in their export performance. Nevertheless, in the cases of food-beverages and wood-furniture industries, the increase in exports to “third” (non-EU) countries was very high. According to the above data, in 2000 the exports of Greek manufactures and the penetration of the Greek market by imported manufactures increased at the same time. The increase in domestic production was made possible by the considerable growth of business investment over the last five years; it also reflects the growth of domestic consumer and investment demand as well as dynamic expansion into neighbouring markets.²

2.4 Mining and quarrying

In 2000 mining and quarrying production recorded a considerable upturn (13.6%) following a continuous decline in the last three years (1997: –1%, 1998: –1.5%, 1999: –6%). As shown by NSSG data (see Table III.3), almost half of the large increase in mining activity stemmed from the increased production of coal, lignite and crude oil. The remainder was due to the increased output of aggregates and industrial minerals. At the same time, the production of metallic minerals recorded an upswing following successive reductions of output in the previous two years.

According to NSSG data, in 2000 coal and lignite output continued to increase, as in the previous two years, and, what is more, at an accelerating pace, owing to the increased demand for lignite used in the production of electric power. Given its abundance in Greece, and the stability of its price, lignite continues to be the most cost-effective solution, compared with other types of fuel, for use in electric power production.³

1 Production volume in 2000 increased by 19.7%, while the drachma value of exports in the nine-month period from January to September 2000 grew by 40.2%.

2 According to more recent NSSG data, in the January-November period of 2000 the drachma value of goods exports (not only manufactured goods) in drachmas increased by a total of 22.3%, reflecting an increase of 49.2% in the value of exports to “third” countries and a reduction of 0.9% in the value of exports to the EU (the respective rates of change without fuel are +14.4%, +38.1% and –2.9%). As data for the 11-month period of 2000 are provisional, they are not fully comparable with those for 1999, they provide however a picture of developments.

3 According to DEH data, the amount of lignite extracted from its mines in 2000 increased by 3.8% compared with 1999 and came to 63.3 million tonnes, while its exploitable deposits are estimated at 2.7 billion tonnes and suffice for fifty years. But if lignite is to maintain its position in electric power production, given the intense pressure exerted upon it by imported fuel, a strategy oriented towards environmental protection and application of new technologies is required.

Crude oil and natural gas output recorded a sharp increase, a fact associated with the re-exploitation of the Prinos deposit as from December 1999.¹

After a decline in the previous two years, the production of non-ferrous metals (mainly bauxite, chromite, nickel and precious metals²) recorded an upturn, while foreign demand for some of them increased greatly. According to provisional NSSG data, the volume of exports of aluminium and alumina ores grew by 4.1%, particularly towards non-EU countries (87%). By contrast, according to the same data, the volume of nickel exports in the January-September 2000 period recorded a considerable decrease (–87%).³

According to the NSSG index, the production of quarry materials and other non-metallic minerals recorded a notable upturn compared with 1999. Specifically, a large increase was recorded in the extraction of two industrial minerals, clay and kaolin (79.7%) and the production of pit gravel and sand (14.4%). These minerals are mainly used in road construction and the increase in their demand is related to the construction of major road arteries, as well as the other projects connected with the Olympic Games of 2004. Limestone and gypsum mining also increased (2.5%), a fact associated with the recovery of construction activity. By contrast, the production of marble and other stones recorded a decrease (–4.8%) in 2000. Nevertheless, according to provisional NSSG data, the volume of marble exports in the January-September period increased in relation to 1999 by 83.8% and by even more to non-EU countries (96.9%). This fact is related to the activity of the sector's large firms abroad,⁴ while mergers and acquisitions in Greece are aimed at strengthening the position of large enterprises in the domestic market. As regards the problems faced by the industry in obtaining quarry operating licences, it should be noted that –by a provision proposed by the Ministry of Development and enacted by Parliament– prior approval for the establishment of sites for quarries producing aggre-

1 The Prinos deposit produces more than 5,000 barrels a day, while exploration for a further increase in its production is conducted by the holding company (Kavala Oil) itself in the same area. The oil drilled is absorbed exclusively by the company "Greek Petroleum S.A" (ELPE). ELPE is promoting important cooperation agreements in the sector of crude oil extraction from deposits in other countries, with the aim of raising its production to 100,000 barrels per day within seven years, a quantity ensuring the utilisation of 45% of the capacity of its two refineries. ELPE has a 30% share in a consortium for the exploitation of oil deposits in Iran and is to sign agreements for the expansion of its activities to other countries (Albania, Azerbaitzan).

2 Concerning the gold-mining investment by the company TVX Hellas in the area of Olympiada, Chalkidiki, it should be noted that, following a Council of State decision (11 April 2001), which found the operation of the plant hazardous, due to the use of cyanogen and arsenic, the completion of the plant was put off and its operation was practically prohibited.

3 However, according to press publications, the production of nickel by the LARKO company is estimated to have amounted to some 17,000 tonnes in 2000, while in the two-year period 1998-1999 the company had greatly reduced production, owing to the global decline in nickel demand and prices. Following, however, the recovery of nickel prices in 1999, the production was favourably affected in 2000.

4 In October 2000, a marble-processing plant was established and brought into operation in China under the name of "Cosmos Building Materials Shanghai Co Ltd". It is a consortium of exclusively Greek interests, which aspires to play a leading role in the Chinese and Middle East markets. Other big companies are also expected to enter the Chinese market (e.g. Iktinos S.A.) and the Balkans market.

gates is no longer required,¹ while existing companies whose change of site is considered necessary will be given relocation incentives. Finally, the production of magnesite, asbestos, perlite etc. recorded a slight decline.

2.5 Electricity-natural gas-water supply

The production of electricity-natural gas and water (see Table III.3), according to the NSSG index (base year: 1993²), continued the upward course of the previous two years and increased at a slightly lower rate than in 1999 (11.3%). Most of the increase stemmed from the greater demand for electricity, while the natural gas distribution index continued to rise owing to the increasing penetration of the various economic sectors by the new fuel. Water treatment and distribution, which have been included in the new NSSG index, increased at a rate twice as high as in 1999. Thus, total production of electricity-natural gas-water contributed 2.7 percentage points to the increase in industrial production as a whole (7.7%).

In particular, according to Public Gas Corporation (DEPA) data, the quantities of natural gas distributed in 2000 amounted to 1,906 million Nm³, exceeding the initial forecast of 1,793 million Nm³. Of this quantity, 75.5% was absorbed by electricity production, while the industrial sector (chemical industries inclusive) absorbed 22.6%. Small industrial and commercial firms as well as households absorbed only a small quantity of natural gas (36 million Nm³), which, however, is forecast to quadruple in 2001 with the construction and operation of urban networks.³

1 Specifically, pursuant to Law 2837/2000, the exact site of a mine or quarry is deemed to be the space in which a deposit of ore, industrial minerals and marble is located. In these cases the provisions of Law 1428/84 on exploration and exploitation apply *ipso jure*.

2 It should be noted that according to the new NSSG index of industrial production (1993=100), the weighting of the electricity-natural gas-water industries in the overall index is tripled (it becomes 18.4%, against 6.4% for the index of industrial production with 1980=100), gaining shares at the cost of – primarily – manufacturing, but also of mining.

3 With the completion of the procedures for the transfer by DEPA of 49% of the ownership and of the management of the Gas Supply Companies (EPA) of Thessaloniki, Thessaly and Attica – to the Italian firm Italgas (on 27-28 June 2000) of the first two Companies and to the consortium of the Cinergy and Shell companies (on 26 October 2000) of the third Company – the foundations were laid for the starting of the distribution of natural gas to the three networks of Athens, Thessaloniki and Thessaly. It is also noted that DEPA retains the right to sign supply contracts with large industrial consumers on condition that it pays “tolls” for the use of EPA networks. Provision of gas to the pipes of Thessaloniki is expected to start in June 2001, supplying, first, 15 industries through the existing average-pressure network (length: 86 kms) and commercial enterprises and small industries through the low-pressure one (length: 183 kms). The Attica EPA will complete its installation in April 2001 and the distribution of the fuel will then begin. Furthermore, from early 2001, natural gas started to be distributed to new sectors, such as that of automobiles, with the circulation of 300 new thermal buses, while the start of operation of the International Athens Airport signalled its supply with 10 million cubic metres of natural gas, on the basis of the contract concluded with DEPA (30 October 2000). As regards interconnections, it is noted that in 2001 the feasibility study for the construction of the submarine pipeline which will connect Greece with the Italian natural gas system will be ready. The construction is based on the agreement between DEPA and the Italian firm ENI. At the same time, on 18 January 2001, a memorandum between DEPA and the Turkish firm BOTAS was signed, in the framework of the Inogate Umbrella Agreement concerning the creation of a bi-directional natural gas pipeline, which will connect producer countries with the major consumer countries in Europe.

According to provisional data from Public Power Corporation (DEH), net electric power production recorded a notable increase (9%) in 2000 and reached 48,884.4 GWH. Most of the increase (4.2 percentage points) stemmed from the operation of natural-gas-operated plants (+50.9%), while the contribution (3.9 percentage points) of lignite-operated plants was also large (production increased by 5.9 percentage points). Diesel plants' production recovered, recording an increase of 11.4%, while hydroelectric plants' production was reduced (-1.7%). DEH's production from renewable energy sources recorded a considerable increase compared with previous years (91.3 GWH from 34 GWH in 1994) and it is expected to expand further following the cooperation that DEH began in 2000 with private companies in the sector of aeolic energy production, through its affiliate company "DEH renewables S.A.". The energy produced by independent companies (it is purchased by DEH) more than quadrupled compared with 1999, reaching 398.5 GWH; as a result, the share of such companies (0.8%) in total electricity production is increasingly larger. Besides, private investors have displayed great interest in participating in electricity production projects using renewable resources as the Greek electricity market is being deregulated. The Ministry of Development is promoting two interventions in the institutional framework in 2001, aimed at facilitating business activity in this sector.¹

On the demand side, electric power consumption grew faster (6.2%) in 2000 than in 1999. This was due to increased demand mainly for household, commercial and industrial uses and to a lesser extent for agricultural use. Specifically, agricultural use recorded a considerable increase (16.9%), following a decline in 1999 (-4.2%). The rise in demand for commercial use was only slightly higher than in 1999 (6.7%, 1999: 6.5%), while the increase in demand for household use was almost the same as that of the previous year (5.4%), despite the increase of 3% in household electricity rates as from September 2000. Electric power demand for industrial use recorded an increase of 4.8%, which is compatible with the steep rise in manufacturing production (6.1%) in 2000. The rise stemmed mainly from demand for high voltage electricity (9.5%), while demand by factories consuming low- and medium-voltage electricity increased only slightly (0.8%). Lastly, electricity consumption for other uses, including mainly the public sector, recorded a considerable increase (5.5%).

The enlargement of the country's energy potential, following the continuous increases in installed capacity during the previous four-year period eliminated the energy dependence of the national economy and made it fully self-sufficient in 2000. Thus, the net imports/exports ratio was zero, with exports slightly exceeding imports. Nevertheless, DEH's total installed capacity did not change significantly in 2000 (10,990 MW).

¹ The first intervention concerns the amendment of the institutional framework and is aimed at simplifying the granting of plant operating licences. The second concerns financing energy products through the 3rd CSF with the inclusion of the relevant investments in the programme. Pursuant to Law 2244/94, in the six-year period 1995-2000, the Ministry of Development granted 133 installation licences to electric-power stations using renewable energy sources (capacity: 517.2 MW). Of these, operating licences have been granted to 38 enterprises (total capacity: 155.6 MW) and most of them (22) concern aeolic parks.

BOX III.1**Deregulation of the electricity market: institutional framework and operation of the Greek market**

The energy sector, which in many countries was almost exclusively controlled so far by the state, is now divided among a larger number of competitors, while consumers are offered the possibility to choose their supplier. This important change, due to the reduction of power plant construction cost, is in turn the result of modern technology and the use of new fuel. It has led EU Member States, since the mid-'80s, to revise their energy policies and pursue new ones which would increase competition, so as to squeeze production costs and ultimately reduce consumer prices.

Major landmarks on the road to the creation of a new deregulated energy market were the two directives issued by the European Parliament and the Council on the deregulation of domestic electricity and natural gas markets,¹ whose correct implementation is a key EU priority in the near future.

Directive 96/92 EC concerning "Common rules for the internal market in electricity" lays down rules which allow competition between electric power producers to function, while offering an increasing number of consumers the possibility of choosing freely an electric power supplier. The directive came into force on 19 February 1997, while the first phase of the opening of the market started officially on 19 February 1999. For the required restructuring to be a success and for enterprises to adjust to the new competitive environment, the directive requires Member States to open their markets in three phases: 26% on 19 February 1999, 28% in 2000 and 33% in 2003. A transitional adjustment period was especially stipulated for Greece, with 19 February 2001 being the date at which the directive would take effect.

Directive 98/30 EC concerning "Common rules for the internal market in natural gas" lays down rules with regard to the organisation and operation of the natural gas sector, market access, system operation and natural gas storage procedures. The directive came into force on 10 August 1998 and Member States ought to implement it by 10 August 2000. An adjustment period lasting until 2006 was laid down for Greece. →

1 It should be noted that the European Commission has prepared a new draft directive concerning full deregulation of the electric power and natural gas market in EU countries. According to this draft, as from 2003 all enterprises will be able to freely choose an electric power supplier and as from 2004 they will be able to choose a natural gas supplier, while as from 2005 all consumers will have this possibility. The aim of this new Commission proposal is to ensure that competition will function under the same conditions for all, since there are very large divergences among Member States as to the opening of the market. However, on average, both the electric power market and the natural gas market have already been deregulated, in percentages (66% and 78% respectively) much higher than those of applying Community directives. The European Council of Stockholm (23-24 March) adopted the objectives proposed by the Commission, but forwarded the decision on the specific materialisation schedule to the European Council which will meet in spring 2002. It also called upon the Commission to ensure that energy producers still having the monopoly in their national market will not abuse their position in order to take advantage of the opening of national markets to other Member States.

→ *Law 2773/99 concerning “the deregulation of the electricity market and the settlement of energy policy issues”*

Greece, in the context of the requisite adjustments to the requirements of the above directives, has already enacted Law 2773/1999 (Government Gazette 286 A/22 December 1999). Its key points are:

A. Institutional organisation of the market

- The conduct of activity related to electric power is subject to state supervision, through the Minister of Development, in the context of the country’s long-term energy planning. The Minister of Development grants production and supply licences, as well as licences for the management of the transmission system and the distribution network. He also issues regulatory provisions and settles all matters pertaining to electricity sale rates.

- The Regulatory Energy Authority (RAE) is set up. It has administrative autonomy and is supervised by the Minister of Development. Its main tasks are summarised below:

- a. It monitors and controls the operation of the market in all its sectors, to ensure observation of competition rules.

- b. It advises on questions concerning the issue of licences for electric power supply, while it also organises and monitors procedures for granting licences,.

- c. It informs the EU Commission on the deregulation of electric power and natural gas markets in accordance with Directives 96/92 EC and 98/30 EC respectively.

- Ownership of the electric power transfer system (high voltage lines) belongs exclusively to the Public Power Corporation (DEH), under a licence granted by the Minister of Development. DEH sees to the development, maintenance and operational integrity of the system. It can also use it for other, non-energy purposes (development of telecommunications).

- The management of the transfer system is conceded by presidential decree to the Manager of the System (DESMHE), the sole agency entitled to manage and exploit it with the permission of the Minister. Non-interconnected islands are excluded, and the management and operation of the transfer system still rests with DEH.

- The electricity distribution network (medium- and low-voltage lines) belongs exclusively to DEH, which is the sole entity that can manage it, following permission by the Minister of Development.

- DEH is converted into a société anonyme by presidential decree.

B. Market operation

- The Law distinguishes electric power consumers into “choosing customers” and “non-choosing customers”. Choosing customers are those who have the right (as from 19 February 2001) to freely conclude supply contracts with electric power producers-suppliers. “Choosing customers” are considered those who annually consume more than 100 GWH or are recognised by PAE as choosers and account for a consumption percentage equal to the percentage of market deregulation pursuant to article 19 of Directive 96/92 EC. Non-choosing or bound custo- →

→ mers are all the other consumers (households as well as small industrial, commercial and agricultural consumers), who do not yet have yet the right to choose their supplier and are supplied with electric power by DEH.

- Producers are those who own a power generating plant, with a licence granted to them by the Minister of Development. Their production is absorbed by the system depending on the financial distribution of the load by the Manager.

- Suppliers are those (private individuals and DEH) who can conclude sale contracts with customers following an application by the latter. DEH can supply choosing and non-choosing customers with electric power, while in the case of non-interconnected islands it is the exclusive supplier.

- The right to import electric power is reserved for suppliers who have declared generating plants owned by themselves as well as a contingency reserve in the European Union.

- The right to export electric power is reserved for producers who are entitled to supply the Greek market.

- Energy from renewable energy sources (APE) and small co-production in the interconnected system has to be absorbed by the Manager and is charged at a fixed price.

Important developments

In the context of preparations for the start-up of the deregulated market (19 February 2001), the developments observed since the enactment of the Law are as follows:

A. Constitution and operation of market agents

- The Regulatory Energy Authority (RAE) has been issuing operation licences since 1 July 2000 under Laws 2773/99 and 2837/2000, as an independent and financially autonomous administrative authority whose role is to advise, recommend and supervise. Meanwhile, the RAE drew up the presidential decrees for the statute of the Manager and Public Power Corporation (DEH), as well as the regulations and codes for the operation of the deregulated market. Once the licencing regulation was approved by the Minister of Development (30 November 2000), the RAE proceeded to invite for the first time producers to express interest for the acquisition of production licences. Thus, based on energy policy priorities at the current stage, the RAE accepted applications only for production plants using natural gas or renewable energy sources, as well as hydroelectric plants. Also, it is moving towards the compilation of a list of choosing customers (6,500 high- and medium-voltage consumers), while it determined natural gas prices to be implemented by the two EPA (Thessaloniki and Thessaly) by end-2001.

- Under Presidential Decree 328/2000, the company “Manager of the Hellenic Electric Power Transfer System” (DESMHE) was established. It is a company created after the transfer sector of DEH became an independent société anonyme. According to the company statute, the Greek state owns 51% of its shares, and electric power production companies (currently only DEH) own 49%. The state’s percentage will gradually decrease, leaving room for emerging →

→ producers. Thus, prospective licence-holding producers, whose plants will be connected with the transfer system, will obtain part of the capital of DESMHE from the shares held by DEH, provided that their total capacity exceeds 5% of total installed capacity. In Greece, the Manager plays a dual role concerning the operation of both the system and the market. The first part includes allocating system loads, managing interconnections, ensuring the requisite ancillary services, maintaining and developing the system and connecting those interested in the system, functions which until now were performed by DEH. The second part includes receipt of daily bids which determine the “system’s marginal price”, clearing production-consumption deviations, system use charges and debiting surcharges. It should be noted that DESMHE does not sell electric power. Consequently, basic transactions between producers-suppliers and their customers are effected without DESMHE intervention. In this way, each customer seeks out the cheapest supplier, with whom he signs a contract. This constitutes the “core” of the deregulated electricity market.

- In early 2001, DEH became a société anonyme under the name of “DEH S.A.” and now operates according to Law 2190 on Sociétés Anonymes. It is expected to be listed on the ASE (it will sell 20% of its equity) as a unified and vertically organised enterprise, while the government intends to retain the majority shares and control of the company. The aims of “DEH S.A.” are to make commercial and industrial business in Greece and abroad, develop activity related to telecommunications and acquire shares in other companies.

- On the basis of the “reorganisation plan” included in its statute, DEH, in order to deal with coming competition, is being restructured in four Basic Business Units, with a view to unbundling mining, production, transfer and distribution activities. The units will operate as independent cost centres.

B. Market prospects

From its outset (19 February 2001), the deregulation of the Greek electricity market was accompanied by a large number of investment proposals by private enterprises. According to the data available so far,¹ RAE has received 950 production and supply applications, which correspond to 20,128 MW. Most of them concern the creation of aeolic parks (629 applications, capacity: 10,227 MW) and are followed by applications for 45 thermal plants (total capacity: 1,315 MW), 224 applications for large and small hydroelectric plants with a total capacity of 6,767 MW, as well as applications concerning plants using geothermy, biomass and solar energy. Already, on 23 April the first licences were granted (for six natural-gas-operated plants, total capacity: 2,160 MW), while it is a priority for RAE to examine import and supply applications (4 applications, for a capacity of 1,120 MW), so that “choosing” customers will soon be given the possibility to choose a supplier. It is therefore expected that electricity imports will start in the second half of 2001, provided that licences will have been granted by then, while the submarine cable between Greece and Italy is also expected to be put in operation (capacity: 600MW).

However, competition is expected to become keener after the first major private electricity production plants start operating —not earlier than in 2004— and it will grow dyna- →

¹ Speech by the RAE president at the conference “Deregulation of the electric power market”, on 15 March 2001.

→ mically until 2010. Until the end of 2004, demand for electricity will be met by DEH and no private company will be able to claim a share, owing to the low cost of the fuel (lignite) used by DEH, as well as because of the time needed to build a power plant. After 2004, as, *inter alia*, electric power consumption will increase, extra demand loads will be met by private companies. According to RAE estimates, the system will need additional capacity every year and it is in this market that private investors will operate. The success of market deregulation will depend, *inter alia*, on whether the price of natural gas is competitive compared with other fuels, as well as on the adequacy of natural gas and the deregulation of the gas market.

In fact, it declined slightly compared with 1999 (10,997 MW), as two power plants at Aliveri ceased to operate owing to obsolescence. A number of other projects are under way and are expected to start up over the next few years.¹

3. SERVICES

Income from the service industry increased in 2000 faster than in 1999 (3.1% compared with 2.2%), as a result of intense activity, particularly in transport-communications, commerce and tourism (see Table III.2 and Chart III.5). According to a new business survey covering private enterprises in this sector (except retail trade and banks),² “the confidence index” in this sector rose considerably in 2000, as in 1999 (although in the three-month period from November 2000 through January 2001 it recorded a sharp drop³).

The Ministry of National Economy estimates that income from transport-communications increased by 4% in 2000 (5% in 1999). This development is associated with the increase in road,⁴ rail and sea cargo transport (owing to the growth of foreign trade), the expanding demand for mobile telephony services and the increase in tourism.

According to Olympic Airways (OA) data, OA passenger transport increased by 6.7% and the ton-kms of goods carried on foreign flights by 22.5%. It should be noted that

1 These projects include mainly the construction of a combined-cycle, natural-gas-operated plant at Komotini (capacity: 492 MW) and a lignite-operated plant at Florina, (capacity: 330 MW). We should also add the construction of the Atherinolakos plant and the air-turbo plant at Lasithi, which will solve the energy problem in Crete when they start operating in 2003 and 2002 respectively.

2 The survey is conducted by IOBE and its provisional results (along with the respective results for the other EU countries) were published for the first time by the European Commission in early February 2001. See “Business and Consumer Surveys: First Results – January 2001”, 2 February 2001, and *European Economy, Supplement B*, February 2001, Table 14.

3 The survey is conducted four times a year (January, April, July and October) and, *inter alia*, enterprises answer the question pertaining to the development of demand in the last quarter compared with the respective period of the previous year. Answers to this question were particularly positive until October 2000, but in January 2001 they suggested a marked deceleration of demand from October 2000 onwards.

4 Road transport is gradually being deregulated. EU passenger and freight carriers may operate on domestic routes, by virtue of a Ministry of Transport circular implementing Community Regulation 3118/93.

mergers and partnerships between private airlines,¹ which have recorded a considerable increase in turnover, intensify competition and lead to an upgrading of their services. Freight carried by the Hellenic Railways Organisation (OSE) increased by 27.2% in the January-November 2000 period, compared with the same period of 1999. Passenger traffic to and from the Piraeus port, according to Piraeus Port Organisation data, increased by 6.8% in 2000 (freight transport increased at an annual rate of 10.6% in the first quarter of 2000). The deregulation of domestic sea transport as from 1 November 2002 under EU Regulation 3577/92² will contribute to the further growth of the industry and of tourism through increased competition, leading – in this case as well – to an upgrading of services.

In the telecommunications sector, the expansion of mobile telephony was noticeable. According to Ministry of Finance data, income from mobile telephony rates increased 40.3% in 2000. Mobile telephony subscribers numbered 5.9 million.³ Of these, Panafon subscribers numbered 2.2 million (in the first quarter of 2001 they came to 2.34 million), Cosmote 2.1 million (in the first quarter of 2001 they reached 2.28 million), and Stet Hellas 1.6 million (in the first quarter of 2001 they reached 1.76 million). The degree of mobile telephony penetration in Greece is 56.6%. Competition in mobile telephones is expected to intensify with the granting of licences for third generation mobile telephones. The characteristics of third generation mobile telephony are advanced services, but also high cost. As from March 2001, one company has started offering third generation mobile telephony services. By contrast, according to OTE data,⁴ the volume of fixed telephone units (urban, intercity, international telephony etc.) declined by 9.8%, as a result of the increased use of mobile telephones. The deregulation of fixed voice telephony as from 1 January 2001 (Law 2867/2000) will entail a further intensification of competition, an increase and improvement in products and services offered and a fall in rates.⁵ In the context of deregulation, five groups of companies⁶ were granted a wireless fixed telephony licence and will begin to supply services probably by the end of 2001. Also, based on Law 2843/2000, it was decided to reduce the government's share in OTE from 51% to 36%.⁷

1 The merger of Cronus Airlines and Aegean Airlines was recently announced (in 1999 the latter had absorbed Air Greece). Their activity corresponds to a 40% share of the domestic market in 2000.

2 The bill concerning the "Free Provision of Sea Intratransport Services" released on 29 March, proposes, *inter alia*, the establishment of an independent "Regulatory Sea Intratransport Authority" (RATHE) with major responsibilities in controlling market operation and observance of the rules governing free and sound competition.

3 It should be noted that, for the first time, mobile telephone connections exceed fixed telephone connections, which, according to OTE data, reached 5.7 million at end-2000. Besides, at the end of the first quarter of 2001 the number of mobile telephony subscribers reached 6.4 million.

4 The Organisation's results for 2000 were positive. The company shows an increase of 21.6% in pre-tax profits on a unified basis and 2.9% for the parent company. At the same time, turnover increased by 11.3% on a unified basis and by 7% for the parent company. An important role in this development was played by Cosmote, which improved substantially the OTE group revenues, as well as by the sale of 15% of the Cosmote equity to the public.

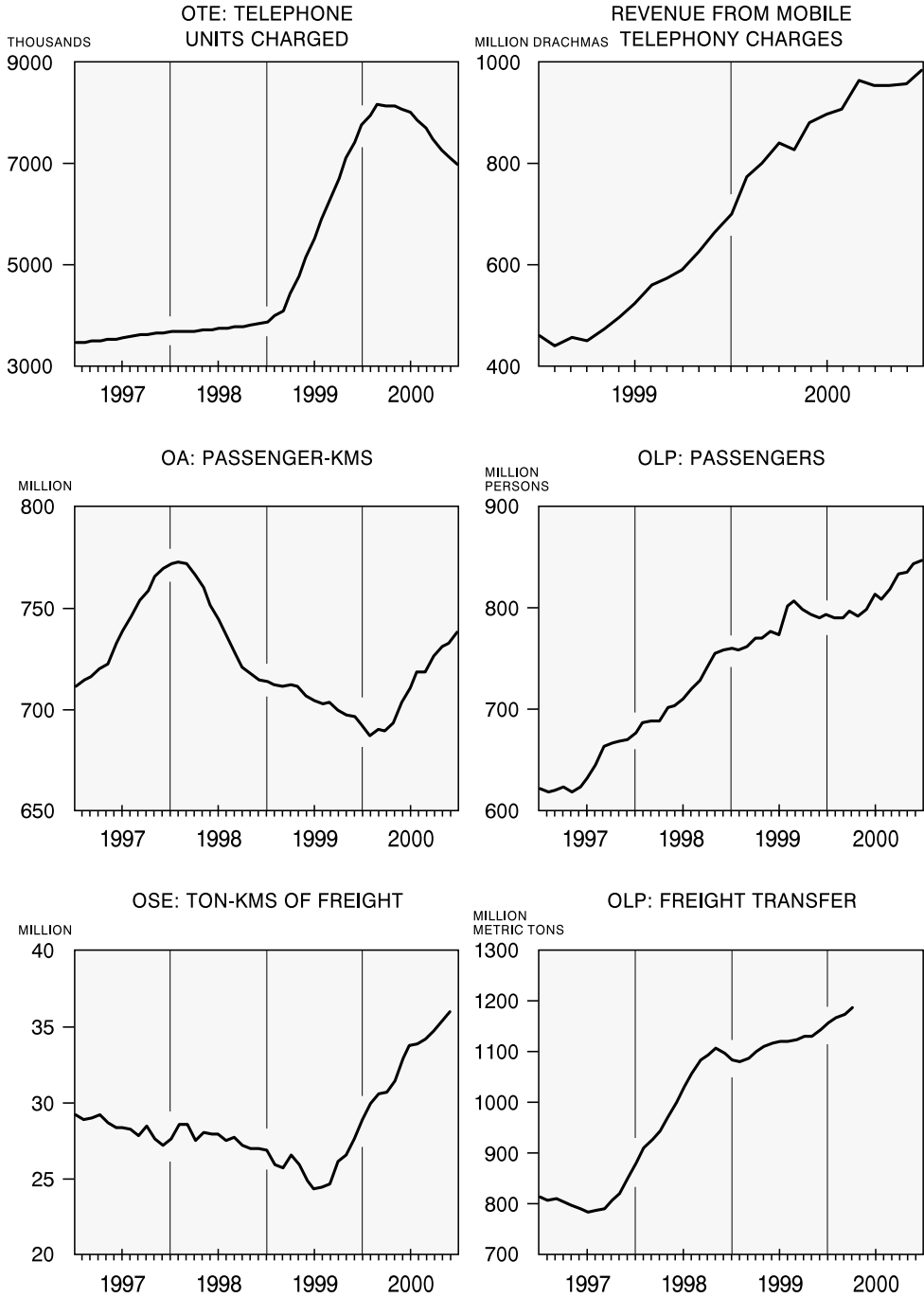
5 As from 1 March 2001 OTE rates were restructured anew.

6 The new companies which will compete with OTE in the field of fixed telephony are: Europrom, DEH group, Panafon, the Mediterranean Broad Band Services (Telecom Italia & Forthnet) and Quest Wireless.

7 9% will be sold through a bond issue and 6% to the two consultants, CFSB and UBS Warburg. The law allows a reduction of 33.3%.

CHART III.5

ACTIVITY INDICATORS FOR SERVICES¹



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

Sources: Hellenic Telecommunications Organisation (OTE), Ministry of Finance, Olympic Airways (OA), Piraeus Port Organisation (OLP), Hellenic Railways Organisation (OSE).

Internet development prospects are also favourable, as the total number of users is expected to reach 1.5 million by the end of 2001. Also the degree of Internet penetration of the Greek market is low (11.7% of the population) compared with other European countries (Netherlands 54.8%, Sweden 53.8%, Denmark 51.6%, Finland 43.5%), Mobile Internet enhances the growth prospects of the network, particularly after the creation of third-generation mobile telephony networks. According to Eurostat data, Greece ranks third-regarding the growth rate of Internet users, after Ireland and Portugal. Also, personal computer sales in Greece are expected to increase by 13.4% in 2001.¹ This rate exceeds the respective average in Western Europe, which is expected to come to 10.8%.

Considerable impetus to the dissemination of “information and communication technologies” (ICT) is estimated to be given by the implementation of the “Information Society” Operational Programme, which (worth 2,839,1 million euro) is incorporated in the 3rd CSF 2000-2006. The specific targets of the programme include supply of equipment to, and networking of, educational institutions of all grades as well as teaching personnel training; increase in ICT use in public administration and social services; development of digital economy; support of the deregulation of the communication market; and development of telecommunications infrastructure in remote regions. Besides, in the 2000-2003 period, the Development Ministry’s programme “Diktyotheite” (Join the Net), with a 40 billion drachma budget, is being implemented. Its aim is to familiarise 50,000 small and medium-sized enterprises (SMEs) with digital economy, utilise the potential and the opportunities offered by the Internet and, in general, motivate businessmen to make the best use of new technologies.

Income from trade is estimated to have increased by 5.5% in 2000, compared with 4.8% in 1999. The volume of retail sales, as shown by the relevant NSSG index, increased by 5.4%.² Besides, the institutional framework of commercial activity is being modernised. The final draft of the Presidential Decree on electronic transactions, according to the new European Parliament Directive 2000/31/EC, provides for full deregulation of e-trade within the boundaries of the European Union. Entry into new markets and flexible response to customers’ demands are the incentives for the use of e-trade applications,³ while a decisive factor in the development of e-trade is the expansion of the Internet, as outlined above. Furthermore, the Ministry of Development has already announced the criteria on the basis of which enterprises across the country will be able to participate in the “Diktyotheite” programme and be subsidised.⁴ Lastly, the prospects

1 According to IDC EMEA TRACKER forecasts.

2 By contrast, according to the IOBE’s monthly business survey on retail trade for 2000, the index of business expectations recorded a slight decline (0.5%). See Section 1 of this chapter.

3 According to a survey by the E-Trade Research Centre (Eltrun) of the Economic University of Athens, 33% of trading firms plan to develop e-trade practices by 2001. Another survey of the Athens Economic University, carried out by ROTA and ALKO, mentions that only 12% of Internet users purchased products through the Internet last year and only 3.5% of Internet users can be considered regular on-line consumers.

4 The geographical location will weigh heavily.

of franchising are positive, owing to the growth rate of Greek companies opting for this system in order to develop and expand.¹

According to Ministry of National Economy estimates, the growth of income from financial intermediaries (3.2%) remained considerable. Although many banks (with the main exception of the National Bank) recorded a decrease in profits in 2000, Greek banks showed higher growth rates than European banks and their prospects have improved thanks to macroeconomic stability and the steep drop in interest rates.² The increase in turnover, mainly in retail banking which will utilise new technologies (Internet banking, phone banking, e-banking),³ new products and euro products will improve profitability indices, while special emphasis is placed on the quality of services and cost reduction. Data in the first two months of 2001 on bank profitability are particularly positive. In insurance, although premium production in the majority of companies increased, only two companies (of those listed on the ASE) were able to raise their profits. On the whole, the drop in the profits of listed insurance companies came to 41.6%.⁴ Insurance company groups, after a round of acquisitions, are now promoting operational mergers within certain bankassurance groups. Completion of these mergers is expected to help boost the competitiveness of each group in the insurance market. Compulsory insurance of dwellings against earthquake risk⁵ as well as the adjustment of the objective values of dwellings will have a positive impact on the private insurance industry, especially on the insurance of dwellings.

Income from hotels-restaurants and “other services” rose by 3.0% and 5.0%, respectively. As regards tourism, available data do not offer a clear picture of developments. According to a sample survey by the National Tourism Organisation (EOT), in the April-October 2000 period arrivals by charter recorded a 1.9% increase,⁶ while the number of overnight stays at AA through C class hotels in tourist resorts fell by 1.8% over the same period.⁷ Nevertheless, travel receipts (at constant drachmas) increased by 21.7% in 2000.⁸ According to a survey by the Institute of Tourist Research and Forecasts (ITEP), the qualitative upgrading of the country’s hotel capacity is required, since 60% of total hotel beds belongs to categories B and C. Furthermore, ITEP points to the need to

1 According to data published in the *Franchise Success* magazine, 83% of companies opting for the “franchise” system are Greek, while only 17% of the franchising systems come from large foreign commercial chains.

2 According to a report-analysis by the international investment house UBS Warburg on the domestic banking system.

3 A survey conducted by Merrill Lynch reports that in Germany about 50% of Internet users effects banking transactions through the Internet, while in Sweden this percentage is 32%. The European average is 20%.

4 The profitability of the two major companies, Ethniki Asphalistiki and Interamerican Life, is characteristic. The profits of the former decreased to 6.3 billion drachmas, compared with 12.9 billion drachmas in 1999, and those of the latter fell to 17.4 billion drachmas, from 44.2 billion drachmas in 1999.

5 According to the relevant draft law.

6 The growth rate of total tourist arrivals is estimated to be much larger, given that the percentage of tourists travelling on scheduled flights is increasing, following the establishment of several private airlines and the strengthening of competition.

7 These statistics are estimated to record only part of total overnight stays.

8 According to data based on the new methodology of balance of payment statistics compilation.

encourage the creation of hotel chains, offering brandname products of superior quality. In the same survey, it is noted that the tourist season can be prolonged through conferences, health tourism and cultural tourism. The Ministry of Development has already announced that in November 2001 and for a three-year period it will subsidise tourist operators for each foreign visitor they bring to Greece in November and March. The upgrading of infrastructure quality,¹ the prospects of the Olympic Games 2004 and the construction of hotels, conference centres, etc. are expected to boost the further development of the industry and increase the share of tourism in GDP (now estimated at 3.3%).

The 2.0% rise in GDP from “real estate renting and other business” is connected with the increase in the volume of rented and owner-occupied dwellings, which are a source of income (rent or imputed income from owner-occupancy).

Finally, the 0.2% increase in GDP from public administration-national security and the 1.5% and 2.5% growth of GDP from health² and education services, respectively, are mostly connected with public sector activity, government budget execution, and employment in central government.

4. EMPLOYMENT – UNEMPLOYMENT

According to the latest available data of the labour force survey conducted by the NSSG, the annual growth rate of total employment was negative for four consecutive quarters, i.e. from the second quarter of 1999 up to the first quarter of 2000 inclusive. In the second quarter of 2000, however, this rate displayed signs of recovery, as it was slightly positive (+0.2%). At the same time, the unemployment rate, which in the fourth quarter of 1999 had reached the highest figure in recent years (12.4%), fell to 12.1% in the first quarter of 2000 and to 11.1% in the second quarter (from 11.7% in the second quarter of 1999).³ The number of unemployed, from 553,000 in the last quarter of 1999, fell to 491,000 in the second quarter of 2000 (i.e. by 32,000 compared with the second quarter of 1999 – see Table III.7).

A more detailed examination of survey data for the second quarter of 2000 (*in comparison with the second quarter of 1999*) leads to the following findings:

- The increase of only 6,500 persons in total employment reflects a drop of 9,200 (–0.4%) in male employment and a rise of 15,700 persons (+1.1%) in female employment.

1 The budget (public expenditure and private contribution) of the 3rd CSF programmes for tourism totals 596.5 billion drachmas.

2 Total expenditure for health (public and private) in 2000, according to OECD (*Health Data 2000*) and NSSG data reached 3.7 trillion drachmas, compared with 3.4 trillion in 1999 and 0.8 trillion in 1989. In 2000, of the 3.7 trillion drachmas, 2.1 trillion concerned public expenditure for health services and 1.6 trillion private expenditure.

3 In 1999 the *average annual* decrease in total employment was 0.5%, while in the sectors except agriculture-fishery the average annual employment rate remained unchanged (–0.1%). The *average annual* unemployment rate in 1999 was 11.9%, compared with 11.1% in 1998. It should be recalled that the NSSG labour force survey is now conducted on a quarterly basis, while until 1997 it was conducted once a year (in the second quarter).

TABLE III.7
POPULATION, LABOUR FORCE, EMPLOYMENT AND UNEMPLOYMENT
(Thousand persons-unemployment in percentage points)

	Population			Labour force			Employed			Unemployed			Unemployment rate		
	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000
Men and women															
– total (aged 15 or more)	8,720	8,803	8,876	4,445	4,463	4,437	3,967	3,940	3,946	478	523	491	10.8	11.7	11.1
– 15-64 years old	6,933	6,922	6,875	4,331	4,356	4,330	3,854	3,835	3,840	477	521	490	11.0	11.9	11.3
– 15-24 years old	1,419	1,406	1,363	567	553	520	399	377	366	169	175	153	29.8	31.6	29.4
– 25 years or more	7,301	7,397	7,513	3,878	3,910	3,917	3,568	3,562	3,580	309	348	338	8.0	8.9	8.6
Men															
– total (aged 15 or more)	4,208	4,222	4,259	2,693	2,668	2,650	2,504	2,467	2,457	188	202	193	7.0	7.6	7.2
– 15-64 years old	3,387	3,371	3,339	2,613	2,591	2,573	2,425	2,391	2,380	187	200	193	7.2	7.7	7.5
– 15-24 years old	699	688	667	304	284	274	239	219	213	65	65	60	21.4	22.8	21.9
– 25 years or more	3,510	3,534	3,592	2,389	2,384	2,377	2,265	2,247	2,244	123	136	133	5.1	5.7	5.6
Women															
– total (aged 15 or more)	4,512	4,581	4,617	1,753	1,795	1,787	1,463	1,473	1,489	290	321	298	16.5	17.9	16.7
– 15-64 years old	3,546	3,551	3,536	1,719	1,765	1,757	1,429	1,444	1,460	289	321	297	16.8	18.1	16.9
– 15-24 years old	720	718	696	264	269	246	160	158	153	104	110	93	39.4	40.9	37.8
– 25 years or more	3,791	3,863	3,921	1,489	1,526	1,540	1,303	1,315	1,336	186	212	205	12.5	13.9	13.3

Source: NSSG, Labour force survey, second quarter of 1998, 1999 and 2000.

As the population between the ages of 15 and 64 declined, the employment rate for men and women¹ rose to 55.8% (from 55.4%) and that for women to 41.3% (from 40.7%).

– The number of employed aged 15-44 declined by 42,600 persons, while those aged 45-64 increased by 48,200 and those aged 65 and over grew by 1,000. At the same time, those aged 15-44 decreased by 83,000, while those aged 45-64 increased by 36,000 and those aged 65 and over increased by 120,000. The employment trend for persons aged 45-64 was generally upward in the last decade (with the exception of the years 1991, 1993 and 1998), but the increase recorded in 2000 was clearly the highest in the entire period.

– The downward trend of employment in the primary sector came to a halt (+0.2%), while in the secondary sector employment continued to fall (–1.5%) and in the tertiary sector went on rising (+0.8% – see Table III.8). Specifically, employment increased in the branches of financial intermediaries, public administration-defence-compulsory social security, households employing house staff, transport and communications, construction, as well as wholesale and retail trade.²

– The number of wage earners increased by a mere 8,000 (+0.4%) and that of self-employed persons remained broadly unchanged, while the rise in the number of employers by 16,000 was accompanied by a 17,000 decrease in the number of assistants in family business.

– A fall in the number of jobless persons is seen particularly in women and the 15-24 age group, leading to a drop in the unemployment rate to 29.5% (from 31.7%) for the young, to 16.7% (from 17.9%) for women, and to 37.7% (from 41.0%) for young women aged 15-24. Jobless persons aged 15-44 declined by 24,500, while those aged 45-64 decreased by 7,600 only. As the number of persons who remain unemployed for a period longer than 12 months declined by 20,000 and the number of those who remain unemployed for a shorter period by only 12,000, the percentage of long-term unemployment³ fell slightly to 58.2% (from 58.5%). Also, “new” jobless persons (namely, those entering the labour market for the first time and seeking jobs) fell by 22,000 and their share in total unemployment dropped from 46.5% to 45.1%.

On the basis of the above data, certain conclusions may be drawn:⁴

– First, the ageing of the population seems to be affecting employment.

– Second, in the 15-44 age group the decrease in population was accompanied by a *simultaneous* fall in the number of unemployed persons (at about the same rate), the unemployed (at a faster pace) and the economically non-active persons (at a lower rate). These developments led to a slight decrease in the share of these persons in the labour force, which is associated with the increase in the number of the *economically non-active persons aged 20-29*, possibly because of their increased participation in education.

1 Employed aged 15-64 as a percentage of the respective age group of the population.

2 Including repair of vehicles and household appliances.

3 I.e. the number of those who remain unemployed for more than 12 months as a percentage of the total number of the unemployed.

4 It would be preferable that some of these conclusions be taken as working assumptions, given that lack of data for the whole of 2000 does not allow drawing final conclusions.

– Third, in the 45-64 age group, the increase in population led to an even larger growth of employment, which became possible thanks to the rise in the *employment rate*, since the number of jobless and of economically non-active persons decreased. The fact

TABLE III.8
POPULATION, LABOUR FORCE AND EMPLOYMENT

	2000 (thous. persons)	Annual percentage changes						
		1994	1995	1996	1997	1998	1999	2000
Population								
aged 15 or more ¹	8,876	1.4	0.9	1.0	1.2	0.0	1.0	0.8
Population aged 15-64 ¹	6,876	0.5	0.1	0.3	-0.1	2.1	-0.2	-0.7
Labour force ¹	4,437	2.2	1.1	1.9	-0.5	4.3	0.4	-0.6
Employment: ¹	3,946	1.9	0.9	1.2	-0.4	3.0	-0.7	0.2
– Primary sector ¹	671	-0.4	-1.0	0.5	-2.4	-8.0	-5.0	0.2
– Secondary sector ¹	888	-0.6	-0.9	-0.1	-2.1	5.5	-1.3	-1.5
– Tertiary sector ¹	2,387	3.8	2.4	2.1	1.1	5.7	0.8	0.8
Rate of participation in the labour force ^{1,2}		(49.1)	(49.2)	(49.7)	(48.8)	(51.0)	(50.7)	(50.0)
Employment rate ^{1,3}		(54.1)	(54.5)	(54.9)	(54.8)	(55.6)	(55.4)	(55.8)
Unemployment (as a percentage of the labour force) ¹	491	(8.9)	(9.1)	(9.6)	(9.6)	(10.8)	(11.7)	(11.1)
Employment in:								
– Manufacturing ¹	557	-0.3	0.0	-0.3	-2.8	3.4	-1.6	-2.1
– Construction ¹	277	0.0	-3.4	0.0	-1.2	13.3	-3.2	1.2
– Banks ⁴	63	5.3	4.0	2.8	1.0	1.8	1.1	2.3
– Civil service ⁵	342	-2.0	2.2	2.3	1.0	0.9	2.4	1.9
– Public enterprises and entities ⁶	144	4.4	0.2	-0.3	-1.5	-2.6	-1.9	-4.3

1 NSSG, Labour Force Surveys: changes from second quarter to second quarter. Revised data on the basis of Eurostat's definitions, New Cronos data base and NSSG.

2 Participation rate of population aged 15 or more in the labour force.

3 Employed people aged 15-64 as a percentage of population aged 15-64.

4 Data obtained from banks: December-on-December changes.

5 Ministry of Finance: December-on-December changes. *Average annual* employment is estimated to have increased by 2.2% in 1994, 1.4% in 1995, 2.5% in 1996 and 1.1% in 1997 and to have decreased by 1.1% in 1998. In 1999 average annual employment increased by 2.1% (if the personnel of public hospitals is counted in and the fluctuation of the number of substitute teachers in secondary schools is normalised – see text) and in 2000 by 1.8%.

6 Ministry of National Economy: December-on-December changes. Average annual employment increased by 0.6% in 1994, or by 4.8% taking into account the reincorporation of the Athens bus system into the public sector. In 1995 average annual employment increased by 1.5%, in 1996 it remained unchanged, while it fell by 0.6%, 2.9% and 1.6% in 1997, 1998 and 1999, respectively and by 3.9% in 2000. If *only public enterprises* are taken into account, the corresponding rates are: +0.6%, -1.3%, -1.2%, -3.4%, -1.9% and -4.2% for 1995, 1996, 1997, 1998 and 1999 and 2000, respectively.

that in the last decade the increase in the number of the employed aged 45-64 kept abreast with the increase in the employment rate of this group may reflect the implications of changes in insurance legislation over the same period, changes which in some cases led to an increase in pension age limits.

– Fourth, the (small) decline in male employment may be associated with the restructuring of secondary production, which is still being carried out under the pressure of international competition. The increase in female employment is in tune with rising employment in services. The importance of services for a further increase in employment is evident from the conditions in the Greek labour market.

– Fifth, the fact that the *decline* in the number of persons characterised as “family business assistants” coincided with the *increase* in the number of those characterised as “self-employed with staff” (employers) may be associated with the fact that employment subsidisation programmes offer – among other things – incentives for the establishment of small enterprises.

The fall in the percentage of persons aged 15-44 in the labour force may partly explain why the absolute reduction in the number of unemployed persons was not accompanied by an equal rise in the number of employed persons.

The composition of total unemployment on the basis of educational level is interesting (according to the same NSSG survey for the second quarter of 2000). Specifically, 40.0% of the unemployed have had six years of secondary education, 21.2% have been through primary school and 12.1% have had 3 years of secondary education. Also, 15.1% have a higher technical education degree and 9.9% a university degree. A very small percentage of total unemployment are of those who have never gone to school (0.6%), those who have attended only some primary school classes (0.4%),¹ doctorate or other post-graduate degree holders (0.3%) and those who have studied in university schools without having obtained a degree (0.3%).

IOBE’s monthly business surveys are another source of information about employment (in the private sector). According to these surveys, business estimates in 2000 concerning employment prospects suggested a stagnation of employment in industry, a considerable increase in the sector of construction, a restrained increase in retail trade² and a clear deceleration of the growth of employment in the private services sector (with the exception of retail trade and banks)³ (see Chart III.6).

In the public sector, according to Ministry of Finance and Ministry of National Economy data (see Chart III.7 and Table III.8), average annual employment in central government⁴ increased by 1.8% in 2000, while in public enterprises⁵ it fell by 4.2% (as was the case in the previous four years).

1 It should be noted that those who have never gone to school and those who have attended only some primary school classes have very small shares in the labour force.

2 According to a SELPE (Hellenic Retail Business Association) survey, employment in department stores increased by 30% in 2000 (mainly through the creation of part-time jobs).

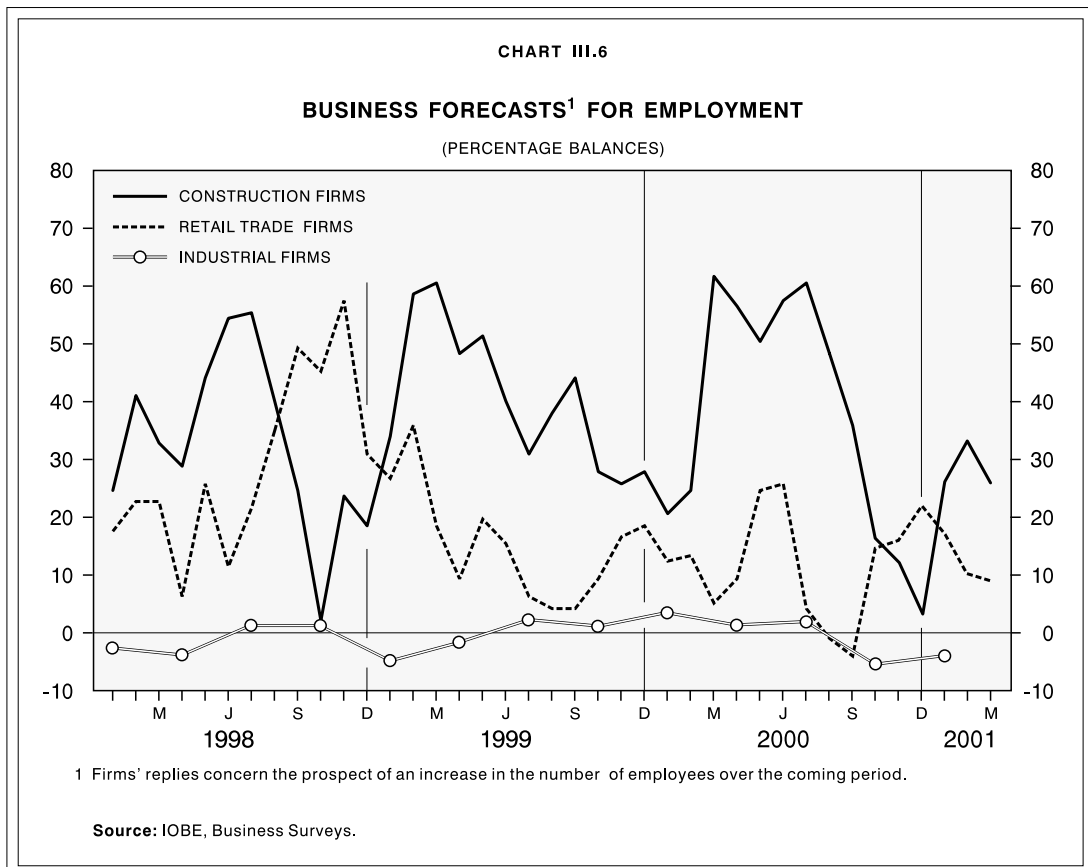
3 The business survey in the service sector is new, is conducted by IOBE and its provisional results (along with those for the other EU countries) were for the first time published by the European Union in early February 2001. See “Business and Consumer Surveys: First Results – January 2001”, 2 February 2001, and *European Economy, Supplement B*, February 2001, Table 14.

4 Teachers and public hospital employees inclusive.

5 People employed under limited-time contracts are not included.

Lastly, the number of bank employees increased by 2.3% between December 1999 and December 2000 (see Table III.8), mainly owing to the founding of a new Greek bank and the increase in certain foreign banks' staff.

The implementation of employment policy continued in 2000, on the basis of the annual National Employment Action Plan (ESDA-May 2000). The most important developments were the following:



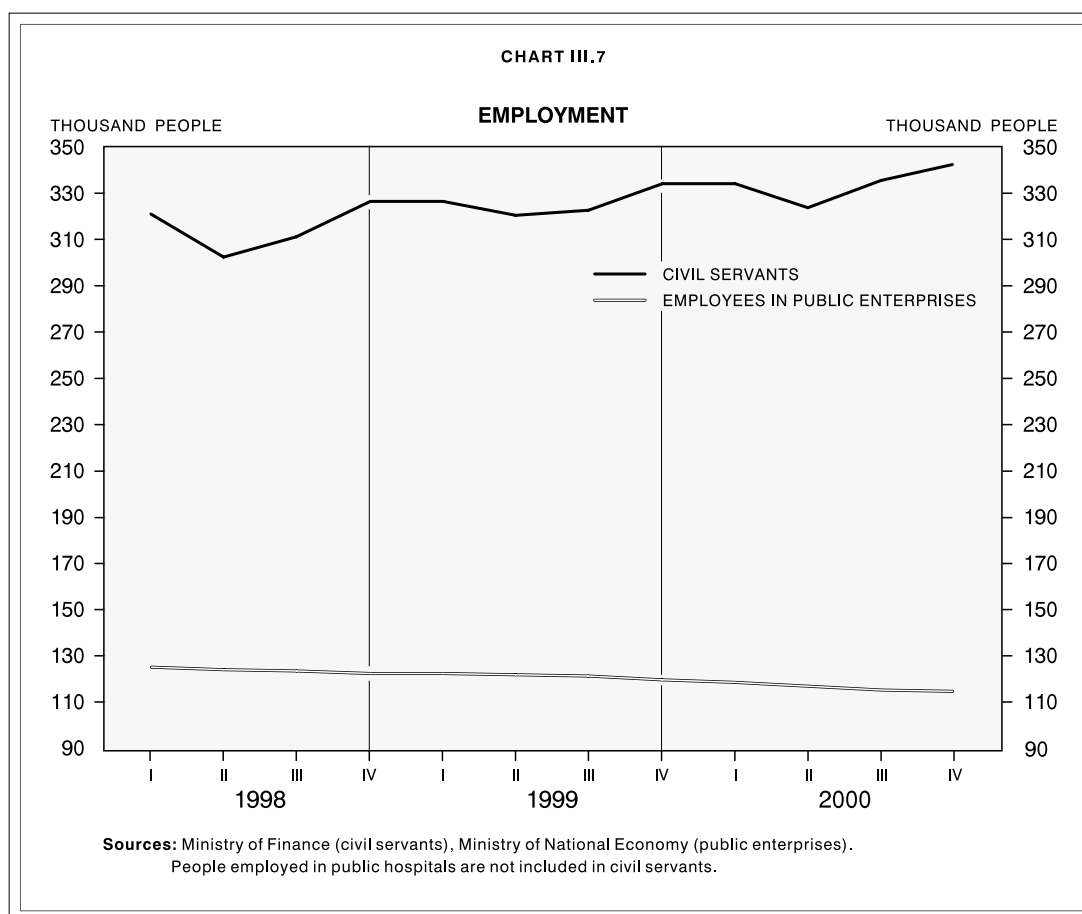
– The percentage of the newly-registered unemployed aged 15-24 who remained unemployed after six months fell to 37.1% in June 2000 (from 63.7% in January 1999). In the same period, the percentage of jobless young persons who participated in training or employment programmes within six months increased to 13.3% (from 5.8%).¹

– A considerable number of employees (223,244) took part in the course of 2000 in various types of vocational training actions.

– As regards Manpower Employment Agency (OAED) operation, in the course of 2000 the establishment of “Employment Promotion Centres” (of which 50 are already

¹ See ESDA 2001, April 2001.

operating) continued – in accordance with Law 2434/96 – while in December 2000 the “operational plan” for the restructuring of OAED was submitted to the Ministry of Labour. According to this plan, OAED will be divided into 4 units, which will become fully operational by the year 2005.¹ Moreover, the procedure under Law 2639/98 concerning the establishment of “private work consultants’ offices”² advanced and the first operating licences were granted (to 11 such offices to date).



– The procedure for the legalisation of foreign workers³ continued and 201,662 “green cards” have been granted to date, namely 89% of the 225,691 people who had submitted the required supporting documents by end-April 1999. A prerequisite for submission of these documents was, according to the relevant procedure, the incorporation of

1 See ESDA 2001, April 2001

2 As amended by Article 12 of Law 2874/2000.

3 The “green card” is a “stay permit of limited duration” provided for by relevant legislation (Presidential Decrees 358 and 359/1997, issued upon authorisation by Law 2434/1996 and amended by Presidential Decrees 241 and 242/1998, Article 73 of Law 2676/1998 and Article 20 of Law 2736/99).

foreign employees in the social security system.¹ The law concerning “foreigners’ entry and stay in Greek territory”, passed on 28 March 2001, contains permanent provisions on immigrants, as well as transitional provisions concerning, on the one hand, the granting of temporary stay permits to immigrants who resided illegally in Greece as from 15 April 2000 the latest and, on the other hand, automatic renewal until 30 June 2002 of “green cards” expiring on 30 June 2001.² Besides, according to a survey conducted by the Ministry of Agriculture throughout Greece,³ the agricultural sector’s *average monthly* requirements for foreign workers were estimated at 108,300 people.⁴

– In July 2000, Article 14 of Law 2837/2000 introduced the subsidisation, out of the government budget, of the contribution which the lowest-paid workers⁵ have to pay to the Social Insurance Fund (IKA) for old-age pension insurance.

The most important development, however, was the enactment of Law 2874/2000 in December, concerning “employment promotion”. Its key provisions are the following: (i) Enterprises are called upon to meet their needs in working hours to a greater extent through recruitments instead of overtime. For this reason, from 1 April 2001 overtime at the discretion of the employer is drastically cut from 8 to 3 hours a week, while its cost, as well as regular overtime cost, increases considerably. (ii) As an alternative to the above overtime arrangement, enterprises may implement a system of rescheduling employees’ working time on an annual basis, combined with a reduction in annual working time. The consent of the labour union at the enterprise level or, when this does not exist, at the trade or the industry level, is required, while, in case of dissent with the latter, the Mediation and Arbitration Agency will intervene. (c) The part-time system is modified. Specific categories of the long-time unemployed are entitled to receive from OAED about 1/3 of the basic unemployment benefit for one year following their employment in a part-time job, provided that the arrangement concerns at least 4-hour work daily. Furthermore, the wage of people employed less than 4 hours a day will be raised by 7.5%, provided that they are on the lowest wage scale. These two measures stimulate labour supply, since financial incentives encourage the unemployed to move to part-time jobs. OAED will bear the cost of the first measure, while the second will burden employers. (iv) To compensate for the increase in labour cost, which may arise from the above arrangements, as well as for more general reasons, the employers’ main contribution to the pension fund of IKA is reduced

1 Foreign employees who submitted applications to obtain the “green card” represented only 60% of the 373,196 people who had been registered in the first phase (1 January-1 June 1998) of the relevant procedure. This was due to some employers’ unwillingness to insure foreigners, and as a result the latter were unable to gather the required stamps.

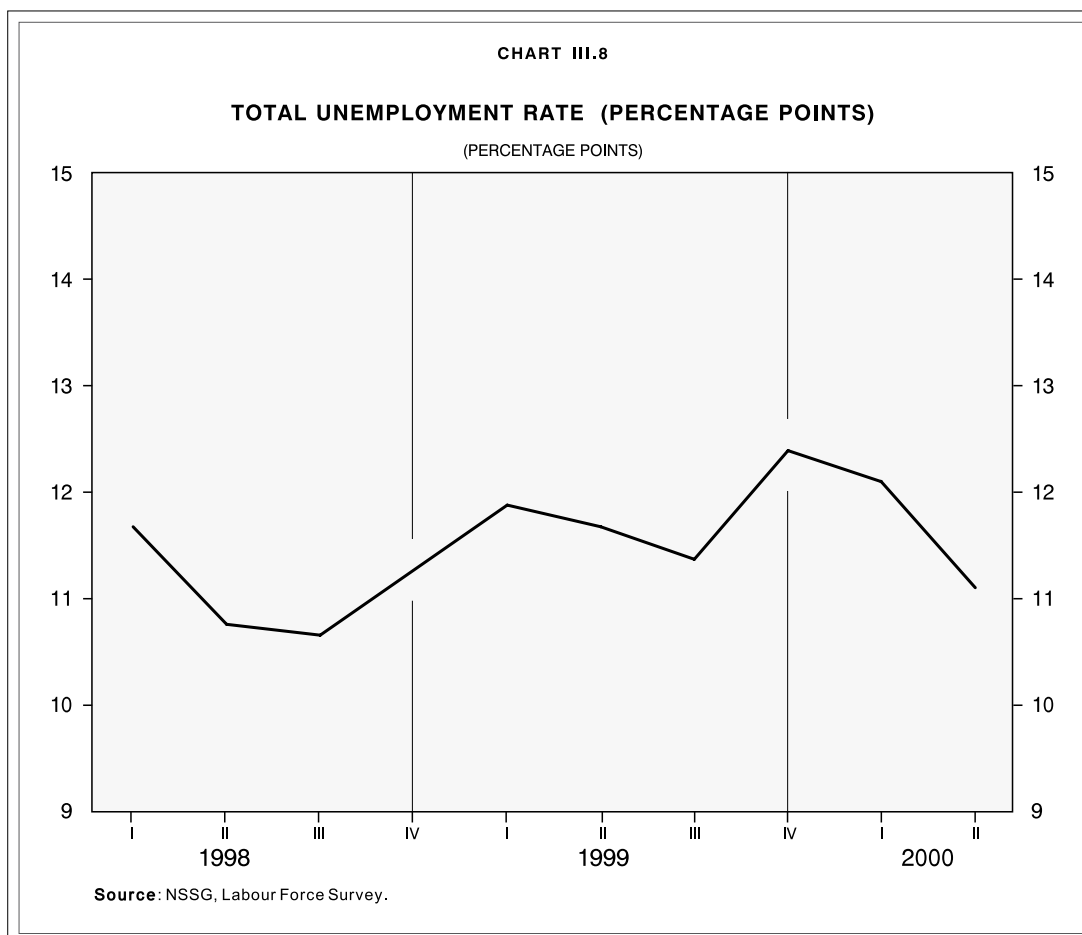
2 It should be recalled that the “green card” procedure was implemented as a one-off measure, since it concerned only the immigrants who were residing illegally in Greece in late November 1997, when Presidential Decree 358/97 was promulgated.

3 Ministry announcements, see newspapers of 30 March 2001.

4 The greatest demand is observed in August (129,000 persons) and September (126,000 persons), while the smallest is recorded in February (85,000 people) and March (88,000 people). The prefectures with the highest requirements are Aitolokarnania, Pella and Chalkidiki.

5 This contribution is equal to 6.67% of earnings and its calculation base is the basic monthly salary or the daily wage, excluding allowances or benefits. See also Bank of Greece, *Annual Report 1999*, page 121.

(from 13.33% to 11.33%) initially from 1 April 2001 to 31 December 2003, but only for *low-wage employees* in the private sector with monthly earnings up to 200,000 drachmas. The difference to IKA is made up by the government. The measure concerns both existing employees and new recruits.¹ (v) The limit beyond which dismissals are considered mass dismissals becomes smoother.²



For the current year, the Ministry of Labour has announced OAED programmes (total cost: 113 billion drachmas) for training support, acquisition of working experience, and integrated training-employment actions. These programmes involve 52,000

1 At the same time, as mentioned in ESDA 2001, the provision of Article 4, paragraph 13, of Law 2753/1999 applies *as well*. It provides that 50% of employers' contributions for new recruits between 17 November 1999 and 31 December 2001 is deducted from enterprises' taxable profits for a period of two years. According to Ministry of National Economy *ex post* data, the cost of implementing the measure amounted to 5 billion drachmas, while a "tax expenditure" of a similar amount is budgeted also for 2001.

2 The 2% monthly limit will apply only to enterprises employing 200 employees or more. The limit for enterprises employing 20 to 49 persons is reduced from 5 to 4 persons, while the limit for enterprises employing 50 to 200 persons, which was 2% (namely 1 to 4 persons), is increased to 4 persons.

unemployed.¹ Programmes for the subsidisation of new jobs are also to be announced. For the whole six-year period 2001-2006, extensive programmes (within the field of competence of various ministries) concerning employment directly or indirectly have been included in the 3rd Community Support Framework. Such programmes are the “Employment and Vocational Training” Operational Programme (projected total cost: 1,998.9 million euro, of which 299.6 million euro in 2001), the “Education and Initial Vocational Training” Operational Programme (projected total cost: 2.484,6 million euro), the community initiative programme EQUAL “for combatting discrimination and inequalities in the labour market” (projected total cost: 138.8 million euro, of which 21.2 million euro in 2001) and the “Information Society” Operational Programme (total cost: 2,839.1 million euro).²

1 Minister of Labour announcements, 27 February 2001.

2 According to an ESDA 2001 estimate, of the total expenditure under the 3rd CSF, 2.1 trillion drachmas concern investment in human resources.

IV. PRICES, WAGES AND BUSINESS PROFITS

1. PRICE DEVELOPMENTS

1.1 Inflation developments and determinants: an overview

In the course of 2000, inflation initially remained low but then began to rise. The low rate of inflation during the early months of the year enabled Greece to meet the convergence criterion related to price stability.¹ The subsequent acceleration caused the annual rate of inflation based on the national Consumer Price Index (CPI) to rise to 3.9% in December 2000 from 2.7% in December 1999 and that based on the HICP to 3.7% from 2.3%.² HICP inflation also picked up in the euro area from 1.7% to 2.6% over the same period (see Charts II.1, II.2 and IV.5, as well as Table IV.1). In Greece, *average annual* CPI inflation rose to 3.2% in 2000 from 2.6% in 1999, while average annual HICP inflation reached 2.9%, compared with 2.1% in 1999.

The faster increase in consumer prices during 2000 mainly reflected the rise in crude oil prices on the world market and the weakening of the euro against the US dollar (note: the same developments caused the rise in inflation in the other European countries). Other factors that accounted for the acceleration of inflation were (i) the convergence of the drachma's current exchange rate against the euro on its central exchange rate within the ERM and of Greek interest rates on corresponding euro area rates, and (ii) the fading out of the downward effect on inflation from the indirect tax cuts of 1999 (the size of the effect that faded out was one percentage point in the year to December – see Table IV.2). The 3.5% revaluation of the drachma's central rate within ERM II, effective as from 17 January 2000, as well as the fact that the convergence of both the exchange rate and interest rates was slow (as intended), reduced the inflationary effect of interest rate and exchange rate developments in 2000.

The foregoing inflationary effects were only partly offset by the favourable effects of (i) tight monetary policy during the *preceding* period (to a considerable extent these effects appeared with a time lag), (ii) the slowdown in unit labour cost growth (which, according to *revised estimates*,³ was more pronounced in the business sector), (iii) the reduction of the general government deficit to 0.9% of GDP (from 1.8% in 1999), and (iv) the opening-up of the telecommunications market.⁴ Furthermore, the fact that the faster

1 The *average annual* rate of inflation, based on the Harmonised Index of Consumer Prices (HICP), was between 2.0% and 2.1% until the end of June 2000.

2 The narrowing of the gap between CPI and HICP inflation rates is due to changes in the coverage of HICP consumer expenditure as from January 2000, which is now more similar to that of the national CPI.

3 See Section 2, below.

4 The average weighted decrease in rates charged by the Hellenic Telecommunications Organisation (OTE) reached 5.7% during 2000. Had this rate reduction not taken place, the annual rate of CPI inflation would have been 0.1 percentage point higher in December 2000. Based on the HICP, which also includes cellular phone services, the downward effect of the reduction in telephone rates reached 0.3 percentage point.

TABLE IV.1
INFLATION INDICATORS
(Annual percentage changes)

Year or quarter	Consumer Price Index						Wholesale Price Index						
	GENERAL INDEX	Sub-indices					GENERAL INDEX	Sub-indices					
		Goods	Services	CPI excluding fresh fruit/ vegetables & fuel	CPI excluding food & fuel	Food and non-alcoholic beverages		Fresh fruit and vegetables	Fuel	Primary	Industrial	Final domestic products for home consumption	Industrial excluding fuel	Exported products	Imported products
1992	15.9	14.1	19.2	16.3	14.1	3.7	20.1	11.3	1.7	14.7	...	6.4	12.6
1993	14.4	11.9	19.0	15.0	12.7	1.5	16.8	11.9	5.4	13.5	...	11.3	12.2
1994	10.9	10.9	10.9	10.8	12.9	24.8	2.7	8.7	13.7	7.4	8.5	8.7	9.2
1995	8.9	7.5	11.4	9.6	8.4	8.2	2.8	7.8	5.1	8.1	8.7	10.2	7.0
1996	8.2	7.2	9.9	8.4	7.0	8.4	10.2	6.1	8.9	7.1	6.1	5.6	1.6
1997	5.5	3.7	8.4	6.8	4.1	11.0	-4.9	3.3	4.2	4.0	3.8	2.9	2.1
1998	4.8	3.9	6.2	5.7	4.4	7.0	-5.9	3.9	7.5	2.8	4.3	3.0	5.4
1999	2.6	1.7	4.0	3.0	2.4	1.8	-1.7	2.1	3.4	3.7	2.6	-0.1	0.5
2000	3.2	3.4	2.8	2.0	1.9	1.4	26.9	7.8	3.0	8.4	3.3	10.5	6.1
1997 a'	6.4	5.0	8.6	7.3	4.4	6.6	2.8	2.4	0.2	5.2	4.3	0.3	-0.4
b'	5.6	3.6	8.8	7.3	3.5	8.0	-7.3	2.7	-2.5	3.7	3.6	3.1	2.2
c'	5.3	3.2	8.6	6.7	5.1	21.2	-10.0	4.5	11.7	4.1	3.9	5.2	3.1
d'	4.9	3.1	7.6	5.9	3.5	9.9	-3.9	3.5	8.8	3.0	3.6	3.1	3.5
1998 a'	4.4	3.4	6.0	5.0	4.9	16.8	-4.7	3.5	11.2	2.1	3.4	3.1	4.3
b'	5.3	4.5	6.5	6.0	4.6	5.4	-2.2	5.1	3.4	4.1	5.0	5.8	7.1
c'	5.1	4.3	6.4	6.2	3.8	-0.8	-3.4	3.5	1.7	3.0	4.6	2.5	5.4
d'	4.3	3.2	5.8	5.5	4.4	6.8	-13.3	3.4	14.4	2.2	4.1	0.7	5.1
1999 a'	3.6	2.8	4.9	4.5	4.3	6.4	-11.9	2.1	10.0	2.3	3.7	-0.9	1.8
b'	2.4	1.3	4.2	3.2	1.7	1.7	-6.1	0.2	4.7	2.0	2.0	-3.4	-1.6
c'	2.0	0.8	3.8	2.5	1.2	-4.6	-2.1	2.0	-1.8	4.3	2.2	-0.3	0.5
d'	2.5	2.0	3.1	1.8	2.4	2.9	14.9	4.2	0.7	6.2	2.4	4.4	1.5
2000 a'	2.9	3.0	2.8	1.6	1.9	0.3	29.0	7.0	1.0	8.2	2.6	9.6	4.9
b'	2.7	2.7	2.6	1.5	1.8	0.0	25.8	7.6	2.7	8.2	3.0	10.0	6.0
c'	3.0	3.2	2.7	1.7	2.4	9.9	23.8	8.3	9.0	8.4	3.0	10.6	6.2
d'	4.1	4.7	3.2	3.0	1.5	-2.8	28.9	8.4	0.2	8.9	4.5	11.7	7.4

Source: Calculations based on NSSG data.

growth of demand for goods was to a significant extent met by a greater — than in 1999 — growth of imports served to curb demand-induced inflationary pressures during most of 2000.

As a result, core inflation (as measured by the annual rate of change in the CPI, excluding fuel, fresh fruit and vegetables) remained below or close to 2% from October 1999 through September 2000.¹ However, it picked up in the last months of 2000 (see Chart II.2), owing to (i) the fading out of the favourable impact on the annual rate of inflation from the indirect tax cuts and lower telephone rates in the corresponding months of 1999, (ii) the indirect upward effect that the rise in oil prices and in the drachma prices of other imported raw materials and intermediate goods had on the prices of various con-

TABLE IV.2
CUTS IN INDIRECT TAXATION (1998-1999) AND TELEPHONE RATES (1999-2000):
IMPACT ON INFLATION

Item	Date	Contribution to the change in the annual inflation rate (in percentage points)
Gasoline (cut in indirect taxation)	24.9.1998	-0.20
Heating oil (cut in indirect taxation)	15.10.1998	-0.20
Cars (cut in indirect taxation)	15.11.1998	-0.26
Electricity (cut in indirect taxation)	1.1.1999	-0.17
Cuts in telephone rates	1.3.1999	-0.07
Gasoline (cut in indirect taxation)	5.8.1999	-0.10
Cars (cut in indirect taxation)	6.9.1999	-0.33
Heating oil (cut in indirect taxation)	15.10.1999	-0.26
Cuts in telephone rates	22.11.1999	-0.11
Electricity (cut in indirect taxation on fuel used as input)	1.12.1999	-0.14
Cuts in telephone rates	1.2.2000	-0.11

Source: Calculations based on CPI data.

sumer goods and services, and (iii) the significant acceleration in the prices of food items other than fresh fruit and vegetables² (see Chart IV.1 A and B). The final months of 2000 were marked by a strengthening of the inflationary expectations of households and industrial firms (see Chart IV.3A).

1 Part of the initial containment of core inflation is also attributed to the reduction in the prices of passenger cars in September 1999 and in the electricity rates charged by the Public Power Corporation (DEH) in December 1999.

2 Mainly including dairy products, fresh lamb, goat, pork and fish. It should be pointed out that several European countries faced inflationary pressures as a result of the changes in their population's dietary habits and increasing preference for white meat, fish and vegetables after the outbreak of bovine spongiform encephalopathy (see also ECB, *Monthly Bulletin*, February 2001, p. 6). This phenomenon was also recorded in Greece, although to a lesser extent, in November and December.

1.2 The effects of monetary policy and demand

The gradual reduction in lending rates and the faster credit expansion to the private sector – which both stemmed from the unavoidable relaxation of monetary policy – increased the disposable funds of households and firms. Meanwhile, the average real disposable income from wages increased considerably and much faster than in 1999.¹ These factors contributed to a strengthening of consumer and investment demand and to an acceleration of core inflation. On the other hand, the reduction in deposit rates and in yields of government securities is estimated to have contributed negatively to the change

TABLE IV.3
EVOLUTION OF PRICES OF REAL ESTATE (DWELLINGS): 1994-2000

Period	Athens area		17 provincial cities ²	
	Percentage change	Deflated change ³	Percentage change	Deflated change ³
1994	...	...	8.7	-1.6
1995	...	...	9.4	1.5
1996	...	...	6.8	-0.7
1997	12.6 ¹	7.5	11.2	6.0
1998	14.5 ¹	10.2	10.6	6.0
1999	11.0 ¹	8.1	5.4	2.8
2000	12.7 ⁴	8.5 ⁴	7.9	3.7

1 December-on-December changes.

2 Fourth-quarter-on-fourth-quarter changes.

3 On the basis of the corresponding Consumer Price Index (CPI) change.

4 Estimated December-2000-on-December-1999 change on the basis of October-2000-on-December-1999 changes.

Sources: For the *provinces*, weighted change on the basis of quarterly data on the cities of Agrinion, Alexandroupolis (since 1996), Volos, Heraklion, Thessaloniki, Ioannina, Kavala, Kalamata, Xanthi, Patras, Pyrgos, Rethymnon, Rhodes (since 1997), Serres (since 2000), Sparta, Florina (since 2000) and Chania, collected by Bank of Greece branches. For *Athens*, calculations on the basis of monthly data on the *prices of dwellings offered for sale*, which for 1997 were frequently published in *Oikonomikos Taxydromos*, while, for 1998-2000, they were collected by Property Ltd.

in gross disposable income in the private sector;² the same holds for the decline in stock prices, which dampened the growth of domestic consumer demand and reduced firms' "non-operating" revenue.³ The reduction in the borrowing costs of enterprises is another factor that contributed directly to containing price increases. However, the prices of real

1 See Section 2, below.

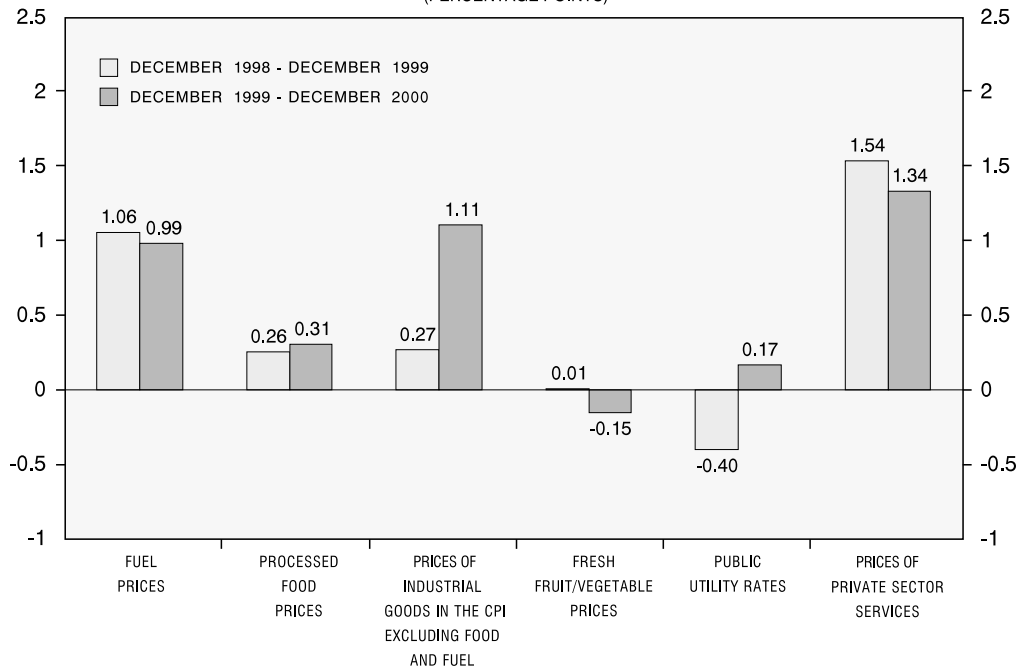
2 See Bank of Greece, *Monetary Policy 2000-2001*, March 2001, p. 53 (in Greek).

3 See Section 3, below.

CHART IV.1

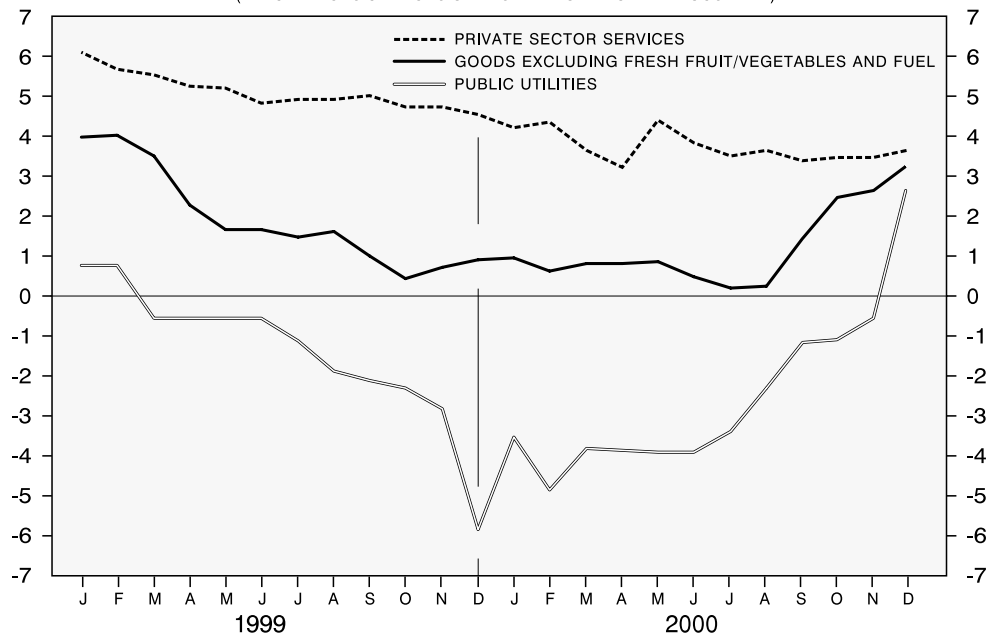
A. MAIN CONTRIBUTIONS TO THE ANNUAL INFLATION RATE

(PERCENTAGE POINTS)



B. GOODS AND SERVICES INCLUDED IN CORE INFLATION

(PERCENTAGES CHANGES OVER SAME MONTH OF PREVIOUS YEAR)

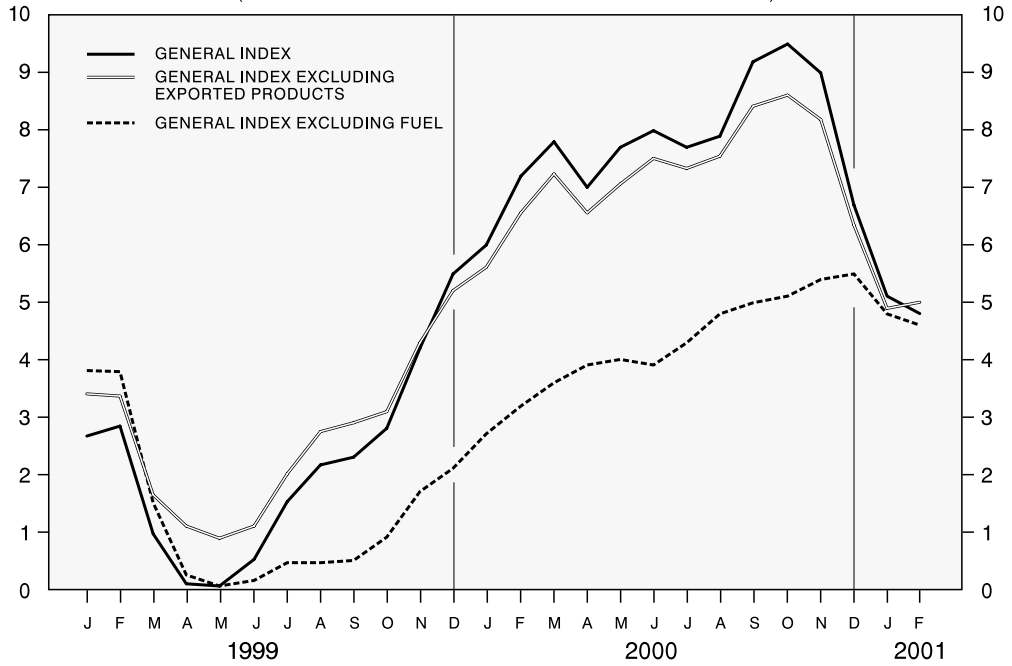


Source: Calculations based on NSSG data.

CHART IV.2

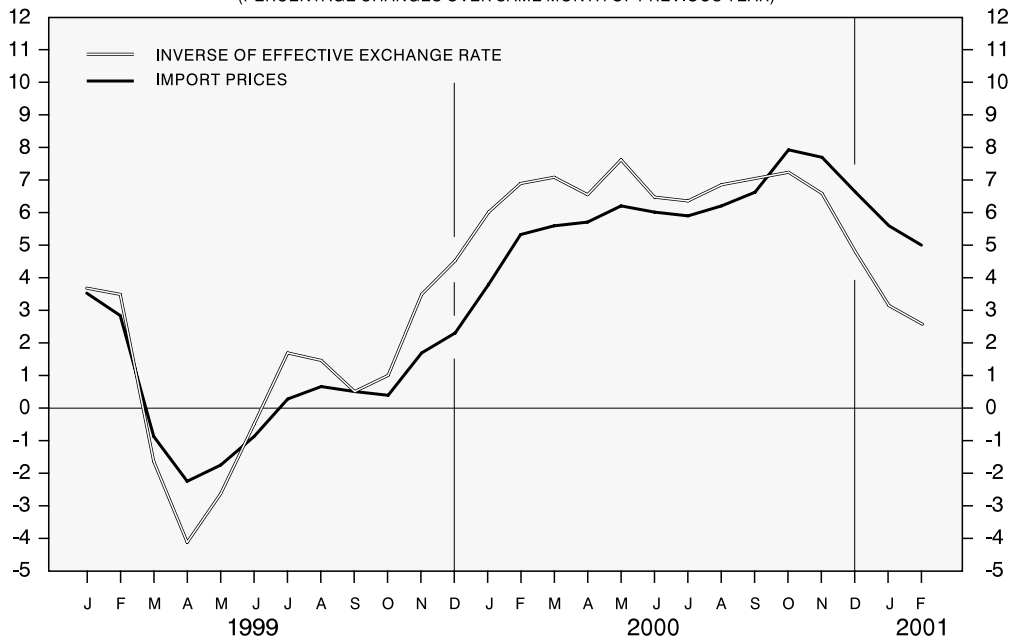
A. WHOLESALE PRICE INDICES

(PERCENTAGE CHANGES OVER SAME MONTH OF PREVIOUS YEAR)



B. IMPORT PRICE INDEX AND INVERSE OF THE EFFECTIVE EXCHANGE RATE OF THE DRACHMA

(PERCENTAGE CHANGES OVER SAME MONTH OF PREVIOUS YEAR)



Source: Calculations based on NSSG and Bank of Greece data.

estate, which accounts for a greater proportion of household assets than shares,¹ continued to rise at a relatively high and slightly accelerating pace (see Table IV.3), which in fact exceeded the rate of increase in building costs for new housing.²

The end result of these diverging influences was that the growth of consumer demand and residential investment accelerated and the growth rate of business investment remained high (see Table III.1 and Charts III.1, III. 2 and III.5). According to Bank of Greece estimates, the output gap³ decreased in 2000, but remained negative. Furthermore, on the basis of the latest estimates of the European Commission, the International Monetary Fund and the OECD regarding the output gap of the Greek economy, Greece's current output was, according to certain methods of estimation, lower than its potential output in 2000 – this negative divergence being nonetheless smaller than in 1999 – while according to other methods, this negative divergence even turned positive (with similar patterns estimated for the euro area).⁴ However, whereas the faster growth of output in manufacturing (which accounts for 13-14% of GDP) led to an increase in capacity utilisation which exceeded the average for the 1990s, it *did* leave room for a further increase.⁵ In addition, the rate of unemployment, after falling slightly in the first half of 2000 compared with the first half of 1999,⁶ remained relatively high, implying that the labour market is not characterised by an overall tightness.

1 According to the Household Budget Survey for 1999 (NSSG), the percentage of households living in owner-occupied homes amounts to 79.6% for the country as a whole and to 72.7% for urban areas. As suggested by an ICAP sample survey (*Greek households: estimates for 1999 and outlook for 2000*, December 1999), the proportion of households that invested in stocks and stock-market mutual funds in 1999 was much smaller: roughly 15% for the country as a whole and 18% for urban areas. According to a more recent survey by ALCO (Feb. 2001), 27% of the population aged 18-65 years invested in the Athens Stock Exchange from 1997 to February 2001. Of this percentage, only 11% still have investments on the ASE today. According to the same survey, only 14% of those who had invested in the ASE had profits, while 67% incurred losses and 18% ended up with neither profits nor losses (see the newspaper *Kathimerini*, 11 March 2001).

2 The increase of 8-13% in real estate prices (for both new and old dwellings) denotes excess demand, given that residential construction costs increased at a slow and decelerating pace in 2000. According to the NSSG, the general price index of construction materials for new residential buildings increased by only 2.7% during 2000, the general index of labour compensation for the construction of new residential buildings rose by 3.6% and the general price index for construction tasks (builders' prices) by 2.1%.

3 The output gap is the difference between the actual and the potential output of the economy as a whole, as a percentage of potential output.

4 The output gap is estimated to have decreased to -0.8 in 2000 from -1.7 in 1999 according to the OECD (*Economic Outlook*, December 2000) and to have become +0.5 in 2000 from -0.1 in 1999 according to the IMF (*Staff Report for the 2000 Article IV Consultation*, March 2001). According to the European Commission (*Spring Forecasts*, April 2001), the output gap either decreased from -0.8 to -0.2 (linear trend method) or from 0.0 turned positive, at +0.2 (production function method). The output gap in the euro area also decreased from -1.4 in 1999 to -0.3 in 2000 according to the OECD, while, according to the European Commission, it either decreased to 0.0 from -0.8 or from -0.2 turned positive at +0.4.

5 According to the Foundation for Economic and Industrial Research (IOBE), capacity utilisation in the industrial sector as a whole rose, on average, to 78.1% in 2000, compared with 76.0% in 1999. The average for 1990-1999 (which, however, includes three years of negative or very limited economic growth) was also 76.0%.

6 See Section III.4.

1.3 Effects of the rise in oil prices and of the fall in the effective exchange rate

Rising oil prices and the appreciation of the US dollar against the drachma (and to a lesser extent against the euro) were the main reasons for higher inflation in 2000.

The average increase in crude oil prices in the world market (in US dollars) reached 56.2% in 2000.¹ Meanwhile, owing to the steep appreciation of the US dollar (and to a lesser extent of the yen) against the euro and to the depreciation of the drachma against the euro through November² (at an average annual rate of 3.2% in 2000, compared with an appreciation of 1.8% in 1999), the nominal effective exchange rate of the drachma decreased at an average annual rate of 6.2% (against merely 0.9% in 1999).

Therefore, in drachma terms, the average annual increase in the prices of crude oil reached 87% in 2000, compared with 42% in 1999. In addition, the prices of non-energy raw materials, once again in drachma terms, increased at an average rate of 22%, compared with a decrease of 4.8% in 1999,³ while the prices of exported manufactures of the OECD countries rose by 12.4%, compared with merely 1% in 1999.⁴

The changes in world prices, in drachma terms, had – to an extent determined by Greek market conditions – a *direct* effect on the prices of all imported goods (see Chart IV.2B) as well as of domestically processed petroleum products (see Chart IV.4A) and an *indirect* effect on the production costs (and therefore the prices) of the remaining goods produced in Greece for home consumption or for export (see Chart IV.2A and Table IV.5).

An indication of the *direct* effects is provided by the fact that the average annual rates of increase in wholesale prices reached 5.0% (only 0.3% in 1999) for non-fuel imported goods and 87%⁵ (compared with 25.5% in 1999) for fuel. As the increase in the prices of imported goods, excluding fuel, was definitely lower than expected on the basis of world price and exchange rate developments, it is safe to assume that importers limited the pass-through to drachma prices, in spite of the substantial rise in demand.

The *indirect* effects, measured at average levels, were relatively limited in 2000, partly because of time lags. Indeed, while the *average annual* rate of change in the prices of domestic manufactured products (intended for home consumption), excluding fuel, picked up only slightly over 1999 (3.3% against 2.6%),⁶ the *annual* rate of the index reached 5.3% in December 2000, from 2.1% in September 1999 (see Chart IV.3B).

1 As an average of the spot prices for three types of oil (Arab light, Brent, West Texas Intermediate) and based on data from the Energy Information Administration of the US Department of Energy.

2 The average annual appreciation of the US dollar against the drachma reached 19.6% in 2000 (depreciation of the drachma against the US dollar of 16.4%), compared with 3.4% in 1999.

3 See ECB, *Monthly Bulletin*, March 2001, Table 4.2, p. 37*.

4 See OECD, *Economic Outlook*, December 2000, p. 227.

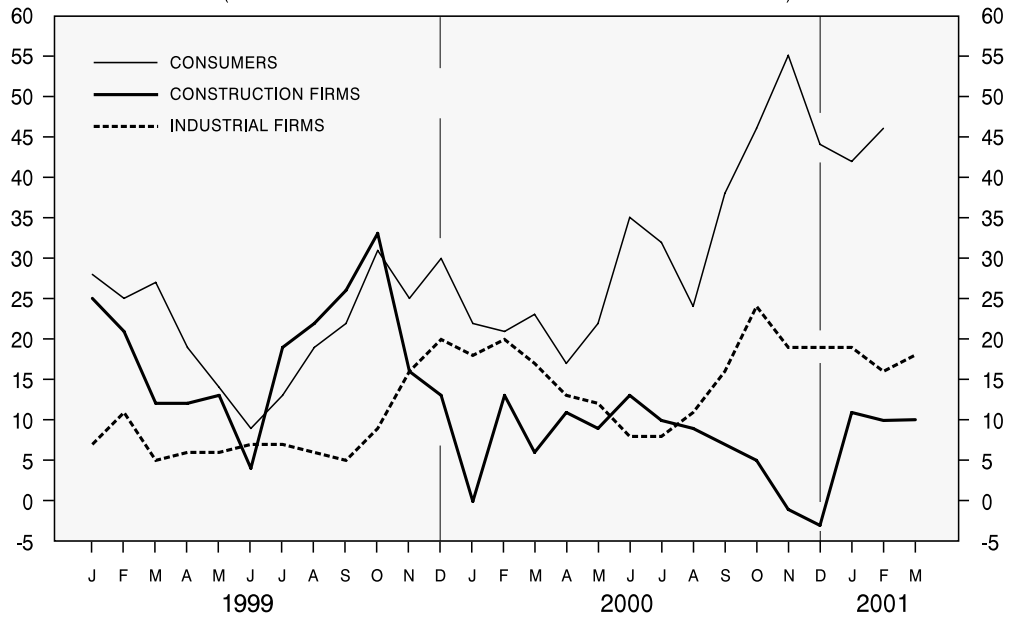
5 The fuels included in the WPI are final products and, for the most part, produced domestically either for home consumption or for export, from an imported raw material (crude oil) that is not included in the index. It should be recalled that the wholesale prices of fuels are not affected by changes in special consumption taxes.

6 Regarding export price developments (excluding fuel), see Section 3 below.

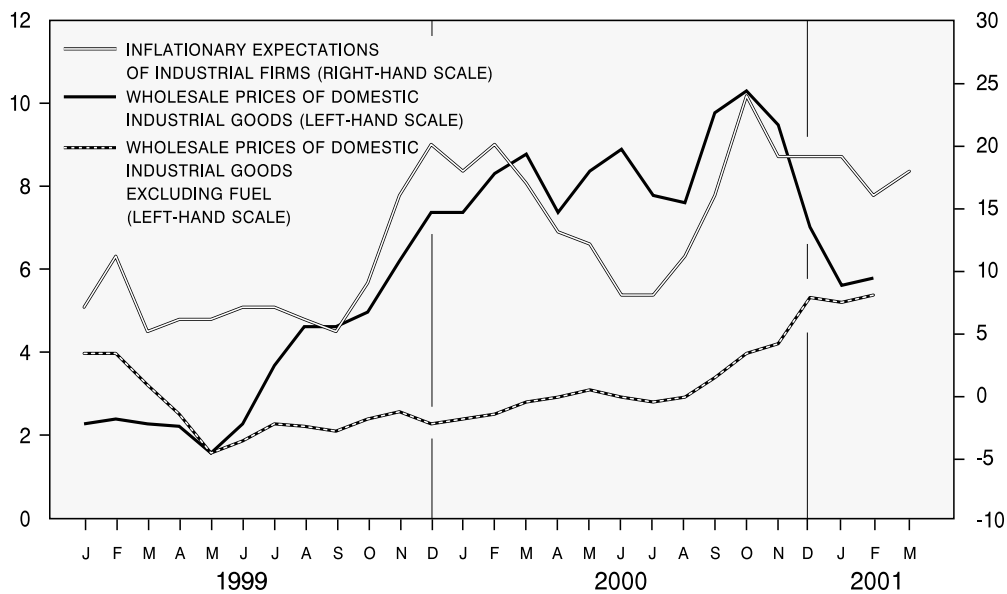
CHART IV.3

A. INFLATIONARY EXPECTATIONS* OF CONSUMERS AND BUSINESS FIRMS

(PERCENTAGE BALANCES OF POSITIVE AND NEGATIVE RESPONSES)



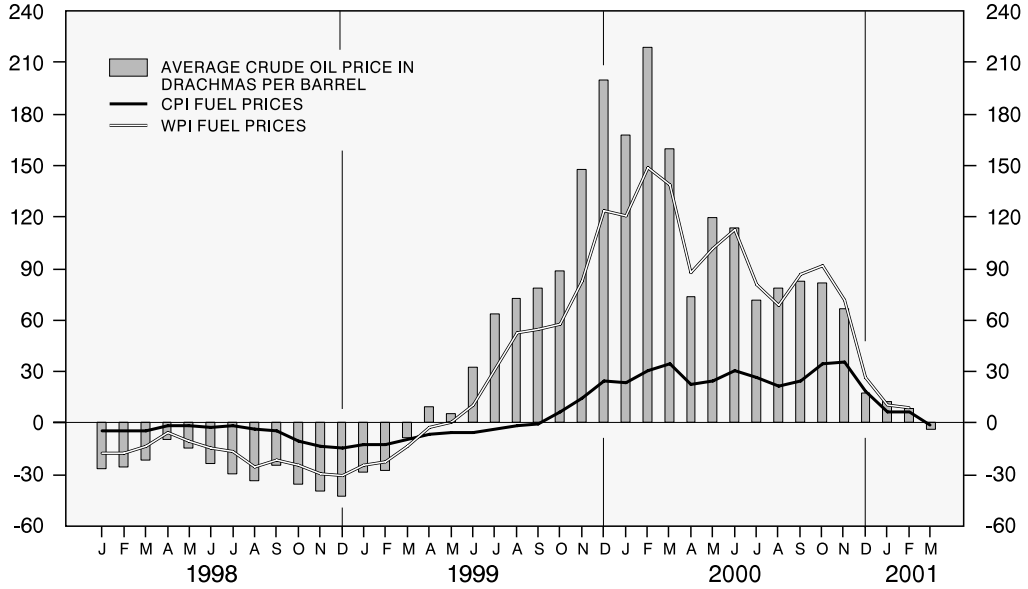
B. WHOLESALE PRICE INDEX FOR DOMESTIC INDUSTRIAL GOODS, AND INFLATIONARY EXPECTATIONS* OF INDUSTRIAL FIRMS**



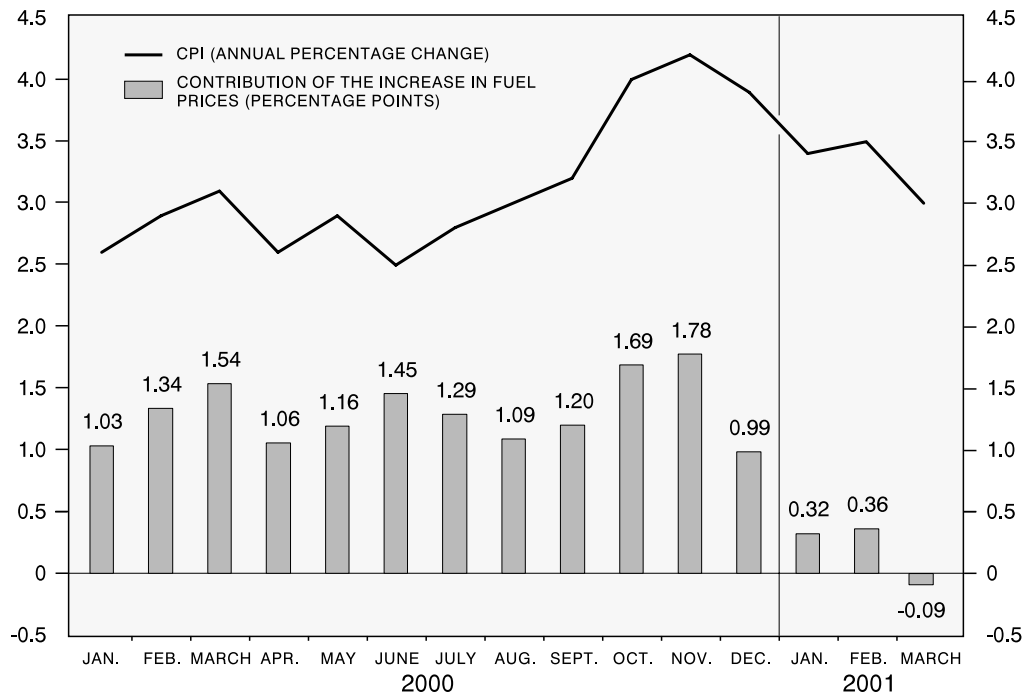
* Expectations: Percentage balances of responses of (a) business firms on the prospects, in the next 3-4 months, of price increases for the goods they produce and (b) consumers on the prospects of a faster increase in consumer prices in the next 12 months.
 ** Prices: Annual percentage changes.
 Source: Calculations based on NSSG, IOBE and European Commission (*European Economy, Supplement B*) data.

CHART IV.4

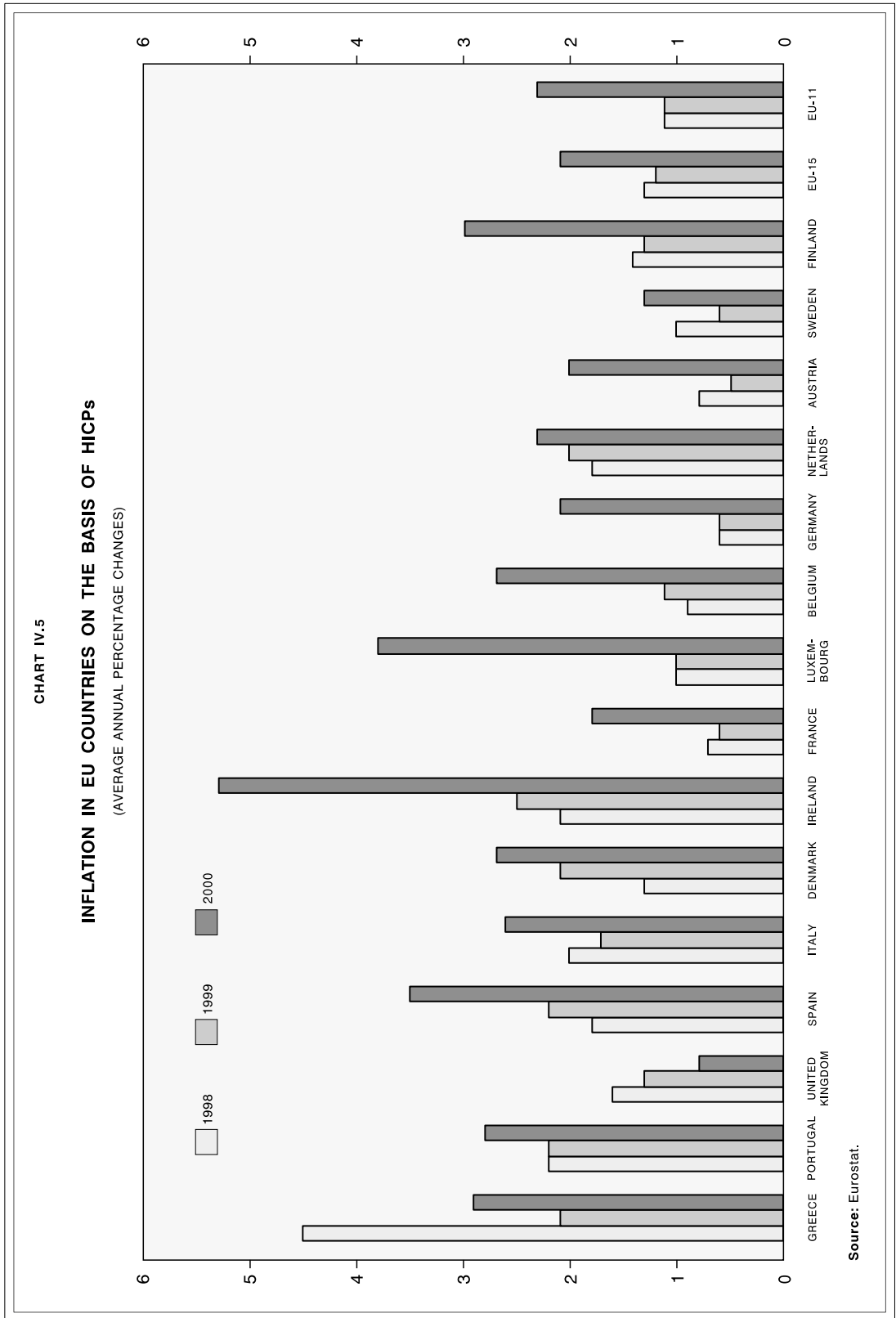
A. EVOLUTION OF CPI AND WPI FUEL PRICES AND OF THE AVERAGE DRACHMA PRICE OF BRENT CRUDE OIL
(PERCENTAGE CHANGES OVER SAME MONTH OF PREVIOUS YEAR)



B. INFLATIONARY CONTRIBUTION OF THE INCREASE IN FUEL PRICES

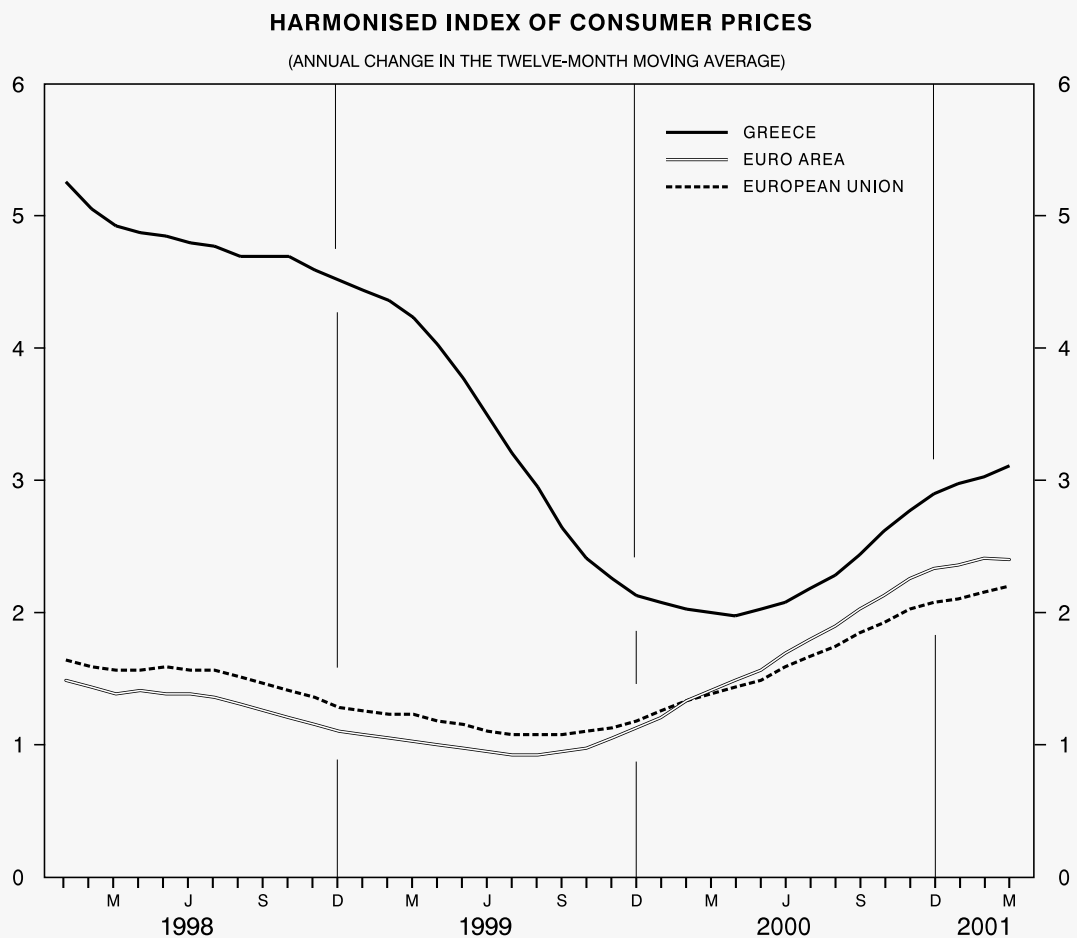


Source: Calculations based on NSSG data, as well as on US Department of Energy data on crude oil prices (average of Brent, Arab light and West Texas Intermediate).



BOX IV.1**Inflation differentials and similarities between Greece, the EU and the euro area: a statistical analysis**

This box contains a statistical analysis of the inflation differentials and similarities between Greece and the European Union (EU-15) and the euro area on average. Almost all of the euro area countries attained or maintained an inflation rate of less than 2.0% over 1998 and



1999, which is in line with the definition of price stability. In the convergence process at the time, Greece reduced its annual inflation (based on the HICP) from 4.5% in 1998 to 2.1% in 1999. Inflation, however, picked up in almost all the euro area countries in 2000, to a different extent in each country. The differentials in price increases for goods and services between Greece and the entire euro area reflect differences in productivity, in the monetary, exchange rate and fiscal policies pursued and in special factors (seasonality, degree of market deregulation, changes in administratively determined prices, etc.). Nevertheless, the price development pattern was →

→ rather similar or synchronised in both Greece and the euro area and for the most part marked by low rates of inflation.

The use of the correlation coefficient (r) as a statistical measure enables us to examine the degree of synchronisation or similarity in price developments between Greece, the EU and the euro area.¹

Before 1999, Greece showed large price differentials in several categories of goods and services when compared with the average for the 11 countries that made up the euro area at the time. More specifically, in 1998, the correlation coefficient was +0.76, meaning that, while there was a relative synchronisation in the rates of change in the HICP, there continued to be a significant discrepancy between Greece and the euro area. In 1999, however, this relationship was reversed and the correlation coefficient turned negative (-0.35), denoting opposite movements in the rates of inflation, with a definite tendency towards convergence (see table in this box).

CORRELATION COEFFICIENTS OF THE RATES OF CHANGE IN PRICES IN GREECE, THE EURO AREA AND THE EUROPEAN UNION, ON THE BASIS OF HICP

Greece compared with:	HICP	Goods	Services	Processed food	Un-processed food	Industrial goods	Non-energy industrial goods	Energy	HICP excluding energy and processed food
Euro area 1998	0.76	0.62	0.30	0.44	-0.20	0.52	0.95	0.77	0.92
EU-15 1998	0.76	0.62	0.50	0.26	-0.10	0.54	0.90	0.79	0.87
Euro area 1999	-0.35	-0.21	0.77	0.66	0.87	-0.27	0.94	0.92	0.91
EU-15 1999	-0.23	-0.11	0.86	0.71	0.86	-0.24	0.98	0.93	0.98
Euro area									
Jan. 2000-Feb. 2001	0.80	0.79	0.50	0.75	-0.08	0.75	0.98	0.92	0.90
EU-15									
Jan. 2000-Feb. 2001	0.82	0.77	0.66	0.79	-0.04	0.74	0.90	0.92	0.92

Sources: NSSG and Eurostat.

The correlation coefficient became rather high (+0.89) between the last quarter of 1999 and February 2001, indicating that a high degree of similarity in price changes had been reached with the other euro area partners.

A high degree of synchronisation in price increases is noted in particular in the HICP excluding unprocessed food and energy (which also serves as a measure of core inflation in the euro area), where the correlation coefficient is consistently close to +1 (ranging from +0.87 to +0.92 during the period under review). This reflects Greece's effort to ensure the convergence of its inflation on euro area levels and to maintain price stability. →

¹ The coefficient (r) is used to measure the degree of linear correlation between two variables and takes values ranging between -1 and +1. A correlation coefficient of +1 denotes a perfect linear correlation between the two variables examined, while a value of -1 indicates a completely negative linear correlation. A value of 0 indicates the absence of any linear correlation between the two variables. Hence, the absolute value of the coefficient indicates how strong (for values close to 1) or weak (for values close to zero) this (positive or negative) correlation is.

→ In spite of the considerable degree of convergence attained in the general price level, some deviation is still recorded in the rates of certain individual price indices, especially from the fourth quarter of 2000 through February 2001 (see chart in this box). This is mainly the case for processed food (average deviation of 2.6 percentage points from the euro area and of 2.3 percentage points from EU-15 over the five months ending in February 2001), energy (average deviation of 2.9 and 4.0 percentage points respectively), non-energy industrial goods (average deviation of 1.4 and 2.0 percentage points respectively) and services (average deviation of 1.4 and 1.1 percentage points respectively). These deviations are attributed to the countries' different cyclical positions and degree of convergence on the EU-15 or euro area average, as well as to structural factors, e.g. different patterns of changes in productivity that affect price formation. Moreover, special one-off factors, such as changes in indirect taxation, market and price deregulation measures, as well as differences in the composition of consumer price indices, may disrupt the rate of change in the prices of goods and services.

These developments ultimately led to a rise in the Wholesale Price Index (WPI) at an average annual rate of 7.8% in 2000, compared with only 2.1% in 1999. Excluding fuel, the acceleration in the WPI was much less pronounced (from 1.3% in 1999 to 4.3% in 2000).

A similar pattern of direct and indirect effects is noted with regard to retail prices. Specifically, the fuel prices included in the CPI increased at an average annual rate of 26.9% in 2000, whereas they had fallen by 1.7% in 1999. In December 2000, the annual rate of increase in CPI-covered fuel prices dropped to 18.6% (after reaching 34.9% in November 2000, from 24% in December 1999), thereby contributing by 0.99 of a percentage point to the corresponding increase in the overall CPI (see Chart IV.4B). The indirect effects of the increase in crude oil prices on consumer prices were limited during most of 2000, as indicated by the satisfactory course of core inflation through September.¹

Nevertheless, while CPI inflation decelerated in the first quarter of 2001, falling to 3.0% in March, core inflation continued to accelerate and rose to 3.9% in February and March, when the indirect effects of higher oil prices were more strongly felt.

2. WAGES AND SALARIES IN 2000

According to *revised estimates*, unit labour cost growth decelerated in the economy as a whole in 2000. Based on the latest available data,² unit labour cost growth is estimated

¹ See Section 1.1 above.

² The estimates initially published in the latest report of the Bank of Greece to the Greek Parliament (see *Monetary Policy 2000-2001*, March 2001) have been revised downwards, following the release of employment data for the first and second quarters of 2000 from the NSSG labour force survey. According to these NSSG data, the growth of total employment and of the number of employed wage earners was slower than initially assumed. As a result, the rise in productivity was higher and the growth of unit labour costs smaller than initially estimated.

to have declined to 2.6% (from 2.8% in 1999).¹ In the business sector (where cost developments affect inflation more directly), the growth of unit labour costs decelerated even more, to 2.1% from 2.9% in 1999. The growth of unit labour costs in the total economy nevertheless remains higher in Greece than in the euro area, where a drop in unit labour cost growth from 1.3% in 1999 to 0.9% in 2000 was recorded.²

Average gross pre-tax earnings in the economy as a whole are estimated to have increased by 6.0% in 2000, compared with 4.5% in 1999. This mainly reflects a marked acceleration in the growth of average earnings in general government and public enterprises in 2000 (following a relatively low rate of increase in 1999). In the private sector the acceleration was moderate, while in the banking sector the growth of average earnings decelerated. Meanwhile, the average real disposable income from salaries and wages (as approximated by the gross earnings of an average employee minus income tax and social security contributions) rose substantially and clearly faster than in 1999 (2000: 4.6%, 1999: 1.0%), primarily owing to income tax cuts and – to a lesser extent – to the faster rise in pre-tax earnings and to the reduction (subsidisation) of low-wage earners' social security contributions.³

In 2000 the collective labour agreements signed in the private sector were mostly for a two-year period. The number of agreements signed increased and a climate of moderation continued to prevail in industrial relations. According to the Ministry of Labour, 297 collective labour agreements were signed in 2000 (compared with 226 in 1999), while the Mediation and Arbitration Agency (OMED) issued 42 arbitration decisions (51 in 1999).⁴ As for the number of working hours lost because of strikes, data are no longer available.

Developments in wages and salaries by category of workers were as follows (see Table IV.4):

Under Law 2768/1999, civil servants' salaries were raised by 2.1-2.9% as from 1 January 2000, while considerably larger increases were granted (as from 1 January 2000 and 1 July 2000) to the military, and new or increased allowances were approved for other categories of government employees. According to the latest *ex post* estimates of the Ministry of Finance (March 2001), total central government outlays for salaries and pensions (excluding healthcare) rose by 7.9% in 2000, while outlays only for salaries rose by 8.2% (compared with 5.7% in 1999). As average annual employment in central government rose by 1.8%,⁵ *per capita* outlays for salaries rose by 6.3%, compared with 3.5% in 1999.

In public enterprises, according to estimates by the Ministry of National Economy, outlays for salaries increased by 5.9%, while average annual employment decreased by

1 Unit labour costs are defined here as the ratio of total compensation of employees to GDP at constant prices. These estimates are slightly different from those of the NSSG and of the Macroeconomic Analysis Directorate of the Ministry of National Economy.

2 See European Commission, *Spring Forecasts*, April 2001.

3 This subsidisation was introduced by Article 14 of Law 2837/2000 (see Chapter III, Section 4).

4 According to OMED records, the number of arbitration decisions was 49 in 2000 and 65 in 1999.

5 See Chapter III.4.

TABLE IV.4
EARNINGS, UNIT LABOUR COSTS AND PRODUCTIVITY: 1994 - 2000
(Annual percentage changes)

	1994	1995	1996	1997	1998	1999	2000
WHOLE ECONOMY							
– Average gross earnings ¹ (nominal)	13.0	11.9	11.5	10.5	6.3	4.5	6.0
– Average gross earnings ¹ (real)	1.9	2.8	3.0	4.7	1.4	1.9	2.7
– Employees' average disposable income ¹ (nominal)	11.5	10.3	9.7	10.7	5.7	3.6	8.0
– Employees' average disposable income ¹ (real)	0.5	1.3	1.4	4.9	0.9	1.0	4.6
– Total compensation of employees ^{1,2}	13.7	12.6	12.5	10.7	7.7	6.3	6.8
– Unit labour costs ^{1,3}	11.4	10.3	9.9	7.0	4.5	2.8	2.6
– Consumer price index ⁴	10.9	8.9	8.2	5.5	4.8	2.6	3.2
– Gross domestic product ⁵	2.0	2.1	2.4	3.5	3.1	3.4	4.1
BUSINESS SECTOR ⁶							
– Total compensation of employees ¹	14.7	12.4	10.9	9.4	6.8	6.4	6.3
– Unit labour costs ¹	12.4	10.1	8.3	5.7	3.6	2.9	2.1
CIVIL SERVICE ⁷							
– Average gross earnings of employees	9.4	12.3	14.9	13.5	9.2	3.5	6.3
– Total outlays for salaries and pensions	11.3	13.1	16.4	13.3	9.9	6.1	7.9
– Total outlays for salaries (excluding pensions)	11.8	13.9	17.8	14.7	8.0	5.7	8.2
PUBLIC ENTERPRISES							
– Average gross earnings of employees ⁸	18.8	10.9	14.1	11.0	5.7	4.8	10.5
– Total personnel outlays ⁸	25.3	11.6	12.6	9.7	2.1	2.8	5.9
– Monthly earnings of white-collar workers in electricity-water supply ⁴	11.0	11.2	14.0	9.9	8.9	...	...
– Hourly earnings of blue-collar workers in electricity-water supply ⁴	16.1	15.8	8.7	10.4	11.4	...	...
BANKS							
– Average gross earnings of employees ¹	14.4	15.4	13.4	9.7	4.0	13.1	6.8
– Total outlays for salaries ⁹	20.5	20.0	16.6	10.8	5.9	14.3	9.3
– Total compensation of employees ⁹	18.2	17.3	16.0	9.8	6.6	12.7	9.4
– Monthly earnings of employees ^{4,10}	17.5	13.1	12.7	9.4	8.6	...	...
NON-BANK PRIVATE SECTOR							
– Minimum earnings ¹¹ (nominal)	12.6	9.4	8.2	8.0	5.4	3.5	4.2
– Minimum earnings ¹¹ (real)	1.5	0.5	0.0	2.4	0.6	0.9	1.0
– Average contractual earnings ¹²	12.5	10.1	8.6	8.2	5.7	3.9	4.2
– Average gross earnings ¹	12.9	11.2	8.8	8.8	5.8	4.4	5.0
– Total compensation of employees ¹	12.6	12.2	10.2	9.3	7.6	6.5	6.0
– Hourly earnings of blue-collar workers in manufacturing ⁴	13.1	13.2	8.6	8.9	4.7	4.4*	5.5*
– Monthly earnings of white-collar workers in manufacturing ⁴	13.0	13.2	9.4	9.8	5.9	...	...
– Output per hour worked (manufacturing) ⁴	3.9	2.0	1.1	4.4	4.4	1.9*	3.5*
– Unit labour costs (manufacturing) ⁴	8.7	11.0	7.5	4.4	0.2	2.5*	1.9*
– Weekly earnings of blue-collar workers in mining ⁴	15.3	14.0	12.7	12.2	5.2	...	...
– Monthly earnings of white-collar workers in mining ⁴	12.9	11.3	11.7	14.3	13.7	...	...
– Monthly earnings of employees in retail trade ⁴	13.3	12.8	9.7	12.0	9.6	...	...
– Monthly earnings of employees in wholesale trade ⁴	15.3	15.3	9.9	10.5	6.3	...	...

1 Bank of Greece estimates.

2 NSSG and Ministry of National Economy estimates on the growth in total compensation of employees (March 2001): 1994: 12.9%, 1995: 15.3%, 1996: 8.8%, 1997: 13.6%, 1998: 10.3%, 1999: 6.8% and 2000: 7.9%.

3 NSSG and Ministry of National Economy estimates on the rate of increase in unit labour costs (as defined by the Ministry of National Economy): 1994: 10.7%, 1995: 11.6%, 1996: 5.9%, 1997: 9.3%, 1998: 6.4%, 1999: 0.6% and 2000: 2.0%.

4 Calculations based on NSSG survey data.

5 NSSG and Ministry of National Economy estimates (March 2001).

6 The business sector comprises public enterprises, banks and private business firms.

7 Estimates based on data from the Ministry of Finance and Introductory Reports on the Budget. Data for 1997 have been adjusted to ensure comparability. For the calculation of expenditure growth in 1998, 1999 and 2000, health care outlays were not counted in.

8 Calculations based on Ministry of National Economy data.

9 Data from annual profit and loss accounts (1994-2000).

10 October-on-October rates of change.

11 National General Collective Labour Agreement.

12 Calculations based on data from collective labour agreements at branch or occupational level.

* Provisional estimates.

4.2%. *Per capita* outlays for salaries thus rose by 10.5%, compared with only 4.8% in 1999, reflecting the rise in outlays for the payment of compensation to retiring employees in certain public enterprises. In the Public Power Corporation (DEH), in accordance with the 2-year collective labour agreement signed in 1999, basic salaries were raised by 2% as from 1 January 2000, while certain allowances were increased as from 1 January 2000 and 1 July 2000.

In banks, the 2-year branch-level collective agreement signed in 1999 provided for increases of 3.4% as from 1 January 1999 and of 2.4% as from 1 January 2000. The increase, however, in *per capita* outlays for salaries, as shown by banks' annual income statements for 2000, reached 6.8% (compared with 13.1% in 1999). Excluding one large bank, for which a *decrease* in average outlays for salaries was recorded due to the retirement of high-salaried employees, this increase in *per capita* outlays amounted to 8.5%. These developments, as in 1999, were related to the upgrading of staff composition in order to meet requirements associated with the introduction of new technologies and the development of new operations, as well as with the signing of collective labour agreements at the enterprise level, which led to higher increases than those provided for in the branch-level agreement.

Finally, in the non-bank private sector, the minimum wages of unskilled workers were set by collective 2-year agreements (2000-2001) in most branches. According to the National General Collective Labour Agreement (signed on 23 May 2000) and several branch-level agreements, increases of 2.0% (plus a corrective pay rise of 0.7%) were granted as from 1 January 2000 and of 1.5% as from 1 July 2000.¹ Other branch-level agreements provided increases in one instalment (as from 1 January 2000). On average, the branch-level agreements provided for an increase of 2.7% (including the corrective pay rise) as from 1 January 2000 and an additional increase of 1.2% as from 1 July 2000. The average annual rise in both minimum and contractual wages under branch-level labour agreements was 4.2%. The average annual rate of increase in actual earnings in the non-bank private sector is estimated at 5.0% for 2000, compared with 4.4% in 1999. In manufacturing, the hourly earnings of blue-collar workers are estimated to have increased by 5.5%, compared with roughly 4.5% in 1999,² while the growth rate of unit labour costs is estimated to have fallen from 2.5% in 1999 to 1.9% in 2000.³ These developments, combined with the average annual decrease of 6.2% in the drachma's nominal effective exchange rate, caused the

1 With regard to 2001, the National General Collective Labour Agreement provides for increases of 1.8% as from 1 January 2001 and of an additional 1.5% as from 1 July 2001.

2 Because of the expansion and restructuring of the sample surveys on earnings conducted by the NSSG, new data are available only for the first quarter of 1999. These data are not, however, comparable with those for the period 1961-1998, due to differences in definitions and coverage. As a result, rates of change cannot be estimated.

3 It is estimated that output per hour of work in the manufacturing sector increased by 3.5%. Specifically, the growth of manufacturing output reached 6.1% in 2000 (against only 0.6% in 1999), the number of workers decreased at an annual rate of 1.4% (according to data from the NSSG labour force survey for the first half of 2000), while the average number of hours worked is assumed (owing to the lack of specific data) to have increased by 4%.

real exchange rate of the drachma to decline by at least 4% (based on unit labour costs in manufacturing), thereby leading to an improvement in competitiveness.

For 2001, it was initially estimated that the rate of increase in unit labour costs would decelerate to 1.4% for the economy as a whole (from 2.6% in 2000) and to 1.8% in the business sector (from 2.1% in 2000) based on the following projections: (i) the increase in average nominal (pre-tax) earnings would decelerate to 5.0% in 2001 from 6.0% in 2000, and (ii) the growth rate of GDP would accelerate to 5.0% from 4.1% in 2000 – productivity growth would also speed up – as provided for in the Stability and Growth Programme for 2000-2004. With regard to earnings, the 2-year collective labour agreements signed in 2000 in the private sector provide for an *average annual* increase of 3.5% to 4.0% in contractual earnings in 2001 (compared with 4.2% in 2000).¹ Compared with 2000, the growth rate of *per capita* outlays for salaries is expected to be 1.7 and 5 percentage points lower in central government² and in public enterprises respectively and to remain virtually unchanged in the banking sector, provided that banks and public enterprises, which have yet to sign collective labour agreements for 2001, agree to moderate increases.

However, considering the deceleration of global economic growth and certain indications regarding domestic economic activity over the last six months, the growth rate of Greek GDP may eventually be slightly less than 4.5%.³ Moreover, the change in the global economic environment is expected to lead to a small deceleration of the economic growth rate across the euro area. The combination of lower GDP growth (compared with the Stability and Growth Programme projections) and a possibly larger increase in average earnings (5.2% instead of 5.0%, if public enterprise and bank personnel are granted higher wage increases than those assumed above) leads to the assumption that unit labour costs will increase by 2.2% in the economy as a whole and by 2.6% in the business sector. Unit labour cost developments in the business sector will therefore contribute only marginally to an acceleration of inflation (*ceteris paribus*). However, this contribution will be reduced if companies take advantage of Law 2874/2000 to promote employment. This law reduces employers' social security contributions for low-wage earners⁴ and increases working hour flexibility. Furthermore, the inflationary impact – through demand – of salary and wage increases will be considerably smaller than in 2000. Specifically, considering that the

1 Most of the collective agreements signed in 2000 do not provide for a corrective increase as from the beginning of 2001 to make up for the rise in inflation during 2000. However, they do provide for a corrective increase as from 1 January 2002, if the average annual rate of inflation in 2001 exceeds 2.3% or 2.5% (depending on the agreement).

2 Article 49 of Law 2873/2000 provided for an increase of 2.2% in the basic salaries of civil servants as from 1 January 2001 and of 3.5% in aggregate regular earnings (owing to the increase in the "performance incentive" and certain other allowances). If, as estimated in the budget for 2001, the total increase in outlays for salaries, excluding pensions, amounts to 6.2% (inclusive of pensions: 5.8%), average outlays for salaries should increase by 4.6%, assuming that the number of employees will increase by 1.5%.

3 This projection is mainly based on a more unfavourable development of net exports. Also, in an alternative worst-case scenario for economic growth, published in an Annex to the Stability and Growth Programme, the average annual growth rate is 0.9 percentage points lower over 2001-2004 than in the baseline scenario.

4 According to rough estimates, the decrease in employers' contributions will reduce the growth rate of unit labour costs in the non-bank private sector by 0.2 of a percentage point on an annual basis.

growth of average pre-tax earnings (in both nominal and real terms) is expected to be slower in 2001 than in 2000 and that the impact of tax cuts will be considerably smaller,¹ the rate of increase in average real disposable income from salaries and wages, which was particularly high in 2000 (4.6%), should decelerate markedly to close to 1% in 2001.² Therefore, no pressure on consumer demand is to be expected from the evolution of real disposable income.

3. BUSINESS PROFITS

Enterprises' income statements published so far do not provide sufficient data to assess the course of profits in 2000. Looking at cost and price indicators, the increase in the drachma prices of fuel, imported raw materials and intermediate goods accelerated, while the growth of unit labour costs in manufacturing decelerated and financing costs gradually declined. Meanwhile, a moderate acceleration was noted in the price increases of domestically produced final industrial products for home consumption (excluding fuel) (see Section 1 above), but not in the prices of exported goods (see Table IV.5).³ This combination of developments does not allow definite conclusions to be drawn about the course of business profits.

Furthermore, the data available from the income statements already published do not provide a complete picture of the course of operating profit margins⁴ of industrial and other firms. It should be mentioned, however, that the operating profits of non-financial-sector firms listed on the Athens Stock Exchange (ASE) continued to rise (in certain instances, even quite substantially), but their *operating profit margins* decreased, as their turnover had increased at a fast pace. These firms' *overall profit margins*⁵ decreased more

1 Under Article 3 of Law 2873/2000, in 2001 the income tax brackets applicable to natural persons have been adjusted upwards by 5% (percentage which roughly corresponds to the forecast increase in average pre-tax earnings). However, tax rates remained unchanged (with the exception of the rate applying to the highest income bracket, which was lowered from 45% to 42.5%), while the tax allowances granted to families in accordance with the number of children were only increased for tax payers with three children or more. Therefore, the tax burden has slightly increased for taxpayers with an average income (which is projected to increase by almost 5%) and with one or two children.

2 The growth rate of total disposable income of the private sector (which, apart from salaries and wages, includes other household incomes and corporate profits) is forecast to remain virtually unchanged, according to recent data.

3 As regards the prices of non-fuel exports, their average annual rate of change accelerated in 2000 in drachma terms (+6.5% against -1.3%), but remained roughly unchanged when the prices are denominated in foreign currency (-0.2% against -2.1% in 1999). As evidenced in recent years, export firms tend to take advantage of the slightest drop in the exchange rate of the drachma, which can sometimes lead to considerable increases in the drachma prices of their goods, so long as their prices, when denominated in foreign currency, remain unchanged or decrease slightly. This was shown to have reoccurred in 2000, but only for non-fuel exports and only through August, during which time prices in foreign currency decreased on an annual basis. From September to December 2000, however, the annual rate of change in the prices of exports, excluding fuel, reverted to positive (1.9% on average).

4 I.e. operating profits as a percentage of the value of sales.

5 Overall profit margins are also affected by the results of operations that are not directly related to the business's main production activity.

than operating profit margins did, owing to the contraction of “non-operating” revenue and/or to losses from stock market transactions. More reliable conclusions can only be based on annual income statements for 2000 for *all* enterprises combined and not only for those listed on the ASE.

TABLE IV.5
EXPORT PRICE INDEX AND
EFFECTIVE EXCHANGE RATE OF THE DRACHMA: 1999-2000
(Annual percentage change)

	Effective exchange rate of the drachma	Wholesale export prices			
		Total		Excluding fuel	
		In drachmas	In foreign currency	In drachmas	In foreign currency
1999					
Jan.	-3.5	-0.7	-4.2	0.4	-3.2
Feb.	-3.4	0.4	-3.0	1.2	-2.2
March	1.7	-2.3	-0.7	-1.9	-0.3
Apr.	4.3	-4.4	-0.3	-4.2	-0.1
May	2.7	-3.7	-1.1	-3.7	-1.1
June	0.5	-2.3	-1.8	-2.7	-2.3
July.	-1.6	-0.6	-2.2	-2.1	-3.7
Aug.	-1.4	-0.4	-1.8	-2.7	-4.1
Sept.	-0.5	0.0	-0.5	-2.4	-2.9
Oct.	-1.0	1.9	0.9	-0.7	-1.7
Nov.	-3.4	4.0	0.5	0.8	-2.6
Dec.	-4.3	7.2	2.6	3.1	-1.3
2000					
Jan.	-5.6	8.1	2.0	4.2	-1.7
Feb.	-6.4	10.3	3.2	5.3	-1.5
March	-6.6	10.6	3.3	5.3	-1.7
Apr.	-6.1	9.1	2.4	5.5	-1.0
May	-7.1	10.5	2.7	6.0	-1.5
June	-6.1	10.4	3.7	5.3	-1.1
July	-6.0	9.2	2.7	5.5	-0.8
Aug.	-6.4	9.7	2.7	6.7	-0.2
Sept.	-6.6	12.8	5.4	8.3	1.2
Oct.	-6.7	13.7	6.0	8.8	1.4
Nov.	-6.2	12.8	5.8	9.2	2.5
Dec.	-4.6	8.6	3.7	7.3	2.4

Source: Calculations based on NSSG and Bank of Greece data.

In 1999, at any rate, according to calculations by the Federation of Hellenic Industries based on data from the balance sheets of all industrial enterprises (sociétés anonymes and limited liability companies), net profits were positively affected by stock market transactions and increased by 41.6% (1998: +31.1%), while the value of these enterprises' sales rose by 7.8% (1998: +6.4%). As a result, their net profit margins increased to 7.37% (from 5.61% in 1998 and 4.55% in 1997). At the same time, the rate of return on own funds improved to 12.4%, from 11.0% in 1998 and 9.2% in 1997.

V. MONETARY POLICY AND MONETARY AND CREDIT DEVELOPMENTS IN 2000

1. MONETARY POLICY OBJECTIVES FOR 2000

The main objective of monetary policy for 2000 was to achieve price stability and meet the convergence criteria relative to inflation, exchange rate stability and long-term interest rates. A high degree of price stability was indeed attained through June 2000, as the average annual rate of inflation based on the Harmonised Index of Consumer Prices (HICP) was 2-2.1%. With an HICP inflation rate of 2% in March, Greece was able to meet the inflation criterion for entry into the euro area. However, the inflationary pressures triggered in the second half of 2000 by the rise in oil prices and the appreciation of the US dollar against the euro caused the average annual rate of HICP inflation to accelerate from 2.2% in July to 2.9% in December 2000 (the 12-month rate of increase in the HICP reached 3.7% in December 2000).

The exchange rate of the drachma against the euro was an intermediate monetary policy target for 2000, with regard to the new ERM II central rate of the drachma (after its revaluation to 340.750 drachmas per euro on 17 January 2000). Throughout the year, the drachma traded above its central rate, but gradually converged towards it, depreciating against the euro by 3.1%. The convergence of Bank of Greece interest rates towards corresponding ECB rates was carried out gradually, mostly in the second half of 2000 and in particular in November and December.

In order to evaluate the stance of monetary policy, the Bank of Greece continued to monitor a series of indicators, which provide information on the determinants of supply and demand for goods and services and influence the course of inflation. These indicators include the broad liquidity measure M4N, wages, capacity utilisation, the bond yield curve, etc. It should be noted that the stable relationship between M4N and both economic activity and the overall price level has recently been affected by financial innovation and the full liberalisation of capital movements. Therefore, its usefulness as an indicator of monetary policy stance has been reduced. Nevertheless, this indicator still provides valuable information on monetary conditions and price developments in the medium term. According to the reference range announced by the Bank of Greece, the rise in M4N was expected to fluctuate between 5-7%. Contrary to what it had done in previous years, the Bank of Greece did not announce a monitoring range for total credit expansion in 2000, owing to increased uncertainty with regard to the course of credit expansion to the public and the private sectors of the economy. This uncertainty can mainly be attributed to the public debt management policy, which was aimed at lengthening its average duration and led investors to restructure their portfolios (securities with longer maturities are more attractive to institutional investors and banks than to the general public), to the anticipated cut in interest rates in 2000 and to the lifting of the measures taken by the Bank of Greece in 1999 to contain credit expansion.

2. MONETARY DEVELOPMENTS

2.1 Monetary aggregates

The broad monetary aggregate M4N, which the Bank of Greece used until the end of 2000¹ as an indicator for assessing monetary conditions, rose by 3,777 billion drachmas in 2000 or 10.5%, compared with an increase of 1,880 billion drachmas or 5.5% in 1999 (see Table V.1). M4N comprises currency in circulation, private deposits in drachmas and foreign currency, as well as private holdings of repos, bank bonds, mutual fund units and government paper with a maturity of up to one year. Thus, with the exception of government paper with an initial maturity of up to one year, M4N components comprise all the monetary liabilities of Monetary Financial Institutions (MFIs) to the domestic private sector. MFIs are defined as credit institutions and money market funds.

The twelve-month rate of M4N growth fluctuated considerably during 2000. Specifically, in the first quarter, it stood at close to or below the lower limit of the reference range of 5-7% announced for 2000. From April onwards, however, it picked up significantly, averaging nearly 9% in the five months through August 2000. It accelerated even further in the final four months of the year, peaking in October at 13.7%, before levelling off at 10.5% at year-end (see Chart V.1). The acceleration in M4N growth is associated on the one hand with the higher yields of certain categories of bank liabilities included in M4N, such as repos, and on the other hand with the conditions on the stock market in 2000, which caused the demand for equity fund units (not included in M4N) to decline. It should be noted in this respect that the value of the assets of equity-type mutual funds declined by 2,320 billion drachmas in 2000, after having increased by 4,536 billion drachmas in 1999. Demand for liquidity (M4N) was also high, as the rise in GDP in 2000 was greater than initially forecast, in both nominal and real terms.² To a significant extent however, the high rate of M4N growth noted from April 2000 onwards also reflects a base effect, i.e. the particularly low level of M4N during the corresponding period of 1999, owing to special factors that generated considerable downward pressure on M4N at the time. These factors include: (i) the measures taken by the Bank of Greece in April 1999 to contain credit expansion, (ii) the large capital increases in banks, particularly in the second half of 1999 and (iii) portfolio shifts away from money

1 Since the beginning of 2001, when Greece joined Economic and Monetary Union (EMU), the Bank of Greece compiles a new monetary aggregate, M3 (in accordance with the Eurosystem's definition applying to all euro area countries), which is added to the corresponding figures for the other euro area countries to produce the euro area's aggregate money stock, M3. Developments of M3 are analysed under the first pillar of the Eurosystem's monetary policy strategy. M3 is defined as currency in circulation, plus overnight deposits held by euro area residents (excluding central government) with euro area money-issuing institutions, plus deposits with an agreed maturity of up to two years and deposits redeemable at notice of up to three months, plus repurchase agreements, money market fund shares and money market paper, together with debt securities issued with an original maturity of less than two years.

2 In December 2000, the Ministry of National Economy revised its initial forecast of 6.3% for nominal GDP growth and 3.8% for real GDP growth to 7.2% and 4.1% respectively.

market fund shares towards equity-type fund shares, a tendency which was reversed in 2000. Moreover, the appreciation of the US dollar and the depreciation of the drachma against the euro produced an upward effect (in drachma terms) on the outstanding stock of deposits in foreign currency throughout most of 2000, thereby contributing to a strengthening of M4N growth from April 2000 onwards. Finally, the acceleration of M4N growth in 2000 is associated with faster credit expansion to both the private and the public sector, as detailed below, while the external sector made a negative contribution to liquidity creation.

TABLE V.1
MONETARY AGGREGATES AND LIQUIDITY*

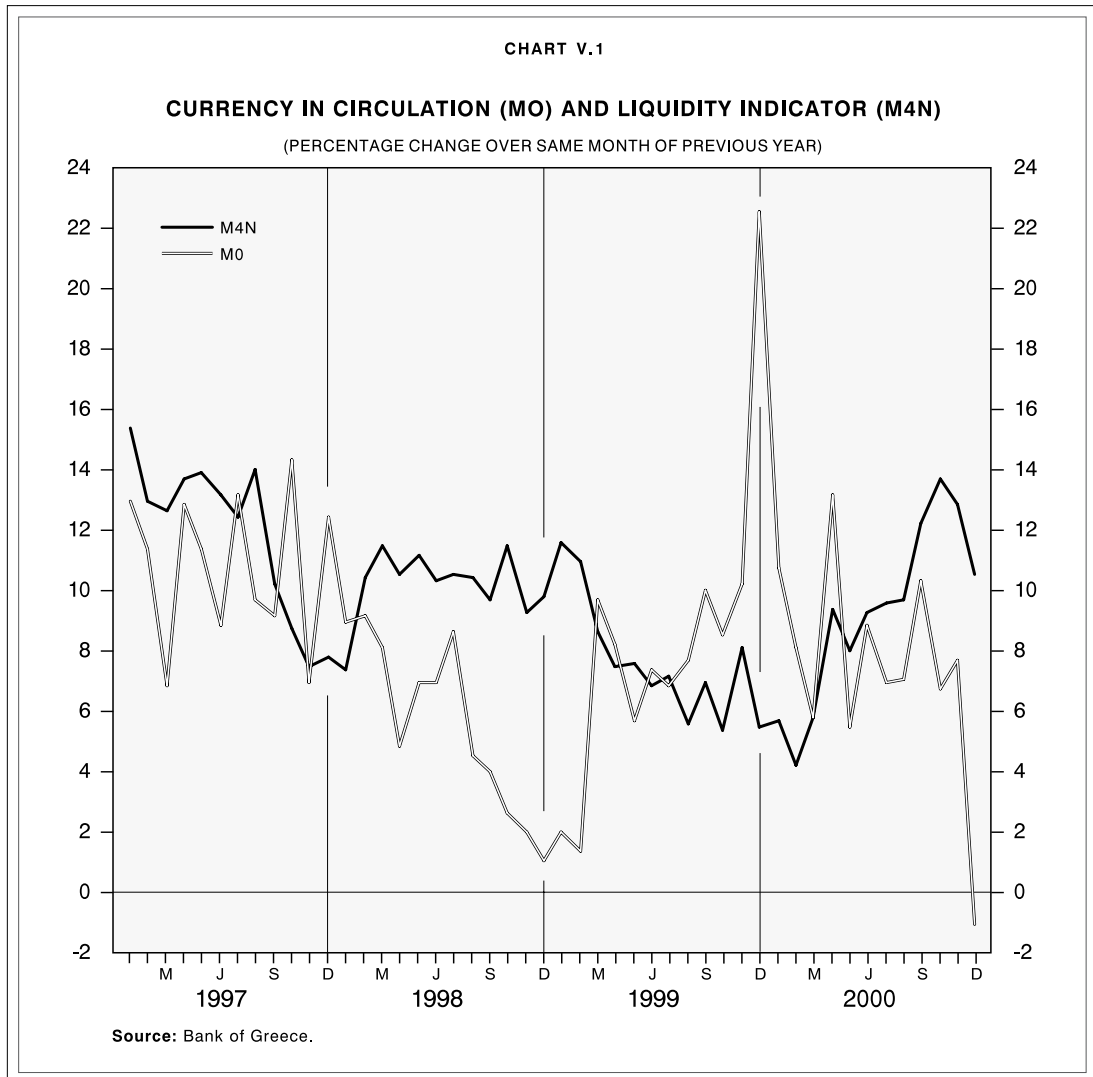
	Outstanding balances on 31 Dec. 2000 (billion drachmas)	Annual changes					
		Billion drachmas			Percentages		
		1998	1999	2000	1998	1999	2000
1. Currency in circulation, M0	2,672.9	23.1	496.2	-29.1	1.1	22.5	-1.1
2. Private deposits	25,493.5	1,672.6	2,703.2	1,411.4	8.5	12.6	5.9
2.1 In drachmas	22,249.9	385.3	2,536.7	1,005.4	2.1	13.6	4.7
2.1.1 Sight	3,135.5	486.3	1,084.6	-255.7	26.7	47.0	-7.5
2.1.2 Savings	16,236.8	446.1	1,220.8	1,234.6	3.3	8.9	8.2
2.1.3 Time	2,877.6	-547.1	231.3	26.5	-17.3	8.8	0.9
2.2 In foreign currency	3,243.6	1,287.3	166.5	406.0	93.0	6.2	14.3
3. Repurchase agreements with the private sector (repos)	5,715.5	855.8	2,151.1	2,672.0	...	...	87.8
4. Bank bonds	52.3	9.5	-39.6	-24.1	8.9	-34.2	-31.5
5. Money market fund units	5,233.4	1,535.8	-1,406.1	653.0	34.5	-23.5	14.3
6. Private investment in Greek government securities with an initial maturity of up to one year	410.5	-1,058.8	-2,024.6	-906.3	-24.1	-60.6	-68.8
7. Liquidity indicator M4N (=1+2+3+4+5+6)	39,578.1	3,038.0	1,880.2	3,776.9	9.8	5.5	10.5

* Monetary aggregates comprise monetary liabilities of banks and money market funds (i.e. of Monetary Financial Institutions – MFIs) to the domestic private sector.

Source: Bank of Greece.

Turning to developments in the basic components of M4N, currency in circulation decreased by 29 billion drachmas or 1.1% in 2000, compared with an increase of 496 billion drachmas or 22.5% in 1999. This negative rate of change in 2000 reflects the increased holdings of banknotes by the public at end-1999 as a precaution against possible problems in the operation of information systems during the transition to the year 2000. Until end-November however, currency in circulation increased at positive rates (on average, by roughly 8%), the highest twelve-month rate of increase (13.2%) having been observed in April owing to seasonal factors. It should be noted that Easter was celebrated at end-April (30 April), while Easter had been earlier the year before (11 April 1999).

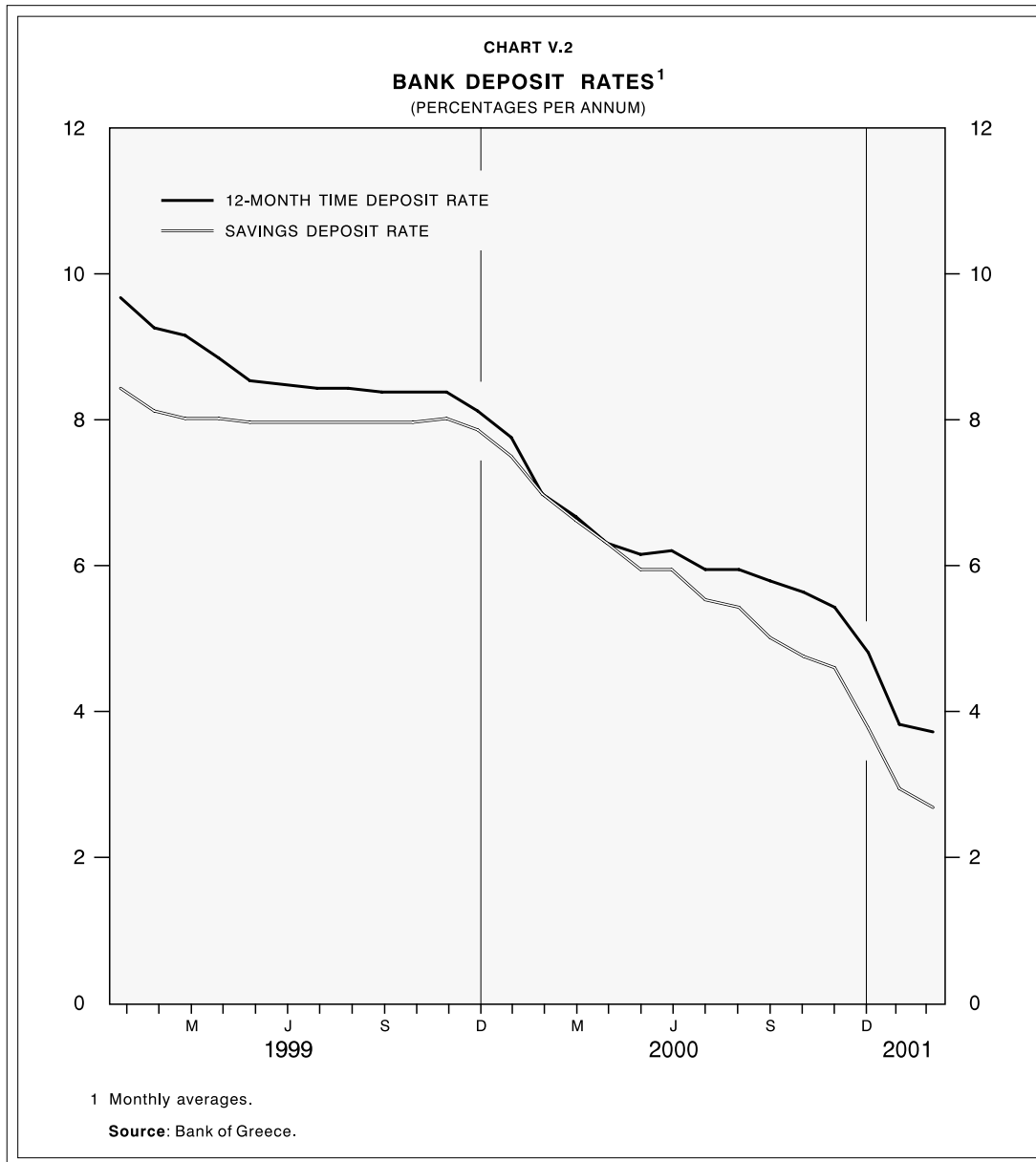
Private deposits in drachmas and foreign currency grew by 1,411 billion drachmas or 5.9% in 2000, compared with an increase of 2,703 billion drachmas or 12.6% in 1999 (see Table V.1). This slowdown was due to the smaller increase in drachma deposits (2000: 1,005 billion drachmas or 4.7%, 1999: 2,537 billion drachmas or 13.6%), while the growth of deposits in foreign currency accelerated (2000: 406 billion drachmas or 14.3%,



1999: 166 billion drachmas or 6.2%). The increase in foreign currency deposits is, as mentioned above, largely associated with valuation effects, mainly as a result of the appreciation of the US dollar.

The slowdown in the growth rate of drachma deposits in 2000 stemmed mainly from sight and time deposits. More specifically, sight deposits decreased by 7.5% in 2000 compared with an increase of 47% in 1999, as conditions on the Athens Stock Exchange

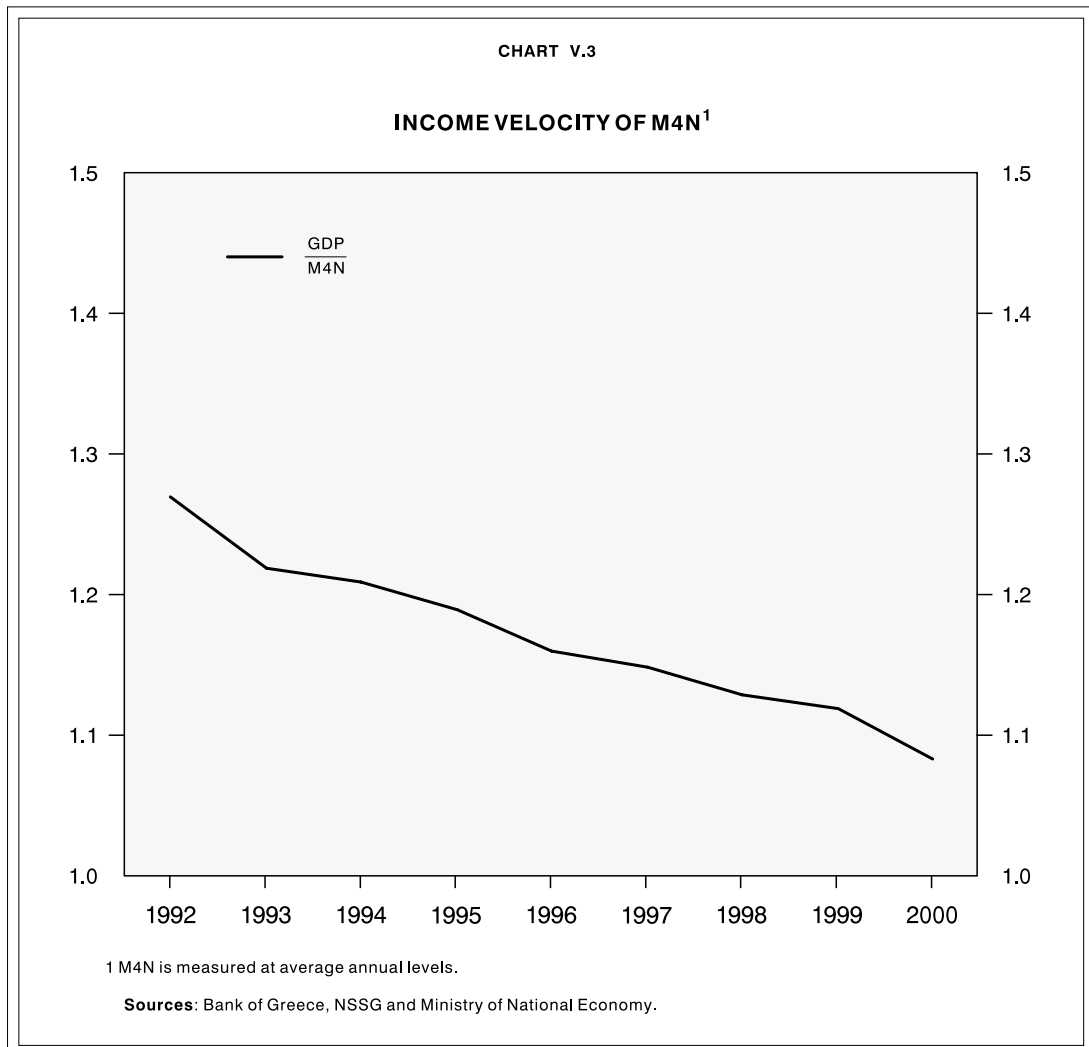
(ASE) during the previous year made this instrument considerably less attractive to savers. It should be noted that the average daily value of ASE transactions fell to 108 billion drachmas in December 2000, from 271 billion drachmas in December 1999, and to 137 billion drachmas over the entire year 2000 from 236 billion drachmas in 1999.



On the other hand, the 12-month growth rate of savings deposits decelerated slightly to 8.2% in 2000, from 8.9% in 1999, while their average annual growth rate was 1.5 percentage points lower (6.5%). Savings deposits developments were affected by cuts in the relevant interest rate, both nominal (see Chart V.2) and real. The nominal rate, fol-

lowing the adjustment of Bank of Greece rates with a certain time lag, was lowered by 4.1 percentage points in the course of 2000, while the real rate decreased even further, owing to the acceleration of inflation during the last five months of the year.

Time deposits increased at a particularly slow pace in 2000. Specifically, their twelve-month growth rate fell to 0.9% in 2000 from 8.8% in 1999 and their average growth rate for the year as a whole fell to roughly 1%. This development is associated with the cut



in the relevant interest rate and the consequent shift of savers towards alternative instruments, such as repos, which offer higher yields and are very close substitutes for deposits. The decrease in the interest rate on time deposits was gradual, but smaller than the cut in the savings deposits rate. Specifically, the interest rate on 12-month time deposits was lowered by 3.3 percentage points in 2000. In the first two months of 2001, nominal interest rates on both time deposits and savings deposits dropped further by roughly one percent-

tage point, owing to the time lag, as mentioned above, with which these interest rates follow the course of Bank of Greece rates.

As discussed above, the growth rate of residents' foreign currency deposits picked up substantially to 14.3% in 2000 from 6.2% in 1999. However, the average growth rate of these deposits for the year as a whole was more than double (30.8%) the year-end rate, owing to considerably faster growth rates from January through November. The slowdown in December was mainly due to the decrease in their drachma equivalent, following the depreciation of both the US dollar and the yen against the drachma in that month. It should be noted in this respect that, at end-2000, 34% of foreign currency deposits were denominated in yen and 29% were denominated in US dollars, while another 24% were deposits in euro area currencies. Repurchase agreements also registered an important increase (2000: 2,672 billion drachmas, 1999: 2,151 billion drachmas), as their yields were higher than those on deposits or Treasury bills. It should be recalled that repo yields are tax exempt and that these instruments are no longer included in banks' minimum reserve base since June 2000. Banks can thus offer higher yields on these holdings. Private holdings in money market fund units increased by 653 billion drachmas in 2000, compared with a decrease of 1,406 billion drachmas in 1999. This turnaround largely reflects portfolio shifts away from equity-type funds towards money market funds, owing to the drop in share prices on the Stock Exchange that affected the yields of equity-type funds. Finally, private holdings of Treasury bills declined by 906 billion drachmas in 2000, compared with a much larger decrease of 2,025 billion drachmas in 1999, owing to the lower yields on Treasury bills than on repos, for which they are very close substitutes. Furthermore, Treasury bill issues were also limited under the government's policy of prolonging the average maturity of public debt.

The downward course of the income velocity of M4N, noted in the last few years, continued in 2000 (see Chart V.3), as the growth rate of M4N was higher (at average levels) than that of nominal GDP, reflecting a higher than unity income elasticity of demand for liquidity (M4N).

2.2 Money market rates and interventions

The interest rate policy of the Bank of Greece in 2000 sought to contain inflationary pressures exerted by the rise in oil prices and the appreciation of the US dollar and to secure smooth conditions for the changeover to the single currency. Interest rates were thus gradually cut, for the most part during the last two months of the year. The Bank reduced its key rates a total of nine times in the course of the year, and by 27 December 2000 its rates had been totally aligned with corresponding ECB rates (see Table V.2). During the year as a whole, the intervention rate in the money market for 14 day-operations was cut by 6 percentage points, while the Lombard rate and the interest rate of the deposit facility were reduced by 5.75 percentage points and 6.5 percentage points, respec-

tively. More specifically, in the ten months through October 2000, the Bank of Greece reduced its interest rates a total of five times (see Chart V.4), taking into account inflation developments and the course of core inflation in particular. During this period, the Bank reduced its money market intervention rate for 14-day operations and the Lombard rate by 3.25 percentage points each to 7.50% and 8.25% respectively, and also lowered the rate on the deposit facility by 3.75 percentage points to 6.50%. It should be noted that, in June 2000, the Bank of Greece abolished the second tier of the deposit facility in the context of harmonisation with the corresponding facility of the Eurosystem.

Interest rates were further lowered in the last two months of 2000, as Greece's entry into the euro area in January 2001 and the adoption of the single monetary policy called for the full convergence of Bank of Greece interest rates towards the corresponding ECB rates. During those two months, the money market intervention rate for 14-day

TABLE V.2
ADJUSTMENT OF BANK OF GREECE INTEREST RATES
(Percentages per annum)

Date of interest rate change	Overnight deposit facility rate ¹		14-day intervention rate	Lombard rate
	First tier	Second tier		
27 Dec. 1999	10.25	9.00	10.75	11.50
27 Jan. 2000	9.50	8.50	9.75	11.00
9 March 2000	8.75	8.00	9.25	10.25
20 Apr. 2000	8.00	7.50	8.75	9.50
29 June 2000	7.25	–	8.25	9.00
6 Sept. 2000	6.50	–	7.50	8.25
15 Nov. 2000	6.00	–	7.00	7.75
29 Nov. 2000	5.50	–	6.50	7.25
13 Dec. 2000	4.75	–	5.75	6.50
27 Dec. 2000	3.75	–	4.75	5.75

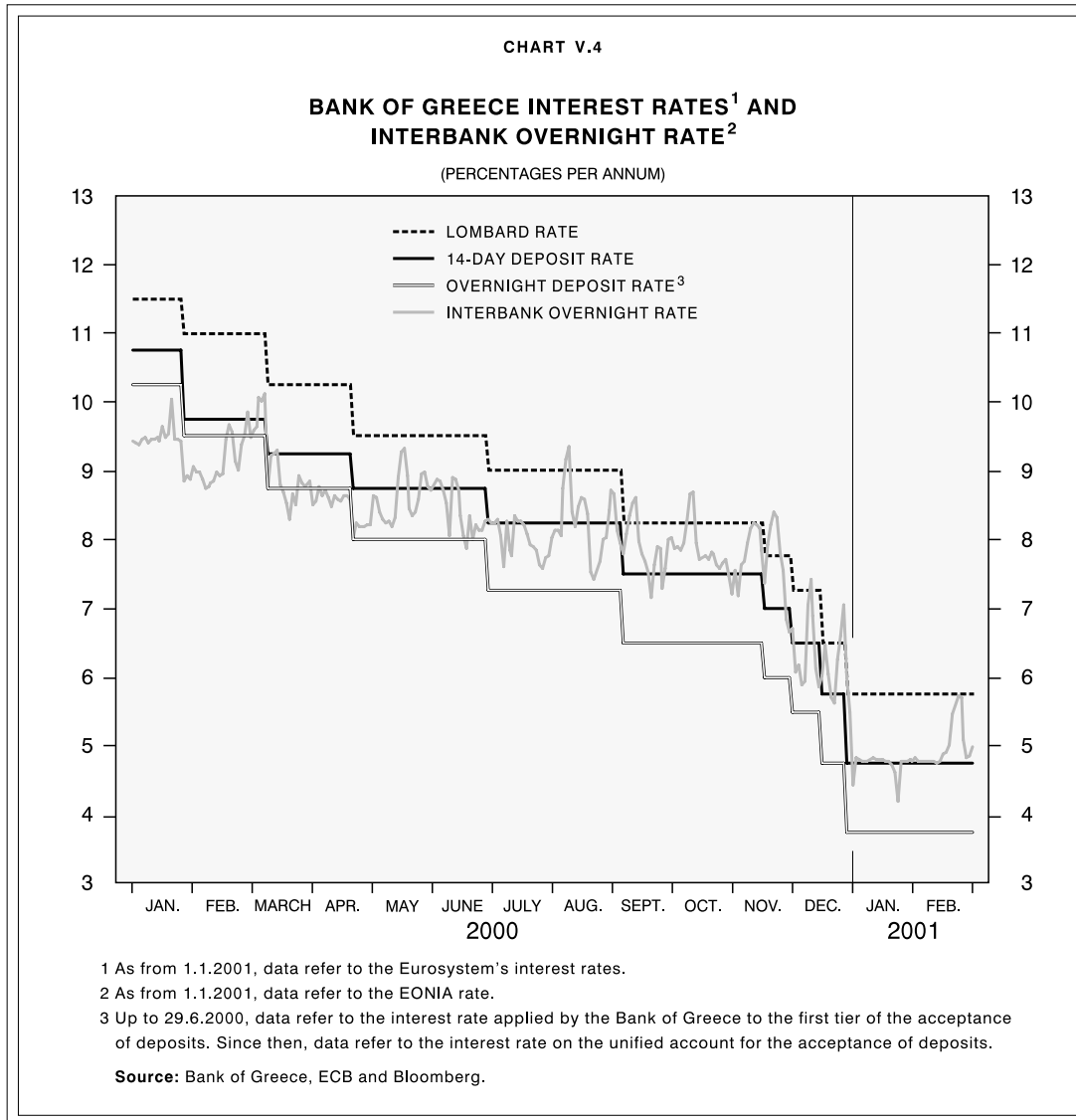
1 The second tier of the deposit facility was abolished on 29 June 2000. Since then, the rate quoted in the "First tier" column applies to the unified deposit acceptance account.

Source: Bank of Greece.

operations and the deposit facility rate were reduced by 2.75 percentage points each and, by 27 December 2000, had fully converged towards the corresponding ECB rates (4.75% and 3.75% respectively). In the meantime, the Lombard rate was reduced by 2.5 percentage points to 5.75%. It should be noted that the convergence of Bank of Greece interest rates towards ECB rates was facilitated by the total 1.75 percentage points increase in ECB interest rates in the course of 2000. Thus, while the difference between Bank of Greece and ECB rates ranged between 7.5 and 8.25 percentage points at end-1999, Greece's interest rates only needed to be adjusted by between 5.75 and 6.50 percentage points in 2000 as a result of the rise in ECB interest rates.

In 2000, the conditions in the money market changed significantly. As a result, Bank of Greece interventions were reversed in May, reflecting the need to support bank liquidity during the second half of the year (see Chart V.5). Specifically, from the begin-

ning of 2000 through mid-May, the market continued to have excess liquidity and the Bank of Greece, in a move to maintain interest rates at a level compatible with its anti-inflationary policy, absorbed considerable amounts of liquidity (average daily absorption of liquidity over that period: 760 billion drachmas). From mid-May onwards, however, bank liquidity diminished due to capital outflows during that month, the widening of the

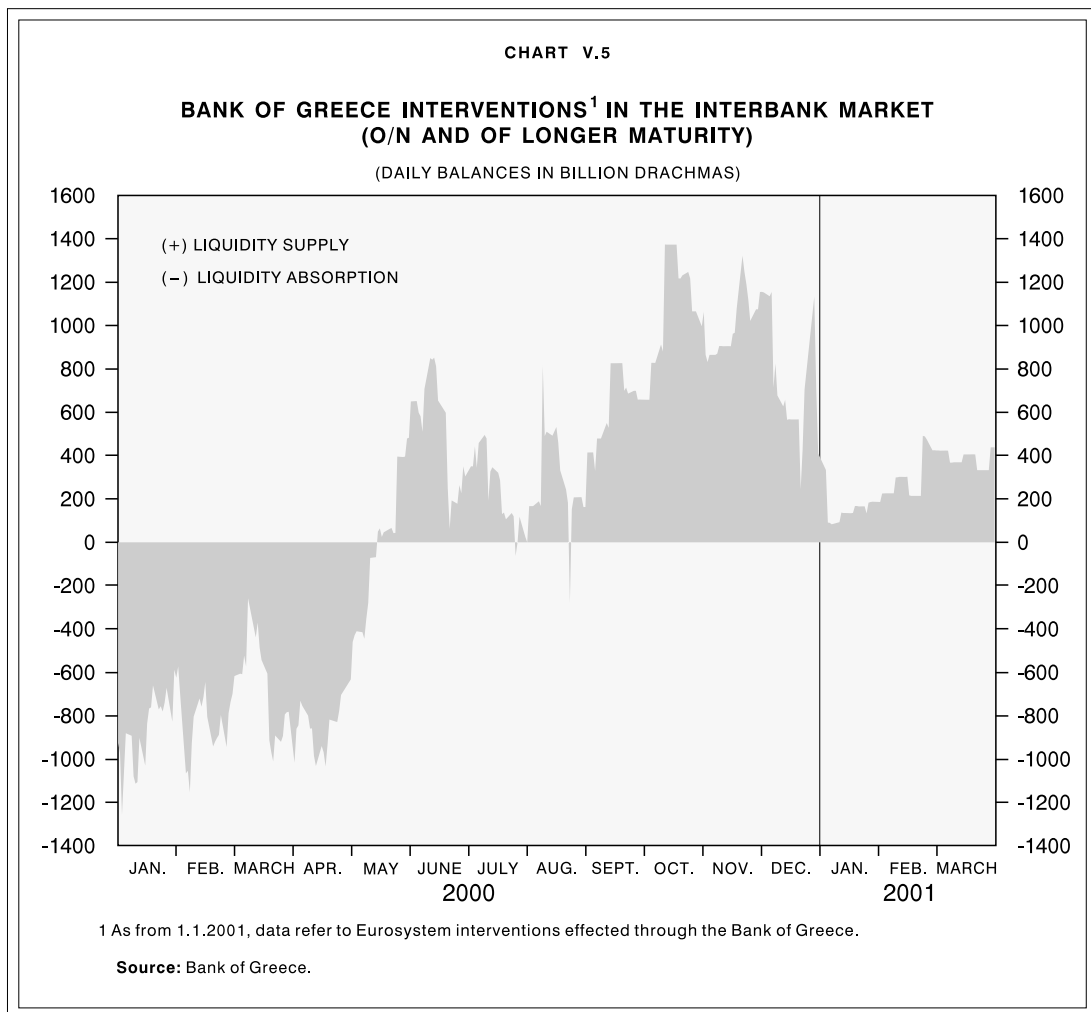


current deficit in the second half of 2000 and the increased fund-raising by the government in May-November.¹ The interbank market registered a liquidity deficit for the first time since the drachma was incorporated in the ERM in March 1998. This called for a

1 It should be noted that the government increased its deposits with the central bank by 700 billion drachmas over this period.

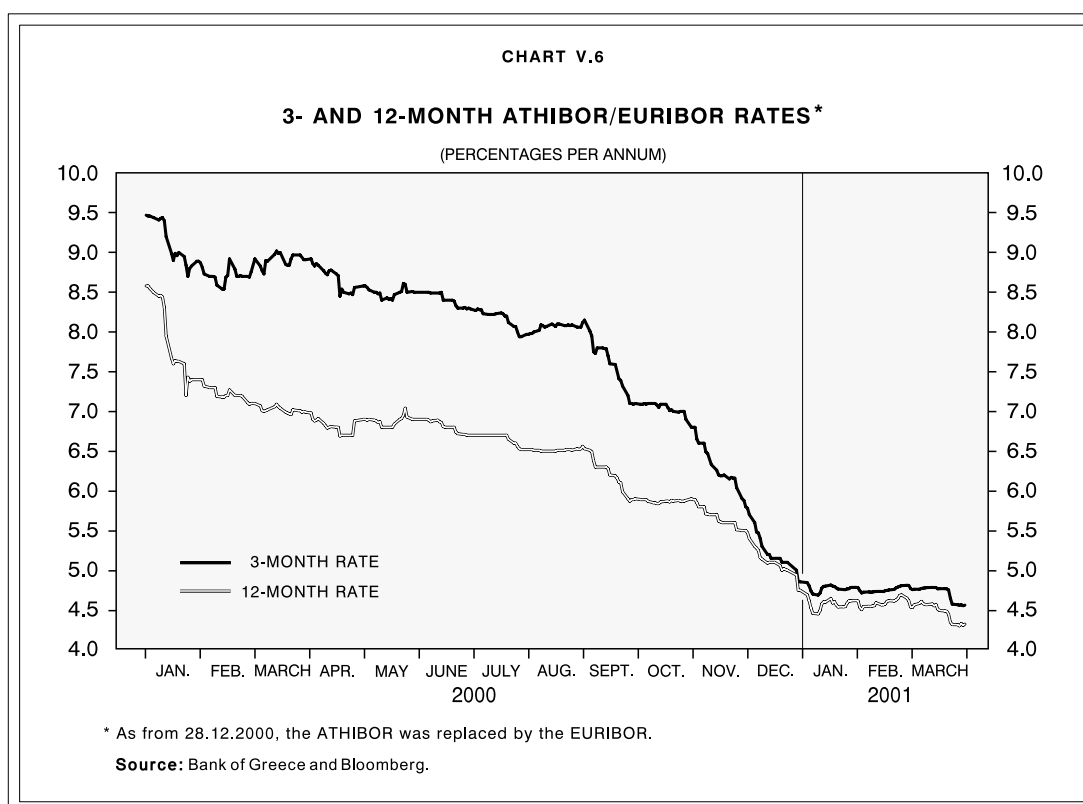
shift in the interventions of the Bank of Greece in the direction of liquidity-providing operations. In the second half of 2000, the average daily supply of liquidity was 625 billion drachmas.

In the first quarter of 2001, the liquidity deficit in the interbank market decreased substantially. This development is linked, on the one hand, to the integration of the money market into the wider Eurosystem market – which reduced borrowing needs in



comparison with the corresponding borrowing requirements in national currency in 2000— and, on the other hand, to limited arbitrage opportunities, as domestic money market rates had been aligned with corresponding euro area rates. Moreover, interbank market liquidity was reinforced, as a part of banks' reserves with the central bank was gradually released, following the reduction in the reserve ratio (see Chapter X.1 for further details).

Interbank rates followed the course of Bank of Greece interest rates. More specifically, after the revaluation of the central rate of the drachma against the euro and the adjustment of Bank of Greece rates in January 2000, ATHIBOR rates declined by 0.6 to 1.2 percentage points, while the largest decreases were recorded in longer maturities. The downward trend of interbank rates continued, though more moderately, until mid-November 2000, but accelerated in the last two months of the year, because the central bank, as already mentioned, made significant cuts in its interest rates. The total reduction in interbank rates amounted to between 3.9 and 4.9 percentage points in 2000, while the rates on shorter maturities recorded the largest decrease. Also, the 3-month ATHIBOR

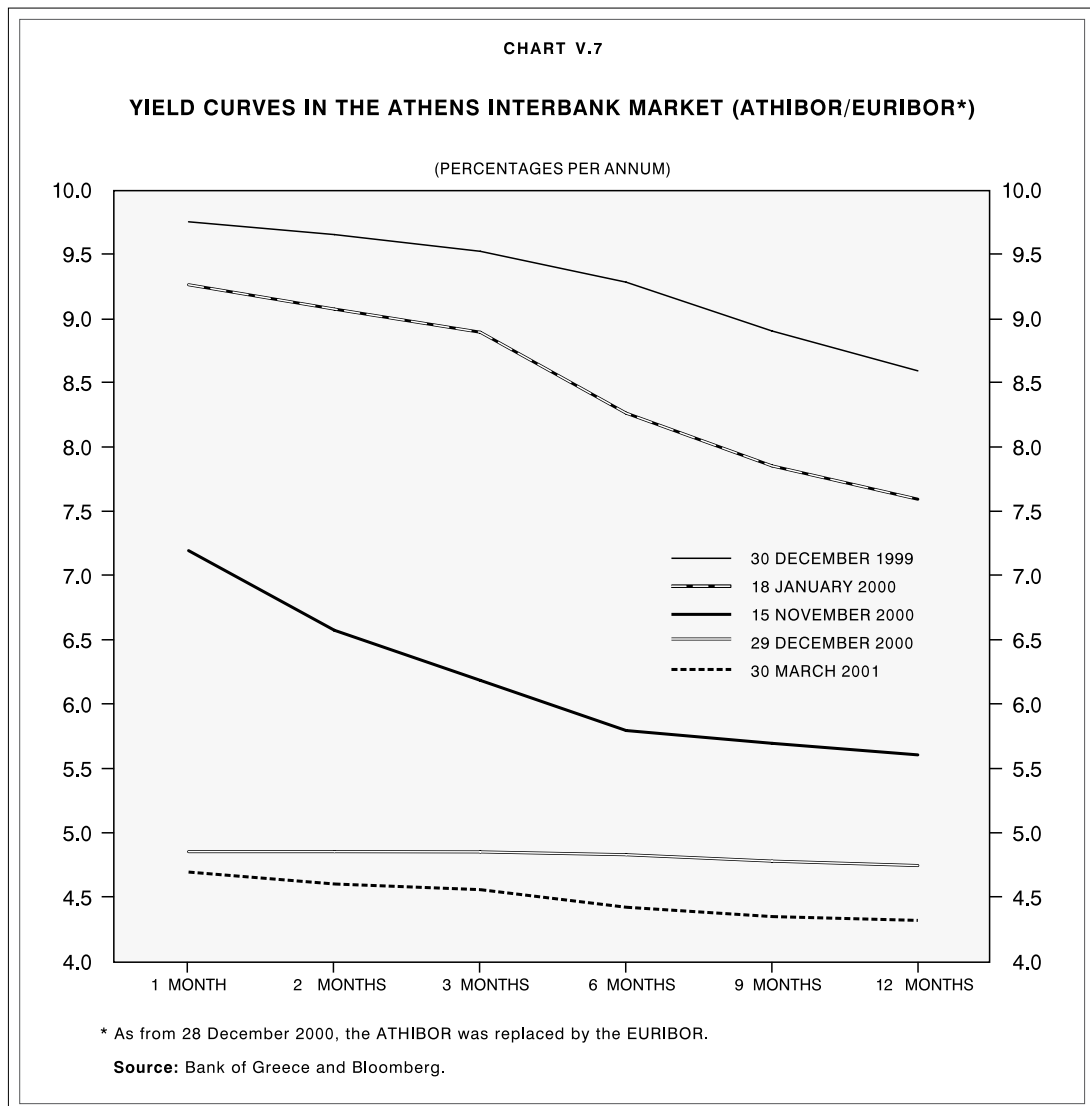


fell by 4.7 percentage points to 4.9% by end-2000, while the 12-month ATHIBOR dropped by 3.9 percentage points to 4.7% (see Chart V.6). Until mid-November 2000, the decrease in interest rates was more moderate for shorter maturities, and more pronounced for longer maturities (of 6 to 12 months). Furthermore, since end-2000, ATHIBOR reference rates¹ are no longer compiled and have been replaced by EURIBOR rates, which apply to the entire euro area. In the first quarter of 2001, EURIBOR rates

¹ ATHIBOR rates were calculated by taking into account the rates of 14 banks active in interbank money markets. These banks were under the obligation to report their bid/ask rates for maturities of 1, 2, 3, 6, 9 and 12 months.

remained virtually unchanged and towards the end of March registered a small further decline of 0.2-0.4 percentage point.

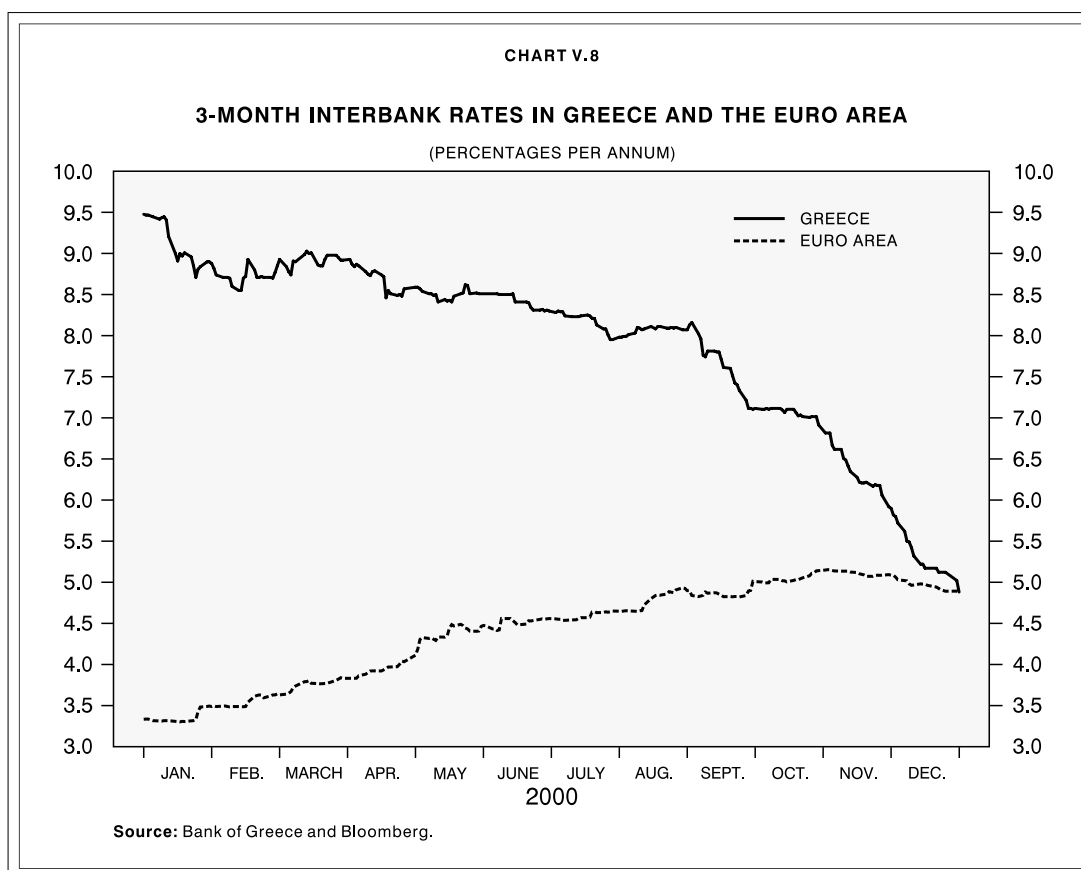
The yield curve in the interbank market shifted downwards in 2000. During most of the year, the yield curve remained almost flat for the shorter maturities (up to three months) and was slightly downsloping for longer maturities (see Chart V.7). As the date



of Greece's entry into the euro area approached and Greek interest rates converged towards ECB rates, the downward slope tended to flatten out for longer maturities and to steepen for the shorter ones. At end-2000, the yield curve had practically flattened out along the entire spectrum of maturities and its slope, as measured by the difference between the 12-month and 1-month rates, fell to -0.1 percentage point from -1.2 percentage points at end-1999. At end-March 2001, the yield curve shifted slightly downwards

and became slightly downsloping, implying market expectations of a decrease in short-term interest rates in the following months.

The interbank rate differential between Greece and the euro area gradually declined in the course of 2000 and, in fact, gained momentum towards the end of the year (see Chart V.8). The convergence of Greek interest rates was also facilitated by the rise in



euro area rates during the year by 0.9 to 1.8 percentage points (the largest increase having been noted for shorter maturities).

3. CREDIT DEVELOPMENTS

3.1 Total credit expansion

Total credit to the public and the private sector increased by 9,016 billion drachmas or 20.2% in 2000, compared with 5,064 billion drachmas or 12.2% in 1999. This development is mainly attributed to a significant acceleration in credit expansion to the private sector, while credit expansion to the public sector was also higher in 2000 than in 1999. Developments in credit aggregates were to a small extent affected by valuation differences incorporated in the

outstanding balances of bank loans to the private sector, due mostly to the significant appreciation of the US dollar and, less so, to the depreciation of the drachma against the euro. Adjusted for valuation differences (estimated at roughly 200 billion drachmas), total credit expansion amounted to 19.7% in 2000. In general, credit expansion was characterised by fluctuations in 2000 and a strong upward trend in the last four months of the year.

In greater detail, credit expansion to the public sector reached 16.1% in 2000, compared with 11.3% in 1999. This acceleration is related to higher public sector borrowing requirements, which, on a cash basis, rose to 1,717 billion drachmas in 2000 from 1,495 bil-

TABLE V.3
NET PUBLIC SECTOR BORROWING REQUIREMENT AND CREDIT EXPANSION
(Changes in billion drachmas, and percentage change of balances)

	1998	1999	2000*
1. Net public sector borrowing requirement (1.1+1.2) (as a percentage of GDP)	1,962 (5.5%)	1,495 (3.9%)	1,717 (4.2%)
1.1 Central government ¹	2,350	2,059	2,416
1.2 Public enterprises and entities ²	-388	-564	-699
2. Financing of the public sector deficit by the private sector	61	-1,750	-3,125
3. Credit expansion to the public sector (1-2)	1,901 (7.4%)	3,245 (11.3%)	4,842 (16.1%)
4. Credit expansion to the private sector	1,672 (15.0%)	1,819 (14.2%)	4,174 (28.5%) ³
5. Total credit expansion (3+4)	3,573 (9.7%)	5,064 (12.2%)	9,016 (20.2%) ³

1 Including capitalised interest.

2 A negative sign indicates a surplus.

3 Credit expansion includes foreign exchange valuation differences, owing mainly to the appreciation of the US dollar, and to the depreciation of the drachma against the euro. Excluding these differences, credit expansion to the whole economy and the private sector in 2000 reached 19.7 per cent and 27.1 per cent respectively.

* Provisional data.

Source: Bank of Greece, NSSG and Ministry of National Economy.

lion in 1999, as well as to a significant change in the sources that financed the PSBR. More specifically, government paper holdings by the domestic non-bank sector decreased by 3,125 billion drachmas in 2000, while holdings by domestic MFIs (excluding the Bank of Greece) and by non-residents, which both affect credit expansion directly, increased by 1,681 billion drachmas and 2,715 billion drachmas respectively. This shift of the private non-bank sector away from government paper towards other instruments is associated with the government's public debt management policy, aimed at prolonging the public debt's average maturity. Long-term bonds, which have been the main focus of government issues over the last three years, are more attractive to banks and institutional investors than to the general public, which is still not familiar with them.

The increase in the PSBR reflects the larger borrowing requirements of central government, as the financial surplus of public enterprises and entities rose to 699 billion drachmas in 2000 from 564 billion in 1999. More specifically, the net borrowing requirements of central government rose to 2,416 billion drachmas in 2000 from 2,059 billion in 1999 (see Table V.3). This development stemmed in part from public debt management accounts, which registered a smaller increase in their outstanding credit balance in 2000 than in 1999 (2000: 425 billion drachmas, 1999: 639 billion drachmas).

3.2 Credit to the private sector

Total credit to the private sector grew by 4,174 billion drachmas or 28.5% in 2000, compared with a 1,819 billion or 14.2% increase in 1999. The twelve-month rate of credit expansion remained at December 1999 levels during the first quarter of 2000, i.e. for as long as the credit-containing measures taken by the Bank of Greece in April 1999 remained in effect. These measures were, however, abolished in March 2000, and credit increased at high rates in the following months (see Chart V.9).

The acceleration of credit expansion to the private sector in 2000 was affected by the decrease in lending rates and by the faster growth of economic activity. High credit expansion, however, to a considerable extent reflects the impact of technical factors, namely a base effect, given the comparatively low level of credit in April-December 1999, owing to the credit-containing measures taken by the Bank of Greece. Furthermore, as already mentioned, credit aggregates were affected by valuation differences that increased the drachma value of the outstanding balance of foreign currency loans, when valued in drachmas, and were mainly attributable to the significant appreciation of the US dollar (11.3%) and, to a lesser extent, to the depreciation of the drachma against the euro (3.1%). Corrected for valuation differences, estimated at roughly 200 billion drachmas, total credit expansion to the private sector reached 27.1% in December 2000.

The acceleration of credit expansion in 2000 was due to the faster increase in both drachma-denominated and foreign currency loans. More specifically, drachma-denominated loans increased by 2,813 billion drachmas or 26.1% in 2000, compared with an increase of 1,093 billion drachmas or 11.3% in 1999, while foreign currency loans increased by 1,361 billion drachmas or 35.4% in 2000, compared with an increase of 726 billion drachmas or 23.3% in 1999 (see Table V.4). Corrected for valuation differences, the growth rate of foreign currency loans reached 30.2%.

The new foreign currency loans granted in 2000 were mainly euro-denominated. The strong demand for these loans was due to the significant interest rate differential between euro- and drachma-denominated loans, while the foreign exchange risk incorporated in these loans gradually diminished, as Greece's entry into the euro area approached and the exchange rate of the drachma converged towards its central rate within ERM-II. It should be noted in this respect that the interest rates on euro-denominated loans

TABLE V.4
BANK CREDIT TO THE PRIVATE SECTOR
(Change in outstanding balances)

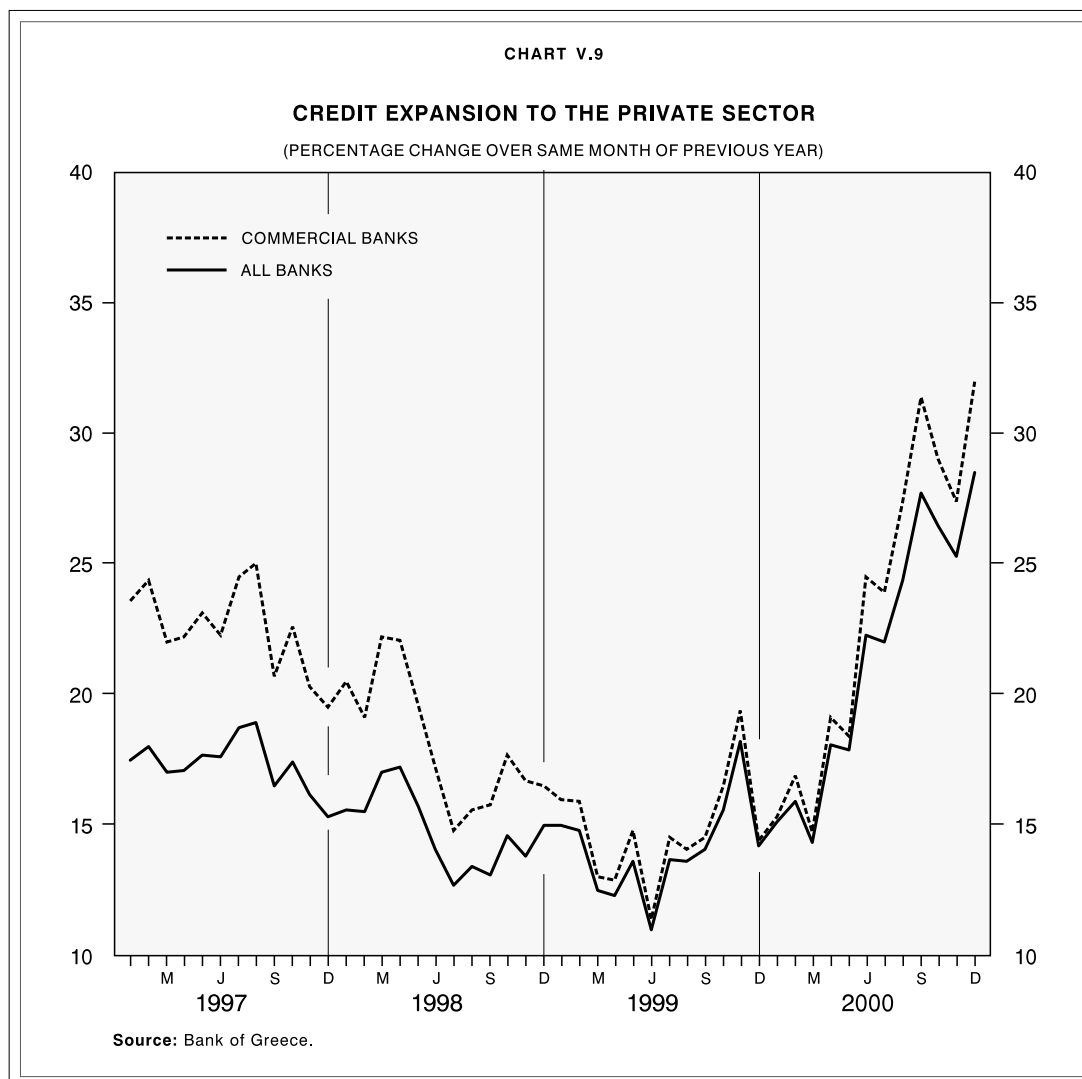
Year	Total credit			Breakdown by maturity						Breakdown by currency					
	Billion drachmas	Percentage points	Percentage of GDP	Long-term			Short-term			Drachmas			Foreign currency		
				Billion drachmas	Percentage points	Percentage points	Billion drachmas	Percentage points	Percentage points	Billion drachmas	Percentage points	Billion drachmas	Percentage points		
1991 ¹	732.0	16.4	4.5	237.0	11.6	20.6	495.0	20.6	593.2	13.9	138.8	72.6			
1992 ¹	878.4	17.1	4.7	198.6	8.8	23.7	679.8	23.7	718.1	14.9	160.3	48.6			
1993 ¹	672.9	11.5	3.2	188.9	7.7	14.3	484.0	14.3	526.4	9.9	146.5	29.9			
1994 ¹	827.2	13.8	3.5	240.8	9.3	17.2	586.4	17.2	547.8	10.2	279.4	43.9			
1995	1,503.3	22.0	5.7	513.2	18.2	24.7	990.1	24.7	949.0	16.1	554.3	60.5			
1996 ¹	1,414.0	17.0	4.8	443.5	13.3	19.4	970.5	19.4	570.0	8.3	844.0	57.4			
1997 ¹	1,476.7	15.3	4.8	636.3	16.9	14.2	840.4	14.2	1,052.3	14.3	424.4	18.3			
1998	1,671.9	15.0	4.7	657.9	14.9	15.1	1,014.0	15.1	1,295.7	15.4	376.2	13.7			
1999	1,818.9	14.2	4.8	759.4	15.0	13.7	1,059.5	13.7	1,093.1	11.3	725.8	23.3			
2000*	4,173.8	28.5	10.2	1,611.6	27.7	29.1	2,562.2	29.1	2,813.2	26.1	1,360.6	35.4			

¹ Excluding the effect of the conversion of state-guaranteed loans into government bonds, as the relevant guarantees were called in.

* Provisional data.

Sources: Bank of Greece, NSSG and Ministry of National Economy.

in 2000 were 5 percentage points lower than those on drachma-denominated loans, and that the average divergence of the drachma's exchange rate from its central rate fell to 1.2 per cent. Furthermore, a substantial number of loans in other currencies, especially in yen, were converted into euro, as borrowers strove to protect their interests against the appreciation of the yen vis-à-vis the euro during most of the year 2000. By the end



of 2000, loans in euro and in euro area currencies accounted for 48% of total foreign currency loans, compared with 22% one year earlier. Yen-denominated loans, on the other hand, which had made up 49% of foreign currency loans in 1999, accounted for only 24% at end-2000. The proportion of loans in US dollars fell to 14.4% at end-2000 from 14.9% at end-1999, while those in Swiss francs also dropped from 13.6% to 11.6%.

3.3 Breakdown of credit to the private sector

A breakdown of bank credit to the private sector indicates that, with the exception of agriculture, credit expansion picked up throughout the economy. A relatively slower

TABLE V.5
CHANGE IN CREDIT TO THE PRIVATE SECTOR BY BRANCH OF ECONOMIC ACTIVITY

	Outstanding balances on 31 Dec. 2000* (billion drachmas)	Changes in outstanding balances					
		Billion drachmas			Percentage points		
		1998	1999	2000*	1998	1999	2000*
1. <u>Agriculture</u>	1,323.8	9.7	103.8	91.9	0.9	9.2	7.5
Long-term loans	779.7	21.5	18.8	55.6	3.1	2.7	7.7
Short-term loans	544.1	-11.8	85.0	36.3	-2.7	20.1	7.1
2. <u>Manufacturing¹</u>	4,028.9	194.6	371.6	457.3	6.1	11.6	12.8
Long-term loans	892.0	32.5	71.2	111.1	4.8	10.0	14.2
Short-term loans	3,136.9	162.1	300.4	346.2	6.5	12.1	12.4
3. <u>Trade</u>	4,216.5	474.6	169.7	1,075.4	20.5	5.7	34.2
Domestic	3,153.4	410.9	156.5	748.5	22.4	7.0	31.1
Import	901.9	37.1	22.5	321.5	10.9	4.0	55.4
Export	66.0	2.7	-15.7	0.4	3.5	-19.3	0.6
Tobacco	95.2	23.9	6.4	5.0	39.9	7.7	5.6
4. <u>Housing</u>	3,840.9	407.9	595.6	913.0	21.2	25.5	31.2
5. <u>Consumer credit</u>	1,878.0	269.0	315.3	562.1	36.8	31.5	42.7
6. <u>Other</u>	3,522.3	316.1	263.0	1,074.1	16.9	12.0	43.9
– Tourism	618.2	48.4	34.6	70.5	10.4	6.8	12.9
– Shipping	731.5	57.6	40.2	143.3	11.7	7.3	24.4
– Leasing companies	186.0	15.3	-72.5	108.6	11.4	-48.4	140.2
– Other	1,986.6	194.8	260.7	751.7	25.0	26.8	60.9
<u>Total</u>	18,810.4	1,671.9	1,818.9	4,173.8	15.0	14.2	28.5
Long-term loans	7,437.6	657.9	759.4	1,611.6	14.9	15.0	27.7
Short-term loans	11,372.8	1,014.0	1,059.5	2,562.2	15.1	13.7	29.1

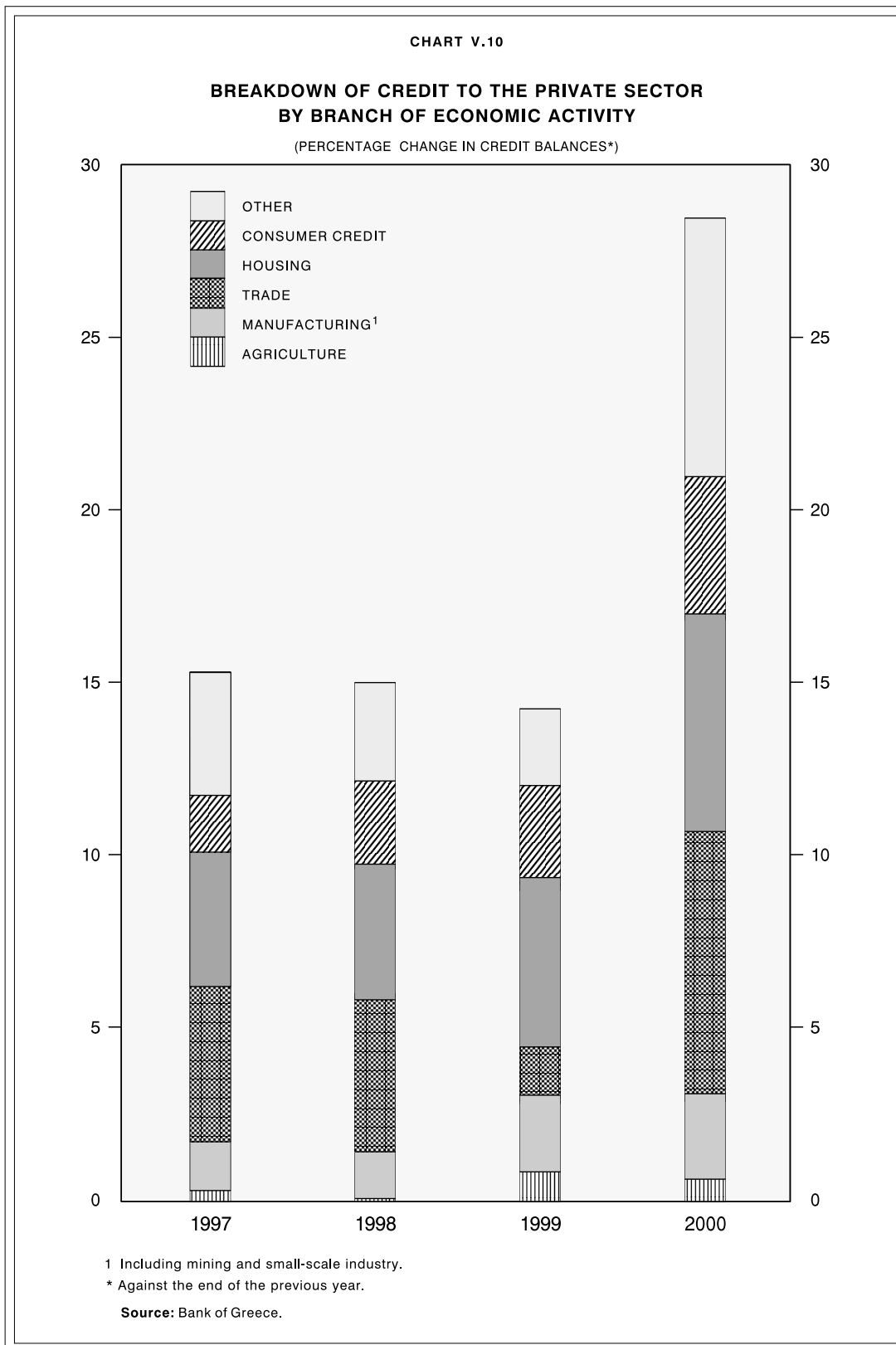
1 Including mining and small-scale industry.

* Provisional data.

Source: Bank of Greece.

acceleration was observed in credit to manufacturing, while credit to trade registered the strongest growth (see Table V.5).

More specifically, credit to manufacturing, including mining and small-scale industry, grew by 457 billion drachmas or 12.8% in 2000, compared with an increase of



372 billion drachmas or 11.6% in 1999. The share of manufacturing in total credit expansion to the private sector (28.5%) rose to 3.1 percentage points in 2000 and did not diverge significantly from the level of 1999, when total credit expansion to the private sector had, as mentioned above, eased off (see Chart V.10). The relatively moderate increase in credit to manufacturing was related to the increased profitability of industrial firms in 2000, as well as to the significant funds that these firms raised through the stock exchange (2000: 649 billion drachmas, 1999: 390 billion drachmas). This reduced their recourse to bank loans, although the drop in lending rates and the considerable rise in industrial output (2000: 7.7%, 1999: 2.8%) increased the demand for loans.

Credit expansion to agriculture decelerated slightly. Specifically, loans to agriculture increased by 92 billion drachmas or 7.5% in 2000, compared with a rise of 104 billion drachmas or 9.2% in 1999. As a result, the share of agriculture in total credit expansion fell to 0.6 percentage point in 2000 from 0.8 percentage point in 1999. This deceleration reflects changes in short-term loans (2000: 36 billion drachmas or 7.1%, 1999: 85 billion drachmas or 20.1%), while the growth rate of long-term loans overshot 1999 levels (2000: 7.7%, 1999: 2.7%). These developments are associated with the slight increase in primary output in 2000, which according to Ministry of National Economy estimates did not exceed 1.5% (1999: 1.4%).

Credit expansion to trade, as mentioned above, accelerated significantly in 2000, in particular after March, once the credit-containing measures taken by the Bank of Greece were no longer in effect. Credit to trade rose by 1,075 billion drachmas or 34.2% in 2000, compared with an increase of 170 billion drachmas or 5.7% in 1999. These developments are attributable to the significant increase in the volume of retail sales (5.4%), but also to the drop in lending rates. Furthermore, in contrast with industrial firms, commercial enterprises raised only limited funds through the stock exchange (2000: 138 billion drachmas, 1999: 195 billion drachmas). It should be noted that loans to trade fell to exceptionally low levels in 1999 as a result of Bank of Greece measures and, consequently, their recovery in 2000 was to be expected. Credit expansion to all branches of trade (apart from tobacco) accelerated, but was more pronounced in the case of import trade, on account of the substantial rise in imports in 2000. Owing to the large increase in loans to trade, the share of this sector in total credit expansion to the private sector rose to 7.4 percentage points from 1.3 percentage points in 1999.

Credit expansion to housing also accelerated in 2000, with the increase in housing loans rising to 913 billion drachmas from 596 billion drachmas the previous year. Their 12-month growth rate remained roughly unchanged (25-26%) through July 2000, but picked up in the following months, reaching 31.2% by year-end, compared with 25.5% at end-1999. The share of housing loans in total credit expansion to the private sector rose to 6.2 percentage points in 2000 from 4.6 percentage points in 1999. These developments are related to the reduction in interest rates on housing loans and to the recovery of private construction activity in the second half of 2000. They are also related to the substantial rise

in real estate prices¹ in 2000, which led to an increase in buyers' borrowing needs. The fact that a significant part of the housing loans granted in 2000 were denominated in foreign currency caused the share of foreign currency loans in total housing loans to rise to 13.7% at end-2000 from 7.6% at end-1999.

There was a significant acceleration in the growth rate of consumer credit, which remained the most rapidly expanding category of loans. Specifically, consumer loans rose by 562 billion drachmas or 42.7% in 2000, compared with 315 billion drachmas or 31.5% in 1999. Their share in total credit expansion to the private sector rose to 3.9 percentage points from 2.5 percentage points in 1999. The 12-month growth rate of consumer loans slowed considerably in the first four months of 2000, standing at 19% in April. In other words, the downward trend in the growth rate of consumer loans observed since May 1999 persisted into the first months of 2000. From April 2000 however, once the bank credit restriction measures were lifted, this trend was reversed and consumer loans picked up progressively, as their interest rates fell substantially in the second half of 2000 and competition intensified among banks in their effort to expand their market shares and promote consumer credit products. This large increase in consumer loans caused their outstanding amount to rise to 4.6% of GDP at end-2000 from 3.4% at end-1999 and 2.8% at end-1998. In spite of the increase, this ratio continued to be lower in Greece than in the euro area (7.4% at end-2000).

The acceleration of consumer loans in 2000 was mainly due to the sharp rise in loans against supporting documents, which increased by 157 billion drachmas or 46.5% in 2000, compared with an increase of only 8 billion drachmas or 2.3% in 1999. The 12-month growth rate of this category of loans accelerated considerably in the last four months of 2000, particularly in December, after having remained either negative or very low until August. These developments suggest that consumer loans tend to be substituted for by credit that commercial enterprises extend to their clients and are thus related to the acceleration in the growth rate of bank credit to trade. It should be noted in this respect that sales of durable consumer goods reached high levels in 2000,² as retailers strove to attract customers by offering competitive purchase terms, including payment by instalments. An acceleration was also seen in loans through credit cards, which constitute the most rapidly expanding category of consumer loans, even though their interest rates decreased less than the rates on other types of consumer loans. Specifically, loans through credit cards increased by 259 billion drachmas or 49.7% in 2000, compared with a rise of 160 billion drachmas or 44.1% in 1999. As a result, loans through credit cards accounted for 41.5% of all consumer loans by end-2000 (1999: 39.6%). On the other hand, personal loans increased at a slower pace in 2000 (2000: 31.9%, 1999: 47.9%). It should be noted

1 Real estate prices increased by 12.7% (1999: 11%) in the Athens area and by 7.9% in provincial towns (1999: 3.7%), see Table IV.3.

2 The retail sales volume index for furniture and household appliances was 6% higher in 2000 than in 1999, and the number of new passenger car registrations was 12.7% higher in 2000 than in 1999.

that these loans, for which no proof of purchase documents are required and which can thus be used to finance non-consumer expenditure as well, had increased sharply, particularly in the second half of 1999, possibly because of developments on the stock market.

Credit expansion to shipping companies also accelerated to 143 billion drachmas or 24.4% in 2000 from 40 billion drachmas or 7.3% in 1999. This development is associated with fund-raising through the stock exchange, which in the case of shipping companies fell to 99 billion drachmas in 2000 from 146 billion drachmas in 1999. Credit to the tourist industry also increased at a quickening pace, but remained low (2000: 71 billion drachmas or 12.9%, 1999: 35 billion drachmas or 6.8%, 1998: 48 billion drachmas or 10.4%), while a recovery was noted in loans to leasing companies. The category of "other loans" to the private sector rose sharply (2000: 752 billion drachmas or 60.9%, 1999: 261 billion drachmas or 26.8%), owing to increased loans for the purchase of shares. Specifically, the outstanding loans of this category amounted to roughly 500 billion drachmas at end-2000, the largest part of which (370 billion drachmas) corresponded to loans for the acquisition, maintenance or increase in equity holdings by natural or legal persons. Loans to natural persons for the purchase of shares amounted to 30 billion drachmas, while loans to securities companies and investment firms totalled roughly 100 billion drachmas.

3.4 Bank lending rates

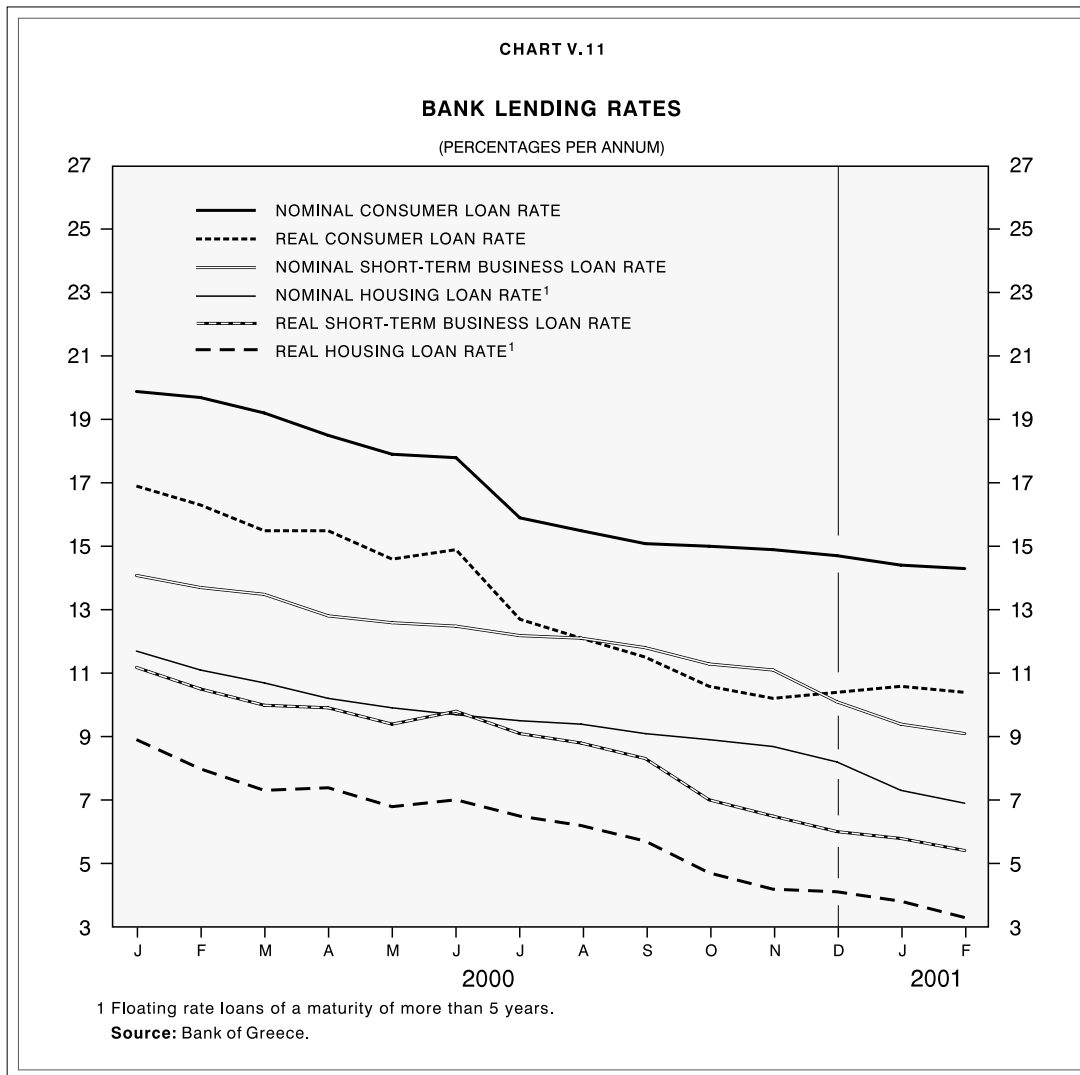
Interest rates on drachma-denominated business loans declined sharply in 2000, as they converged towards euro area rates (see Chart V.11). More specifically, the average interest rate on short-term business loans fell by 4.5 percentage points in 2000 to 10.1% in December 2000 from 14.6% in December 1999. The average interest rate on long-term business loans followed a similar course, falling to 9.8% in December 2000 from 13.2% at end-1999. It should be pointed out that the spread between short-term and long-term rates narrowed to 0.3 percentage point at end-2000 from 1.4 percentage points at end-1999, suggesting that the expectations of a substantial further drop in short-term interest rates had also diminished.

The interest rates on floating-rate housing loans decreased considerably, while those on fixed-rate housing loans dropped only slightly. More specifically, the rates on floating-rate loans fell by roughly 4 percentage points in 2000 (December 2000: 8.3%, end-1999: 12.4%). The decline in interest rates on fixed-rate housing loans was much smaller (December 2000: 7%, December 1999: 8%), as these rates had already been largely aligned with euro area rates as early as in 1999.

The largest reduction in interest rates was recorded in the consumer loans category, as rates fell by 5.6 percentage points on average. More specifically, interest rates on loans through credit cards dropped to 17.8% in December 2000 from 21.9% in December 1999, interest rates on loans against supporting documents fell to 12.5% from 18.2%, while

interest rates on personal loans, where the biggest decreases were observed, fell to 13.8% at end-2000 from 20.7% at end-1999.

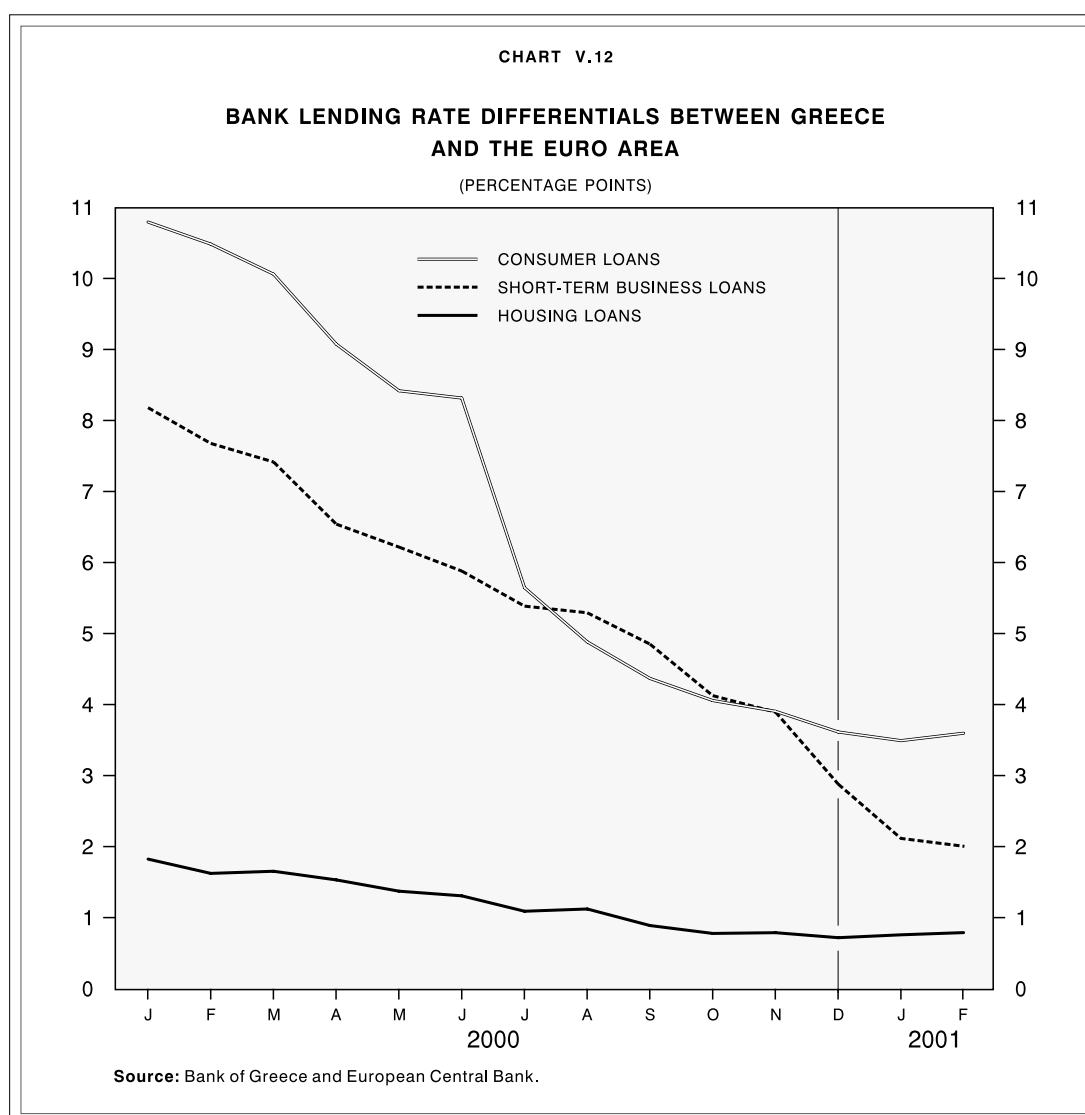
Turning to real interest rates, they were substantially lower on all categories of bank loans in 2000 than at end-1999, considering that inflation, as measured by the 12-



month rate of change in the Consumer Price Index increased by 1.2 percentage points from 2.7% in December 1999 to 3.9% in December 2000.

The downward trend of lending rates continued into the first quarter of 2001. Specifically, the interest rate on short-term bank credit to businesses was 1.3 percentage points lower in March 2001 than at end-2000 (March 2001: 8.8%, December 2000: 10.1%) and the rate on long-term credit to businesses was 0.8 percentage point lower (March 2001: 9%, December 2000: 9.8%). Similar developments were observed in the interest

rates on loans to households. More specifically, the average interest rate on consumer loans decreased by 0.8 percentage point (March 2001: 13.9%, December 2000: 14.7%), while the interest rate on floating-rate housing loans maturing in more than 5 years dropped even more (March 2001: 6.7%, December 2000: 8.2%). It should be pointed out



that interest rates on fixed- and floating-rate loans had practically evened out, whereas they had differed by more than 4 percentage points at end-1999.

Differentials between Greek and corresponding euro area lending rates ranged between 0.8 and 3.7 percentage points at end-2000, whereas they had ranged between 2.2 and 11.3 percentage points at end-1999 (see Chart V.12). The biggest differential (3.7 percentage points) was observed in consumer loans and the smallest (0.8 percentage point)

in fixed-rate housing loans maturing in more than five years. The interest rate differential was 2.9 percentage points for short-term business loans, and slightly less for long-term business loans. The convergence of Greek interest rates towards the corresponding rates of the other euro area countries continued into the first quarter of 2001, since, as stated above, Greek interest rates declined further during that period. Any remaining divergences reflect differences in credit risk, bank operating costs, portfolio structure and/or bank products offered.

APPENDIX TO CHAPTER V

CHRONOLOGY OF MAIN MONETARY POLICY MEASURES

26 January 2000

– The intervention rate of the Bank of Greece for the acceptance of 14-day deposits is lowered to 9.75% from 10.75%.

– Effective from 27 January 2000, the interest rate for the first tier of the deposit facility is lowered to 9.5% from 10.25% and that for the second tier to 8.5% from 9%.

– Effective from 27 January 2000, the Bank of Greece Lombard rate is lowered to 11% from 11.5%.

3 February 2000

With a view to adjusting the provisions concerning transactions in gold to the provisions governing foreign exchange transactions in general, purchases and sales of gold not used for commercial or industrial purposes are fully liberalised. Such transactions may be freely carried out henceforth by credit institutions and/or the Bank of Greece.

14 February 2000

With a view to making more effective the management of credit institutions' reserves and adjusting the system of reserve requirements to the respective framework of the Eurosystem, the distinction between the interest-bearing and the non-interest-bearing part of credit institutions' reserve requirements with the Bank of Greece is abolished as of 10 March 2000. The total amount of these deposits will be henceforth remunerated at a single interest rate, to be determined by a Monetary Policy Council Act.

1 March 2000

With the aim of gradually adjusting the provision of statistical information to the requirements of the European Central Bank in view of Greece's participation in Economic and Monetary Union, as well as of meeting the particular requirements of the Bank of Greece for the conduct of monetary policy, the monthly balance sheet which credit institutions are required to submit to the Bank of Greece is amended.

7 March 2000

– Effective from 8 March 2000, the intervention rate of the Bank of Greece for the acceptance of 14-day deposits is lowered to 9.25% from 9.75%.

- Effective from 9 March 2000, the interest rate for the first tier of the deposit facility is lowered to 8.75% from 9.5 percent and that for the second tier to 8% from 8.5%.

- Effective from 9 March 2000, the Bank of Greece Lombard rate is lowered to 10.25% from 11%.

- With a view to further adjusting the operational framework for the conduct of monetary policy to the respective framework of the Eurosystem, the provisions (amended and codified in a single text) concerning monetary policy instruments are put into force on 10 March 2000.

- Effective from 10 March 2000, credit institutions participating in the Euro-Hermes system and entitled to receiving intraday financing from the Bank of Greece in euro must all apply, for the securities used as collateral against this financing, the same valuation method and the risk control measures provided for in the above single text concerning monetary policy instruments.

- Effective from 10 March 2000, the interest rate on the unified account of credit institutions' reserve requirements with the Bank of Greece is set at 5.5%.

17 March 2000

Banks are allowed to finance legal and natural persons for the purchase of shares or other equity, provided that, by such purchase, the above persons acquire at least 5% of the capital of a firm or maintain at, or increase to, at least 5% their participation in such capital. Further, banks are allowed to grant loans to natural persons on collateral of securities listed on the Athens Stock Exchange, which securities may be derived not only from new purchases with the proceeds of the loan, but also from the existing portfolio of the borrower.

18 April 2000

- Effective from 19 April 2000, the intervention rate of the Bank of Greece for the acceptance of 14-day deposits is lowered to 8.75% from 9.25%.

- Effective from 20 April 2000, the interest rate for the first tier of the deposit facility is lowered to 8% from 8.75% and that for the second tier to 7.5% from 8%.

- Effective from 20 April 2000, the Bank of Greece Lombard rate is lowered to 9.5% from 10.25%.

13 June 2000

The Hellenic Postal Service is allowed to sell foreign exchange in the form of postal money orders and is given a broader scope for purchasing foreign exchange in the form of such orders.

28 June 2000

- The intervention rate of the Bank of Greece for 14-day operations is lowered to 8.25% from 8.75%.
- Effective from 29 June 2000, the Bank of Greece Lombard rate is lowered to 9% from 9.5%.
- Effective from 29 June 2000, the second tier of the deposit facility is abolished.
- Effective from 29 June 2000, the interest rate on the unified account of the deposit facility is set at 7.25% against 8%, which was the rate for the first tier.

30 June 2000

The minimum reserve system applied by the Bank of Greece is adjusted to that of the Eurosystem. More specifically:

1. The reserve base is adjusted so as to be identical to that adopted by the European Central Bank (ECB Regulation 2818/98).
2. The single reserve ratio (12%) is replaced by reserve ratios determined by category of liabilities. The general ratio is set at 2%, with the exception of certain categories, for which a 0% ratio applies (e.g. repos and deposits with agreed maturity of over two years).
3. The maintenance period starts on the 24th calendar day of each month and ends on the 23rd calendar day of the following month, instead of the currently effective period (10th calendar day of each month to the 9th calendar day of the following month).
4. Credit institutions are allowed to raise, on a daily basis, the total amount of their reserve requirement (against a maximum of 15% of the amount they were allowed to raise so far), provided that they comply with averaging provisions on a monthly basis.
5. Mortgage banks and (as of 24 October 2000) the Postal Savings Bank are brought under the new reserve requirement system.
6. Effective from 10 July 2000, foreign currency deposits governed by the provisions of Bank of Greece Governor's Act 2358/25 April 1995 (deposits of Greek seamen and workers abroad) are brought under the unified reserve requirement system, while the relevant ratio of redeposit with the Bank of Greece (stipulated in the above Governor's Act, as applicable) is reduced to 58% from 60%.
7. To achieve a gradual and controlled increase in liquidity, the Bank of Greece will gradually release the amount by which existing required reserves exceed the reserves to be calculated with the new, lower reserve ratio. The amounts to be gradually released will be kept as time deposits maturing in 6, 12 and 18 months, with the exception of an amount (equal to 10% of the total) which will be returned to banks on 3 January 2001.

7 July 2000

Effective from 10 July 2000, the interest rate on credit institutions' reserve requirements with the Bank of Greece is lowered to 5.25% from 5.5%.

5 September 2000

- Effective from 6 September 2000, the intervention rate of the Bank of Greece for 14-day operations is lowered to 7.5% from 8.25%.
- Effective from 6 September 2000, the Bank of Greece Lombard rate is lowered to 8.25% from 9%.
- Effective from 6 September 2000, the interest rate of the deposit facility is lowered to 6.5% from 7.25%.

14 November 2000

- Effective from 15 November 2000, the intervention rate of the Bank of Greece for 14-day operations is lowered to 7% from 7.5%.
- Effective from 15 November 2000, the Bank of Greece Lombard rate is lowered to 7.75% from 8.25%.
- Effective from 15 November 2000, the interest rate of the deposit facility is lowered to 6% from 6.5%.

23 November 2000

With a view to ensuring the smooth transition to the minimum reserve system applied by the European Central Bank, the Bank of Greece sets transitional provisions with regard to its own minimum reserve system for the period ending on 31 December 2000. Effective from 1 January 2001, reserve requirements on credit institutions operating in Greece shall be governed by the general provisions of ECB Regulations.

28 November 2000

- Effective from 29 November 2000, the intervention rate of the Bank of Greece for 14-day operations is lowered to 6.5% from 7%.
- Effective from 29 November 2000, the Bank of Greece Lombard rate is lowered to 7.25% from 7.75%.
- Effective from 29 November 2000, the interest rate of the deposit facility is lowered to 5.5% from 6%.

5 December 2000

With the aim of fully adjusting the framework of foreign currency reserve requirements on credit institutions operating in Greece to the corresponding framework applied by the Eurosystem, the balance of foreign currency redeposits with the Bank of Greece outstanding on 11 December 2000 will be gradually released, as follows:

– 50% of the deposits in euro or in currencies of euro area Member States will be released on 3 January 2001 and the remaining 50% on 28 March 2001. From 3 January to 28 March 2001, the latter amount will be remunerated at the ECB main refinancing rate.

– The amounts (to be released) of deposits in currencies other than the euro will be kept as time deposits maturing in 3, 9 and 15 months, except an amount (equal to 10% of the total) which will be returned to banks on 3 January 2001. From 3 January 2001 up to maturity, these deposits will be remunerated on a three-month basis at a rate equal to the LIBOR plus 25 basis points.

6 December 2000

With the aim of monitoring the operation of the domestic foreign exchange market in the new institutional framework which will be put into force on 1 January 2001, following the drachma's entry into the euro area, as well as with the aim of providing statistical information to the European Central Bank, credit institutions participating in the above market are required to provide to the Bank of Greece all necessary data and information.

12 December 2000

– Effective from 13 December 2000, the intervention rate of the Bank of Greece for 14-day main refinancing operations is lowered to 5.75% from 6.5%.

– Effective from 13 December 2000, the Bank of Greece Lombard rate is lowered to 6.5% from 7.25%.

– Effective from 13 December 2000, the interest rate of the deposit facility is lowered to 4.75% from 5.5%.

19 December 2000

Monetary policy instruments and procedures to be used by the Bank of Greece from 1 January 2001 onwards, following its entry into the Eurosystem, are fully adjusted to the corresponding Eurosystem framework and are codified in a single text.

21 December 2000

The Operating Rules of the unified "Hermes" payment system, which is managed by the Bank of Greece and has emerged from the unification of the "Hermes" payment system in drachmas and the Euro-Hermes system are approved. The unified "Hermes" system is linked to the trans-European payment system (TARGET) and, effective from 1 January 2001, will settle exclusively in euro domestic and cross-border payments.

27 December 2000

The Bank of Greece adjusts its interest rates to the corresponding rates of the European Central Bank as follows:

- The intervention rate of the Bank of Greece for 14-day operations is lowered to 4.75% from 5.75%.
- The Bank of Greece Lombard rate is lowered to 5.75% from 6.5%.
- The interest rate of the deposit facility is lowered to 3.75% from 4.75%.

22 January 2001

The scope of activities of the Hellenic Industrial Development Bank is broadened.

VI. THE CAPITAL MARKET

1. INTRODUCTION

Developments in the domestic capital market in 2000 were marked by the decision on Greece's entry in the euro area and by the satisfactory course of Greek macroeconomic aggregates. On the other hand, the Greek capital market was affected by negative developments in international capital markets in the second half of the year.

Primary market sales of government paper were lower than in 1999 and interest rates on those securities exhibited a downward trend. In the secondary market, increased demand for government securities led to a decline in their yields to levels closer to those of comparable euro area bonds. Thus, between the end of 1999 and the end of 2000 the yield differential between Greek and German 10-year bonds fell almost by half.

Both stock prices and transactions in the stock market followed a downward course in 2000. Nevertheless, the funds raised through the stock market were only slightly lower than the 1999 peak. The Athens Derivatives Exchange (ADEX) is showing signs of growing activity and welcomed four new products in 2000. The negative developments on the Athens Stock Exchange had an impact on the mutual funds market, resulting in a slight decline in the total value of mutual funds' assets.

2. THE MARKET FOR GOVERNMENT PAPER

2.1 The primary market

In 2000, the main developments in the primary market for government paper were a drop in the sales of government securities relative to 1999, a decline in yields and the prolongation of the average maturity of issues. Underlying these positive developments were the improvement of Greek macroeconomic aggregates and the decision on Greece's entry into the euro area (June 2000), which brought about a reduction in exchange rate risk and the upgrading of the country's credit-standing by international rating agencies.

In greater detail, the nominal value of government paper issued in 2000 fell to 9.1 trillion drachmas, compared with 10.4 trillion drachmas in 1999 and 10.1 trillion drachmas in 1998 (see Table VI.1). Debt issuance was effected through standard tenders¹ and for the most part (80% of total nominal value) by reopening past issues, aimed at taking advantage of favourable conditions in the secondary market and at further deepening that market.

During 2000, demand for Treasury bills and government bonds in the primary market by far exceeded supply: demand for both Treasury bills and bonds in 2000 was over

¹ Conducted at regular pre-announced dates.

three times as high as supply, while demand for bonds alone strengthened further in the first quarter of 2001 (to a level more than four times as high as that of supply).

The government securities issued in 2000 were mostly bonds with maturities of 2 to 20 years and, to a lesser extent, Treasury bills with maturities of 3, 6 and 12 months. It should be noted that 20-year bonds, mainly targeted at institutional investors, were launched for the first time in January 2000.

The government continued its policy of prolonging the average maturity of public debt through the substitution of bonds for Treasury bills, as indicated by the fact that Treasury bill issues were only 12% of total issues in 2000, compared with 22.6% in 1999 and 46.2% in 1998 (see Table VI.1). As in previous years, Treasury bills with a maturity of 12 months prevailed, with a share of 74% in the total value of issues.

TABLE VI.1
NEW ISSUES OF GREEK GOVERNMENT PAPER IN DRACHMAS
(Percentage share by maturity)

Maturity (years) ¹	1999	2000
up to 1	22.6	12.0
2	8.6	0.4
3	12.9	19.0
5	12.4	18.5
7	11.8	5.8
10	18.0	25.0
15	13.7	1.6
20	–	17.7
Total	100.0	100.0
Total (trillion drachmas)	10.4	9.1

1 3- and 6-month Treasury bills are included in the maturity of up to 1 year.

Source: Bank of Greece.

Total government bond issues in 2000 represented a nominal value of 8 trillion drachmas, the same as in 1999. Their maturity structure indicates a substitution of 10-year bonds for 7-year bonds and of 20-year bonds for 15-year bonds. In general, bond issues were focused on benchmark securities (with maturities of 3, 5, 10 and 20 years), with a view to increasing liquidity in the market for such securities and reducing yield differentials against comparable euro area bonds. The newly introduced 20-year bonds accounted for 17.7% of the total value of bond issues. Significant increases were recorded in the respective percentages for 10-year bonds, the largest category (2000: 25%, 1999: 18%), 3-year bonds (2000: 19%, 1999: 12.9%) and 5-year bonds (2000: 18.5%, 1999: 12.4%), at the expense of 2-year bonds (2000: 0.4%, 1999: 8.6%), 7-year bonds (2000: 5.8%, 1999: 11.8%) and 15-year bonds (2000: 1.6%, 1999: 13.7%). The combined result of these developments was that the average maturity of bond issues increased further to 9.3 years in 2000 from 7.6 years in 1999. If Treasury bills are also taken into account, the average

maturity of the total government securities issued in 2000 came up to 8.4 years from 6.1 years in 1999.

Yields on Treasury bills issued through primary market tenders followed a declining path in 2000. Between the first and the last tender conducted in 2000, the yields on 12-month Treasury bills fell by 206 basis points, while the drop in yields on 6-month Treasury bills was even more pronounced.¹ As a result, at the end of 2000 the yields for both maturities were almost the same, and the relevant yield curve, which edged slightly downwards at the end of 1999, became almost flat. The weighted average interest rates in 2000 tenders declined, mirroring similar drops in the secondary market rates.

2.2 The secondary market

The main features of the secondary market for government bonds in 2000 were a significant rise in the value of transactions and a gradual convergence of bond yields on their euro area counterparts. Developments in this market reflected, on the one hand, the favourable impact of the improved macroeconomic aggregates of Greece and the decision on Greece's entry into the euro area and, on the other hand, international bond market trends, in particular a shift to fixed-income securities observed in late 2000, amid uncertainties about the outlook of the US economy and falling prices in global stock markets.

In greater detail, the average daily value of transactions in the Book-Entry Securities Clearing System operated by the Bank of Greece increased by 232% in December 2000, compared with one year before (see Chart VI.1A). The average daily value of transactions conducted through the Electronic Secondary Securities Market (HDAT) came up to 171 billion drachmas in December 2000, from 101 billion drachmas in December 1999 (see Chart VI.1B and Table VI.2). Greece's entry in EMU at the beginning of 2001 boosted HDAT transactions in bonds (mainly those with a maturity of 10 years or more) and thus the average daily value of transactions in the first quarter of 2001 almost quadrupled relative to the corresponding period of 2000. Transactions in long-term securities (with maturities of 10 years or more) accounted for 69% of total HDAT traffic (in value terms) in 2000, compared with 60% in 1999 (see Table VI.2). Ten-year bonds continued to concentrate the bulk of HDAT transactions (about 1/3 in the first quarter of 2001), while 15-year and 20-year bonds also represented high proportions.

The yield on the 10-year government bond² initially increased, reaching 6.7% by 13 January 2000, but afterwards started to decline and closed the year at 5.5%. This implied a continuing convergence towards comparable euro area yields, resulting in a narrowing of the yield differential from 110 basis points in December 1999 to 47 basis points in December 2000, although euro area 10-year bonds also dropped in the same period. More

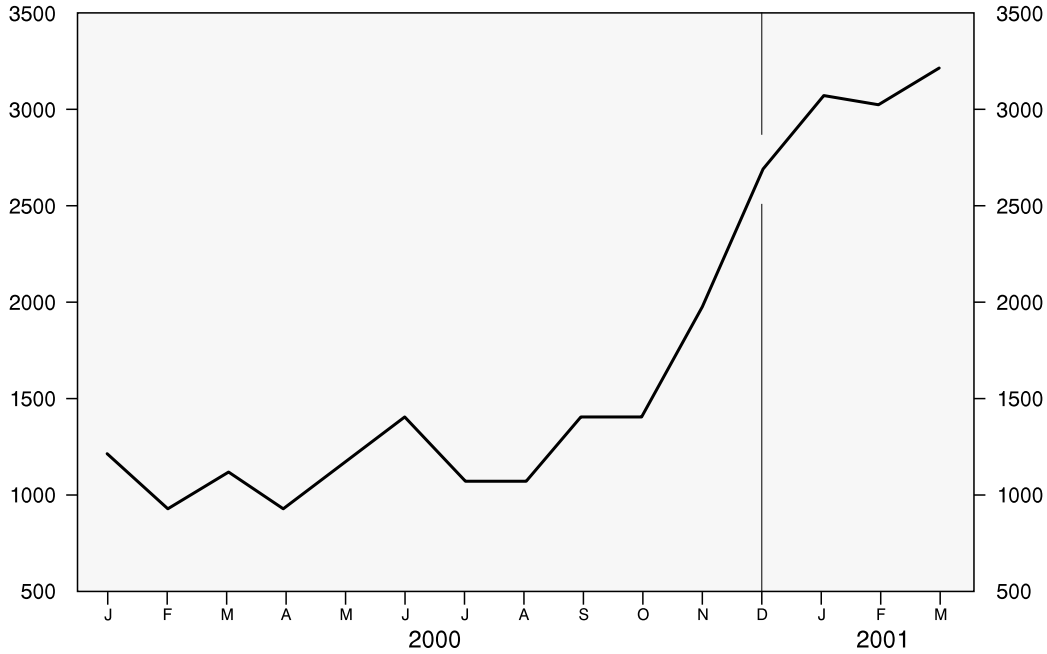
1 As from August 1999, 3-month and 6-month Treasury bills are issued every three months, which explains breaks in yield series.

2 As from January 2000, the 10-year bond may be used as an underlying asset in futures contracts on the ADEX.

CHART VI.1

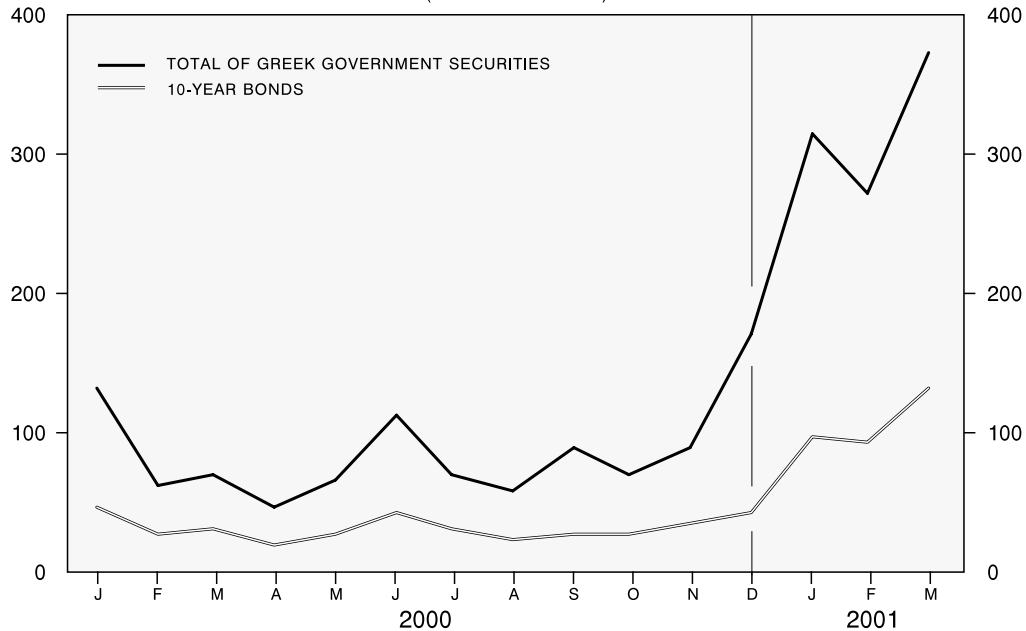
A. AVERAGE DAILY VALUE OF TRANSACTIONS IN GREEK GOVERNMENT SECURITIES IN THE BOOK-ENTRY SECURITIES SYSTEM

(BILLION DRACHMAS)



B. AVERAGE DAILY VALUE OF TRANSACTIONS IN HDAT

(BILLION DRACHMAS)



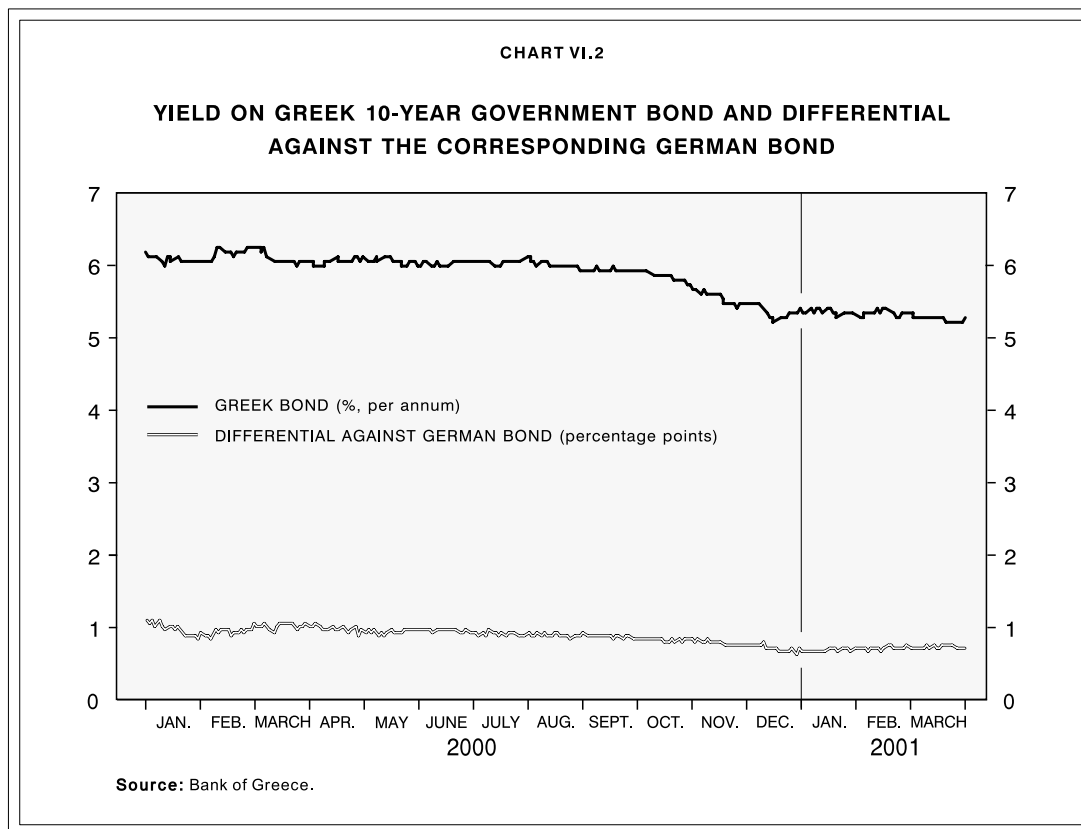
Source: Bank of Greece.

TABLE VI.2
VALUE AND STRUCTURE OF TRANSACTIONS IN GOVERNMENT SECURITIES IN HDAT

Period	Average daily value of total transactions (billion drachmas)	Percentage share in the total value of transactions						
		Treasury bills	Government bonds					
		3-year	5-year	7-year	10-year	15-year	20-year	
2000 Jan.	130.2	4.8	11.1	22.6	37.2	19.2	5.1	
Feb.	63.5	3.6	7.8	13.6	45.0	23.5	6.4	
March	69.5	4.1	8.9	14.5	42.0	20.2	10.3	
Apr.	46.6	2.7	13.3	15.6	44.1	19.7	4.6	
May	67.9	4.3	13.6	10.8	42.4	20.4	8.4	
June	112.3	4.9	9.9	12.6	36.8	22.2	13.5	
July	71.5	3.1	10.0	11.6	44.3	21.1	10.0	
Aug.	59.9	2.1	16.4	12.3	39.3	13.7	16.3	
Sept.	90.7	7.1	15.7	13.3	29.7	14.5	19.6	
Oct.	70.6	4.8	12.2	14.7	39.6	16.1	12.6	
Nov.	88.9	2.9	11.2	14.4	38.4	17.1	16.1	
Dec.	170.5	7.5	9.2	19.1	25.3	23.2	15.7	
2001 Jan.	314.0	3.4	12.8	15.7	30.6	20.8	16.8	
Feb.	272.0	3.7	7.3	16.7	34.3	18.1	19.9	
March	371.2	2.6	10.9	17.6	35.1	18.7	15.0	

Source: Bank of Greece.

specifically, the yield differential between the Greek and the German 10-year bond fell from 124 basis points in December 1999 to 64 basis points in December 2000 and 59 basis points in March 2001 (see Chart VI.2). Yields for the other maturities also kept converging towards the lower euro area yields; however, the convergence was faster for shorter maturities (up to 5 years).¹ Thus, between end-December 1999 and end-December 2000 the yield on 3-year bonds fell by 204 basis points, while the yield on 10-year bond dropped by 101 basis points. Besides, at the end of 2000 the yield differential between the 20-year bond and the 12-month Treasury bill came to 1.2 percentage points. As a result, the yield



curve shifted downwards and took a positive slope along the entire spectrum of maturities. These developments indicate the satisfactory integration of the Greek bond market into the corresponding markets of the euro area and the international markets in general.

The increased liquidity of the secondary market allowed a further decline in the bid/ask spread² for securities with a maturity of over 3 years. Specifically, in December 2000

¹ The high interest rates on these securities at the beginning of 2000 reflected the high short-term interest rates prevailing at the time, in the context of the anti-inflationary monetary policy pursued.

² The maximum bid/ask spread, initially set at 25 basis points (as from 1 December 1999), was lowered to 10 basis points on 1 January 2001.

this spread fell by nearly half relative to December 1999 and stood at 14 basis points.¹ This is a clear indication of the improved liquidity of the government bond market.

3. THE STOCK MARKET

Stock prices and transactions followed an erratic yet ultimately downward path in 2000. However, fund-raising through the stock market was only slightly lower than the peak of 1999.

Developments in the stock market during 2000 were affected by a number of factors, such as the anticipated upgrading of the Greek stock market from the category of emerging markets to that of developed markets in the first half of 2001, the low profitability of most firms with shares listed on the ASE² and the unfavourable climate prevailing in global stock markets in the second half of 2000.³ Moreover, in 2000, the institutional framework of the Greek stock market was strengthened through a series of measures, including an increase in the minimum own funds required for the listing of new companies on the ASE, the establishment of wider margins for the daily fluctuations of share prices, a change in the method for calculating the daily close, as well as a set of regulatory decisions by the Capital Market Committee in view of the aforementioned upgrading of the Greek stock market.

In greater detail, stock prices, after a steep rise of 61.9% between end-June 1999 and mid-September 1999, registered a downward trend, which continued into the first half of 2000 and accelerated in the second half of the year (see Chart VI.3A). It should be noted that the highest and lowest values of the composite share price index were recorded at the beginning of 2000 and towards the end of the year respectively, with a high of 5,794.85 points on 3 January and a low of 3,213.42 points on 28 November (see Chart VI.3A). Between end-December 1999 and end-December 2000, the composite index fell by 38.8% (see Table VI.3), receding to about its mid-April 1999 level. At average monthly levels, share prices were 33.3% lower in December 2000 than in December 1999, although the pace of decline varied widely across individual indices. The steepest drops were recorded in the construction firms index (62%), the leasing firms index (61.4%) and the parallel market index (79.4%). The banking index, by contrast, declined at a lower rate (22.1%) than the composite index. At average annual levels, however, share prices were only 2.8% lower in 2000 than in 1999, partly reflecting a significant base effect, especially concerning the change between the first half of 1999 and the first half of 2000.

1 This spread is one of the lowest at an international level.

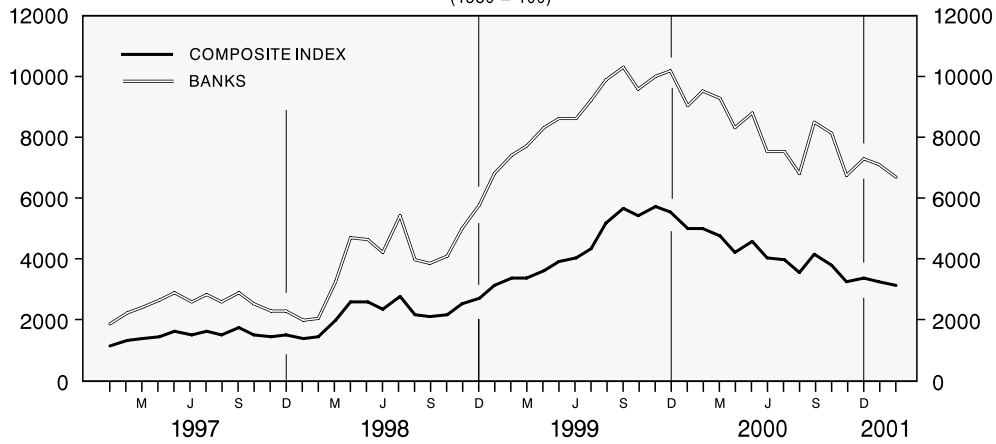
2 Pre-tax profits of firms with shares listed on the main market of the ASE fell by approximately 16% in 2000 relative to 1999.

3 Owing to a deceleration in US economic growth and uncertainties about corporate earnings in several sectors, mainly the technology sector, of the US and the euro area economy.

CHART VI.3

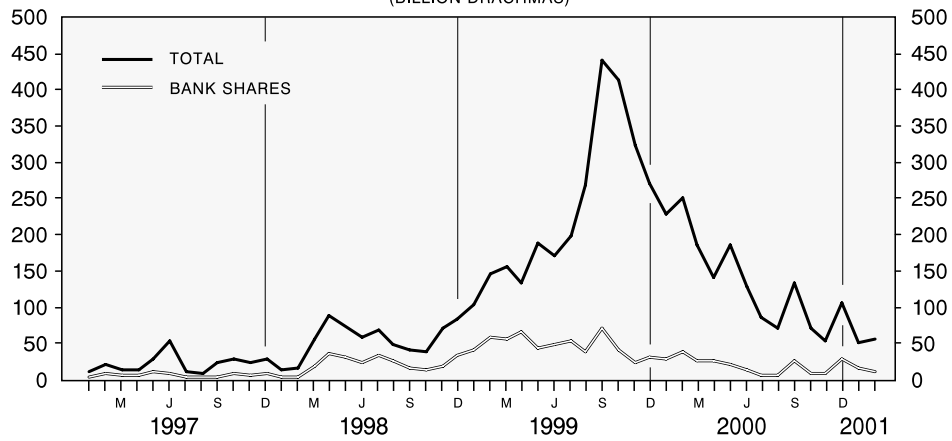
A. SHARE PRICE INDICES OF THE ATHENS STOCK EXCHANGE

(1980 = 100)



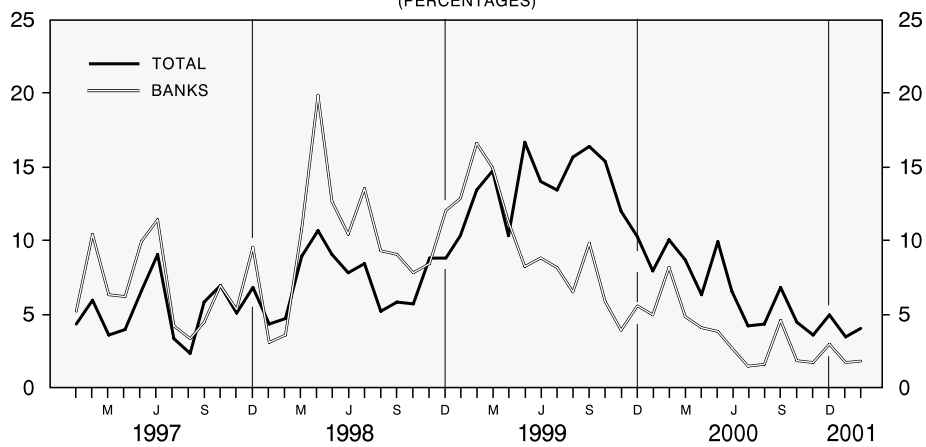
B. AVERAGE DAILY VALUE OF TRANSACTIONS

(BILLION DRACHMAS)



C. MONTHLY MARKETABILITY OF SHARES

(PERCENTAGES)



Sources: Athens Stock Exchange and Bank of Greece.

TABLE VI.3
STOCK MARKET AGGREGATES

Year	Share price indices ¹ (1980 = 100)		Average daily value of transactions ² (billion drachmas)	Market capitalisation ¹ (billion drachmas)			Market capitalisation (percentage of GDP)			Funds raised through the Athens Stock Exchange ⁴ (billion drachmas)		
	Composite	Banks		Shares	Bonds ³	Total	Shares	Bonds	Total	Listed companies	New companies	Total
1997	1,479.6	2,303.3	23.4	9,811	13,735	23,546	30	41	71	515	20	535
1998	2,737.6	5,799.4	56.1	22,839	22,801	45,640	64	64	128	494	333	827
1999	5,535.1	10,165.4	235.8	67,311	26,190	93,501	176	69	245	2,926	383	3,309
2000	3,388.9	7,307.0	137.1	40,194	26,218	66,412	98*	64*	162*	2,374	620	2,994

1 Year-end.

2 Shares.

3 Bonds comprise Greek Treasury bills and government bonds (drachma-denominated, in foreign currency, and with a foreign currency clause), bank bonds, corporate bonds and bonds of international organisations.

4 Through capital increase and issue of new shares. Subscriptions to new capital are entered on the last day of the subscription period.

* Provisional data.

Sources: Athens Stock Exchange, Bank of Greece and (for GDP) Ministry of National Economy.

The total value of trading in shares fell from 58,800 billion drachmas in 1999 to 34,343 billion drachmas in 2000 (see Table VI.4) and, in general, followed a downward course during the year, except for an appreciable recovery in September and again in December. Specifically, the average daily value of transactions fell to 107.7 billion drachmas in December 2000 from 271.3 billion drachmas in December 1999 (see Chart VI.3B). For 2000 as a whole, the average daily value of transactions dropped to 137.1 billion drachmas, from 235.8 billion drachmas in 1999. A similar development was seen in the share marketability index,¹ which fell to 5% in December 2000, from 10.3% in December 1999 (see Chart VI.3C). This was due to a large and broadly-based decrease in share trading volumes, affecting in particular the shares of leasing firms (66.2%), construction companies (56.9%) and banks (56.1%). A sectoral breakdown of the value of transactions indicates a decline in each of the components for banks, leasing, investment, construction, commercial and industrial firms, alongside increases in the respective components for the other industries.

Falling and highly volatile stock prices had a negative effect on the behaviour of savers and institutional investors. Specifically, equity holdings of mutual funds and portfolio investment companies gradually declined in 2000, ending the year about 330 billion drachmas lower (at constant prices) than twelve months before, as savers and investors increasingly liquidated their equity-type mutual fund units, while mutual funds partly substituted their investments in shares listed on the ASE with repos and synthetic swaps. On the other hand, non-residents increased their investments in the Greek stock market. According to balance of payments data, in 2000² there was a net inflow of 643 billion drachmas for investment in shares listed on the ASE, compared with a net outflow of 812 billion drachmas in 1999.

The market capitalisation of shares listed on the ASE dropped to 40,194 billion drachmas or 98% of GDP at the end of 2000, from 67,311 billion drachmas or 176% of GDP at the end of 1999 (see Table VI.3). The aggregate market capitalisation of shares in both the main and the parallel market also declined. This development reflected the substantial fall in stock prices, which more than offset the upward effect of new listings and new equity issuance.

The funds that firms raised through the stock market in 2000, for the purpose of increasing their own funds or for financing investment and/or consolidation through mergers and acquisitions, slightly declined in 2000 compared with 1999. Specifically, the increased fund-raising observed in the last quarter of 1999 was sustained into the first quarter of 2000, but in the next months decelerated; thus, the total funds raised³ through the stock market fell to 2,994 billion drachmas in 2000, from 3,309 billion drachmas in 1999 (see Table VI.3). These funds were raised by 146 firms (1999: 156 firms), of which 48 (1999: 40) were listed for the first time on the ASE and raised 619 billion drachmas com-

1 Number of shares traded over the total number of shares listed.

2 In the period from May to October 2000, there was a significant net inflow, which more than offset the net outflow observed in other months.

3 By public subscription or private placement.

TABLE VI.4
VALUE AND STRUCTURE OF STOCK MARKET TRANSACTIONS
(Billion drachmas)

	1997		1998		1999		2000	
	Value of trans- actions	Percentage of total	Value of trans- actions	Percentage of total	Value of trans- actions	Percentage of total	Value of trans- actions	Percentage of total
Shares	5,802.0	99.7	14,083.6	99.1	58,796.0	100.0	34,343.0	100.0
Main market	5,540.3	95.2	13,322.5	93.7	52,261.9	88.9	28,610.0	83.3
–Banks	1,950.0	33.5	5,697.2	40.1	12,150.5	20.6	5,337.0	15.5
–Leasing	30.3	0.5	77.1	0.5	403.5	0.7	136.3	0.4
–Insurance	145.9	2.5	181.0	1.3	1,111.6	1.9	858.6	2.5
–Investment	127.9	2.2	241.5	1.7	1,806.9	3.1	919.6	2.7
–Construction	360.4	6.2	310.7	2.2	4,856.4	8.3	2,094.0	6.1
–Commercial and industrial	1,643.9	28.2	4,550.7	32.0	20,909.4	35.6	10,836.2	31.6
–Telecommunications	1,007.3	17.3	1,473.2	10.4	3,253.0	5.5	3,164.3	9.2
–Holdings	158.6	2.7	340.6	2.4	2,109.5	3.6	1,526.6	4.4
–Other	116.0	2.0	450.4	3.2	5,661.1	9.6	3,737.4	10.9
Parallel market	261.7	4.5	761.1	5.4	6,534.1	11.1	5,733.0	16.7
Bonds¹	18.5	0.3	128.4	0.9	4.4	0.0	0.0	0.0
Total	5,820.5	100.0	14,212.0	100.0	58,800.4	100.0	34,343.0	100.0

1 Comprising Treasury bills and government bonds (drachma-denominated and with a foreign currency clause), bank bonds, corporate bonds and bonds of international organisations.
Source: Athens Stock Exchange.

pared with 383 billion drachmas in 1999. In addition, 370 billion drachmas were raised¹ through the stock market via the sale of existing shares,² but this amount was much lower than in 1999 (847 billion drachmas). Funds raised by non-financial firms increased significantly (2000: 2,155 billion drachmas, 1999: 1,525 billion drachmas). This rise was mainly attributed to increased fund-raising by companies already listed on the ASE and belonging to the industrial, construction and information sectors, as well as by new firms from the industries of retail trade and publications. Within the financial sector, the funds raised by portfolio investment companies increased to 516 billion drachmas in 2000, from 395 billion drachmas in 1999. On the other hand, the funds raised by banks fell to a mere one sixth of the 1999 figure (2000: 211 billion drachmas, 1999: 1,286 billion drachmas).

Between end-December 1999 and end-December 2000, the banking index fell by 28.1%, with sharp fluctuations during the year. At average annual levels, the fall in the index was limited to 6% in 2000. The average daily value of transactions in bank shares declined by 55% to 21 billion drachmas in 2000, from 49 billion drachmas in 1999. The average monthly marketability of bank shares followed a similar course, falling to 2.9% in December 2000, from 5.5% in December 1999. This development in the stock market-related indicators of banks is largely associated to the above-mentioned general trends of the stock market, as well as to a decline in banks' profitability in 2000, following a strong pick-up in 1999. In greater detail, the total profits of banks³ with shares listed on the ASE, which had risen by almost 200% in 1999, fell by 20.3% in 2000. Still, banks' operating profits remained at satisfactory levels in 2000, considering that the soaring profits of 1999 chiefly stemmed from the 1999 boom in financial transactions (+156%), as well as from extraordinary (one-off) revenue.⁴

Between end-1999 and end-2000, the share price index of portfolio investment companies fell by 52.7%. This is explained by the fact that a significant part of these firms' portfolios consists of shares listed on the ASE (resulting in a year-on-year decline of 77% in profits). It should be noted that portfolio investment companies proceeded to some portfolio restructuring in 2000, as evidenced by a shift from placements in the Greek stock market (which fell as a percentage of their total holdings to 74% at the end of 2000, from 77% at the end of 1999) to those in the foreign capital market (2000: 6.5%, 1999: 2.8%).

The index of leasing companies recorded a loss of 64.7% at the end of 2000, compared with the end of 1999, in spite of an impressive rise (357%) in the profitability of these firms during 2000. The construction index fell by 63.1%, compared with an increase of 586% in 1999, partly reflecting a drop of 11.8% in construction companies' profits. Nevertheless, the prospects for a recovery and improved profitability in the construction industry appear to be positive, supported by the favourable legislation underway⁵ and by

1 By public subscription or private placement.

2 For the most part, shares of public enterprises sold by the government.

3 Before taxes and directors' fees, and excluding the profits of the Bank of Greece. The total profits of banks (with shares listed on the ASE) dropped by 13.8% in 2000, compared with an increase of 158.3% in 1999.

4 As in the case of the Commercial Bank of Greece, which sold its participation in the capital of the Ionian Bank.

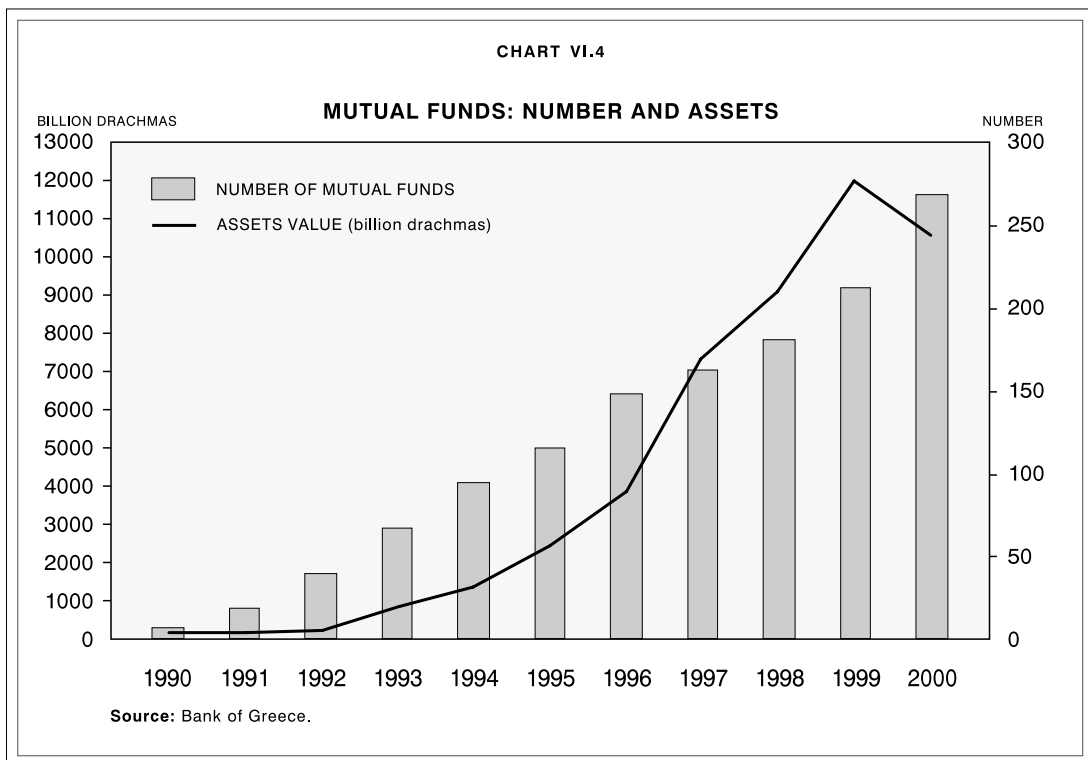
5 The draft law on construction companies, which has been introduced to Parliament, establishes new criteria for the classification of construction companies in registers, as well as incentives for mergers and acquisitions within the industry.

the expected pick-up in demand for constructions in coming years, in the context of the implementation of Community Support Framework III and the preparation of the 2004 Olympic Games to be held in Athens.

Finally, the industrial index dropped by 39.9% between December 1999 and December 2000. The general factors explaining weak demand for shares contributed to this development, while a 14% rise in listed industrial firms' profits had a positive effect. Among manufacturing industries, those of food and beverages, rubber and plastic, main metallurgy, non-metallic minerals and machinery increased their profits.

4. THE MUTUAL FUNDS MARKET

The impressive upswing in mutual funds activity over the last years was reversed in 2000. Specifically, the value of mutual funds' assets fell by 1,440 billion drachmas or 12% and stood at 10,556 billion drachmas at the end of 2000, compared with 11,996 billion



drachmas at the end of 1999 (see Table VI.5 and Chart VI.4). This development is attributed exclusively to a drop in the value of mutual fund units in circulation, which more than offset a small rise in their volume.

Demand for mutual fund units was met primarily by the sale of units already on the market at the end of 1999 and, to a lesser extent, by the launching of new mutual

funds in 2000. In greater detail, 61 mutual funds were established in 2000 (45 of the equity type,¹ 7 of the money-market type, 8 of the balanced type and 1 of the bond type), with total assets valued at 111 billion drachmas at end-2000 and representing approximately 1.1% of the total value of mutual funds' assets. Furthermore, 17 mutual funds changed their investment purpose, with 12 being now reclassified as mutual funds of the equity type, 3 of the bond type and 2 of the balanced type, while 4 mutual funds² (2 of the money-market type, 1 of the bond type and 1 of the balanced type) withdrew from the market in 2000. Following these developments, the number of mutual funds rose to 269

TABLE VI.5
MUTUAL FUNDS: NUMBER AND ASSETS
(Assets value in billion drachmas)

Type of mutual fund	1999		2000		Percentage of total assets	
	Number	Assets value	Number	Assets value	1999	2000
Money-market type	46	4,580	49	5,234	38.2	49.5
Domestic	41	4,570	43	5,223	38.1	49.4
Foreign	2	1	2	2	–	–
International	3	9	4	9	0.1	0.1
Bond type	66	1,362	62	1,610	11.4	15.3
Domestic	42	1,276	38	1,510	10.7	14.4
Foreign	13	63	13	64	0.5	0.6
International	11	23	11	36	0.2	0.3
Equity type	70	5,031	122	2,709	41.9	25.7
Domestic	55	4,945	79	2,532	41.1	24.0
Foreign	10	55	26	136	0.5	1.3
International	5	31	17	41	0.3	0.4
Balanced	30	1,023	36	1,003	8.5	9.5
Domestic	22	907	25	915	7.5	8.7
Foreign	3	6	4	5	0.1	0.0
International	5	110	7	83	0.9	0.8
Total	212	11,996	269	10,556	100.0	100.0

1 Year-end.

Source: Bank of Greece.

at the end of 2000, from 212 in 1999 and 181 in 1998. Finally, it should be noted that during 2000 a new Mutual Funds Management Company (MFMC) was established and 4 MFMCs merged, bringing their total number to 27 at the end of 2000, compared with 30 in 1999.

1 Of which, 25 domestic, 12 foreign and 8 international.

2 Of which, 3 mutual funds (1 of the money-market type, 1 of the bond type and 1 of the balanced type) merged with 3 similar-type mutual funds.

As illustrated in Table VI.5, the fall in the total value of mutual funds' assets largely reflected declines in the asset value of the equity-type mutual funds (−46.1%) and, to a lesser extent, of the balanced-type mutual funds (−2%), while the asset value of the money-market type and of the bond-type mutual funds increased (+14.3% and +18.2%, respectively). The drop in the value of assets of the equity-type mutual funds is attributed both to the fall in share prices on the ASE and to the shift of investors from mutual funds of the equity type to those of the money-market type and of the bond type. This shift was due to the significant fall in the prices of equity-type mutual fund units, compared with the relatively satisfactory yields on Greek money market products, especially synthetic currency swaps and repos, which form a large part of the holdings of money-market-type mutual funds and, to a lesser extent, bond-type mutual funds. Increased demand for units of mutual funds of the money-market type and of the bond type, which combine low risk

TABLE VI.6
PORTFOLIO STRUCTURE OF MUTUAL FUNDS
(Billion drachmas)

	1999	2000	Change
Domestic investment	11,585	9,900	−1,685
– Synthetic currency swaps	2,617	3,229	612
– Greek government bonds	2,613	2,609	−4
– Shares listed on the ASE	4,821	2,503	−2,318
– Repos	1,174	1,493	319
– Deposits and cash	360	66	−294
Foreign investment	215	388	173
Other	196	268	72
Total	11,966	10,556	−1,440

1 At year-end.

Source: Bank of Greece.

and relatively satisfactory returns, resulted in their higher share in the total asset value of mutual funds, from 38.2% and 11.4% at the end of 1999 to 49.5% and 15.3%, respectively at the end of 2000. There was a slight increase in the share of mutual funds of the balanced type (2000: 9.5%, 1999: 8.5%). By contrast, the share of mutual funds of the equity type in total asset value dropped to 25.7% at the end of 2000, from 41.9% at the end of 1999.

The investment behaviour of mutual funds changed in 2000, being marked by a shift to Greek stock market securities and, to a lesser extent, to foreign capital markets. Specifically, the fall (of 1.440 billion drachmas, as noted above) in mutual funds' assets in the twelve months to December 2000 stemmed largely from decreased investment in shares listed on the ASE (−2.318 billion drachmas) and in bank deposits (−294 billion drachmas) (see Table VI.6). On the other hand, mutual funds' holdings of synthetic cur-

rency swaps and repos and investments abroad rose to 612 billion drachmas, 319 billion drachmas and 173 billion drachmas respectively. At the end of 2000, 30.6% (1999: 21.8%) of all mutual fund portfolios were made up of synthetic currency swaps, 23.7% (1999: 40.2%) of shares listed on the ASE, 24.7% (1999: 21.8%) of government securities and another 14.1% (1999: 9.8%) of repos.

VII. PUBLIC FINANCE

1. THE PUBLIC SECTOR BORROWING REQUIREMENT AND ITS FINANCING

The continuous and systematic efforts to eliminate public sector imbalances led to a gradual decline in the general government deficit, from 13.6% in 1993 to 1.8% in 1999. On the basis of the 1999 deficit, Greece satisfied, already from the beginning of 2000, the relevant criterion laid down in the Maastricht Treaty and (as it met the other criteria as well) it succeeded in entering the euro area as from 1 January 2001.

In this context, efforts to achieve fiscal consolidation continued successfully in 2000, as the country's participation in the euro area as from 2001 would create additional obligations for a further deceleration of the deficit, since the general government budget

TABLE VII.1
GENERAL GOVERNMENT DEFICITS
(Percentage of GDP)

	1996	1997	1998	1999	2000*
General government					
National accounts data ¹ - <i>convergence criterion</i>	7.4	4.0	2.5	1.8	0.9
On an accrual basis ^{2,3}	7.0	5.4	3.2	2.5	2.1
Borrowing requirement (on a cash basis) ^{2,4}	10.2	6.8	5.0	3.7	4.0

1 Including public enterprises' debt assumed by central government.

2 Excluding capitalised interest.

3 Ministry of Finance and Bank of Greece data.

4 Including expenses for the acquisition of assets, which, according to the established international practice, are deducted from the two indicators mentioned above.

* Provisional data.

Sources: Bank of Greece, Ministry of Finance and Ministry of National Economy – National Accounts Service.

should be “close to balance or in surplus”, as stipulated in the Stability and Growth Pact. The general government deficit declined in 2000, for the fifth consecutive year, to stand at 0.9% of GDP, making it possible to aim for a surplus in 2001. Progress towards the containment of deficits is also reflected in the reduction of the general government deficit on an accrual basis (see Table VII.1).

The decrease in deficits also affected the debt-to-GDP ratio, which declined for the fourth consecutive year, to reach 103.9% of GDP in 2000 (see Section 2.4).

According to recent national accounts data, the deficit of general government, which comprises central government, social security funds, local authorities and the other public entities (but not public enterprises), fell by 0.9 of a percentage point, from 1.8% of GDP in 1999 to 0.9% in 2000. According to the Greek Stability and Growth Programme, which was submitted to the European Commission in December 2000, this deficit, which is com-

piled in a uniform and internationally comparable way by all EU Member States, is expected to turn into a surplus in 2001, equal to 0.5% of GDP.

The second item in Table VII.1 also concerns general government and shows a 0.4 of a percentage point decrease in the deficit. This indicator is based on accrual data as regards central government and on estimates as regards the surplus of all social security funds and other public entities.

Finally, the general government borrowing requirement, as shown by cash flows to and from the banking system, recorded a small increase (0.3 of a percentage point) and stood at 4% of GDP. Certain transactions, which are not taken into account in the deficit on a national accounts or accrual basis (e.g. “expenditure for the acquisition of assets”), are included in the borrowing requirement. Furthermore, on a national accounts and an accrual basis, revenue collected during the “extension” of the fiscal year is registered in the year it accrues to but, on a cash basis, it is registered in the year it is collected. For these reasons, the borrowing requirement is not only larger than the respective national-accounts- and accrual-based deficit, but may also increase when the other two indicators are declining and vice versa.

The public sector borrowing requirement

According to available provisional data, the borrowing requirement of the public sector, on a cash basis, increased somewhat in 2000 and reached 4.2% of GDP, compared with 3.9% in 1999 (see Table VII.2). This development is exclusively due to the increase (0.5% of GDP) in the central government cash deficit. By contrast, the surplus of public entities rose by 0.2 of a percentage point (1999: 1.7% of GDP, 2000: 1.9% of GDP), while the deficit of public enterprises remained at 1999 levels (0.2% of GDP).

The central government borrowing requirement rose from 5.4% of GDP in 1999 to 5.9% in 2000. This development is attributable to the public investment budget and, in particular, to the speeding up of the implementation of large projects and to the delayed receipts from various EU funds..

By contrast, the ordinary budget borrowing requirement declined by 0.1% of GDP compared with 1999, reaching 1.6% of GDP, and the cash deficit of the special management accounts of the State (DIDAGEP) remained at the 1999 level (0.2% of GDP). The improvement in the ordinary budget is attributable to the satisfactory course, for the third consecutive year, of ordinary budget tax revenue.

The faster implementation of large projects and the expenditure incurred for the relief of those hit by the Athens earthquake of 1999, combined with the delay observed in the receipt of the bulk of public investment budget revenue from EU funds, resulted in a 0.6% increase in the investment budget cash deficit compared with 1999, which reached 4.1% of GDP. However, as most of the revenue was collected in early 2001, i.e. in the extension of the fiscal year, this delay did not influence the deficit on a national accounts

or an accrual basis. Lastly, it should be noted that investment expenditure includes equity injections to public enterprises.

TABLE VII.2
PUBLIC SECTOR NET BORROWING REQUIREMENT
(Billion drachmas)

	1995	1996	1997	1998	1999	2000*
1. Central government ¹	2,964.9	3,690.9	2,584.7	2,323.7	2,059.3	2,416.0
Percentage of GDP	10.9	12.3	7.8	6.5	5.4	5.9
– Government budget (Ordinary budget) ²	2,909.6 (2,328.8)	3,676.9 (2,990.7)	2,559.7 (1,663.6)	2,244.7 (1,178.7)	1,988.4 (649.7)	2,332.0 (643.3)
(Public investment budget)	(580.8)	(686.2)	(896.1)	(1,066.0)	(1,338.7)	(1,688.7)
– DIDAGEP** etc.	55.3	14.0	25.0	79.0	70.9	84.0
2. Public entities ³	-546.4	-647.4	-345.3	-529.0	-635.8	-766.0
Percentage of GDP	-2.0	-2.2	-1.0	-1.5	-1.7	-1.9
– Financing of social security funds	22.0	12.2	2.2	-26.0	27.2	28.0
– Financing of local authorities	7.3	31.0	5.9	8.0	3.7	79.0
– Financing of other entities	12.6	-47.5	-23.3	-20.0	-36.0	25.0
– Reserves	-588.3	-643.1	-330.1	-491.0	-630.7	-898.0
General government (1+2)	2,418.5	3,043.5	2,239.4	1,794.7	1,423.5	1,650.0
Percentage of GDP	8.9	10.2	6.8	5.0	3.7	4.0
3. Public enterprises	-0.7	83.5	-132.6	141.0	71.1	67.0
Percentage of GDP	0.0	0.3	-0.4	0.4	0.2	0.2
– Financing of public utilities	-7.2	57.5	-115.6	65.0	86.2	73.0
– Financing of other enterprises	-2.9	15.7	18.4	57.0	78.1	60.0
– Liquid assets	9.4	10.3	-35.4	19.0	-93.2	-66.0
Public sector (1+2+3)	2,417.8	3,127.0	2,106.8	1,935.7	1,494.6	1,717.0
Percentage of GDP	8.9	10.4	6.4	5.4	3.9	4.2
Public sector (including capitalised interest)	2,502.1	3,306.0	2,141.8	1,962.7	1,494.6	1,717.0
Percentage of GDP	9.2	11.0	6.5	5.5	3.9	4.2

1 Results from the respective accounts with the Bank of Greece, the Agricultural Bank and commercial banks.

2 Including, as of 1997, movements in public debt management accounts.

3 Estimates on the basis of their investment in securities and bank deposits and the change in their liabilities to the banking system.

* Provisional data and estimates.

** Agricultural Markets Management Service.

Source: Bank of Greece.

The considerable increase in certain social security funds' reserves more than offset the increase in the borrowing requirement of local authorities and other public entities. As a result, the overall cash surplus of public entities grew (1999: 1.7% of GDP, 2000: 1.9% of GDP).

TABLE VII.3
SOURCES OF FINANCING THE PUBLIC SECTOR BORROWING REQUIREMENT
(Billion drachmas)

	1995		1996		1997		1998		1999		2000*	
	Amount	Percentage of total	Amount	Percentage of total	Amount	Percentage of total	Amount	Percentage of total	Amount	Percentage of total	Amount	Percentage of total
BORROWING IN DRACHMAS	1,954.5	80.8	2,834.0	90.6	967.0	45.9	69.6	3.6	-1,238.3	-82.9	-1,187.0	-69.1
- Treasury bills and bonds purchased by monetary financial institutions ¹	744.6	30.8	489.7	15.7	625.0	29.7	-556.5	-28.7	525.9	35.2	1,681.0	97.9
- Treasury bills and bonds purchased by the domestic non-bank sector ¹	1,670.8	69.1	2,455.5	78.5	119.4	5.7	61.4	3.2	-1,750.0	-117.1	-3,125.0	-182.0
- Loans and advances from monetary financial institutions	-22.9	-0.9	40.4	1.3	-4.0	-0.2	346.7	17.9	-134.8	-9.0	178.1	10.4
- Bank of Greece ²	-438.0	-18.1	-151.6	-4.8	226.6	10.8	218.0	11.3	120.6	8.1	78.9	4.6
BORROWING IN FOREIGN CURRENCY³	463.3	19.2	293.0	9.4	1,139.8	54.1	1,866.1	96.4	2,732.9	182.9	2,904.0	169.1
TOTAL BORROWING	2,417.8	100.0	3,127.0	100.0	2,106.8	100.0	1,935.7	100.0	1,494.6	100.0	1,717.0	100.0

1 Sales of securities in the secondary market are also included.

2 As from 1 January 1994, the respective figure no longer concerns financing by the Bank of Greece but changes in the credit balance of the government's cash account with the Bank.

3 Including purchases of drachma-denominated government securities by non-residents.

* Provisional data.

Source: Bank of Greece.

Finally, the cash deficit of public enterprises dropped slightly from 71.1 billion drachmas in 1999 to 67 billion drachmas in 2000. However, as a percentage of GDP, it shows no change compared with the previous year (standing at 0.2%). This development is related to the ongoing efforts to modernise and restructure public enterprises.

Financing net PSBR evolved smoothly in the course of 2000. For the fourth consecutive year, the PSBR was financed by the issue of medium- and long-term drachma-denominated fixed-interest bonds, while bonds maturing in 20 years were issued for the first time (see Table VII.3). Non-residents bought substantial amounts of these bonds, while domestic private investors shifted from government paper to repos. As the acquisition of government paper by non-residents is registered as borrowing in foreign currency (see Table VII.3), it appears that borrowing in foreign currency financed the entire PSBR and that part of it was used to repay liabilities in drachmas.

Unlike domestic private investors, domestic credit institutions increased their portfolio of government paper, thus helping to finance the deficit.

Efforts to prolong the average maturity of public debt continued in the course of 2000, through the further substitution of long-term bonds for Treasury bills and the issue of twenty-year bonds. At end-2000, the outstanding balance of Treasury bills was reduced to 602 billion drachmas (consolidated debt of general government), compared with 1,544 billion at end-1999 and 3,566 billion drachmas at end-1998. At the same time, the average maturity of borrowing effected in 2000 exceeded eight and a half years.

Finally, in order to finance part of its borrowing requirement, the State drew 78.9 billion drachmas out of its deposits with the Bank of Greece.

2. FISCAL AGGREGATES

2.1 The government budget

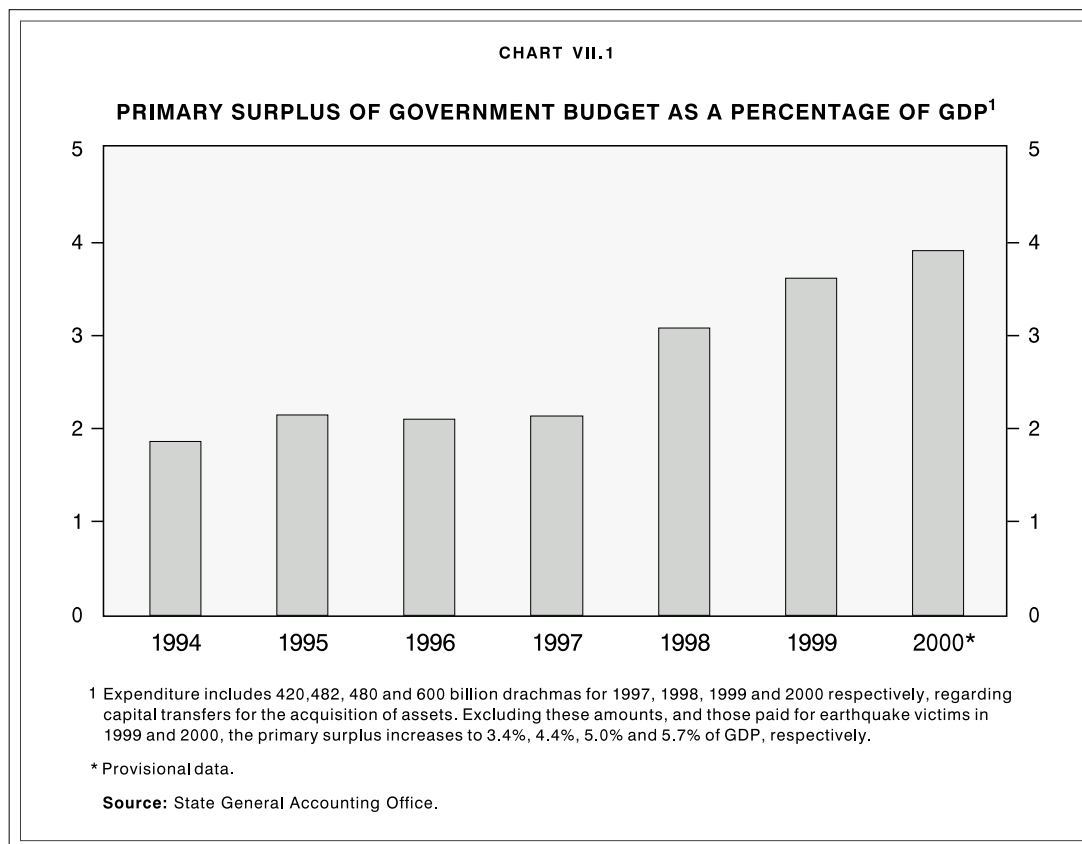
As was the case also in 1999, revenue was much higher than forecast and constituted the distinctive feature of fiscal developments in 2000. According to provisional data from the State General Accounting Office, the deficit of the government budget dropped further to 1,787 billion drachmas or 4.4% of GDP, compared with 5.0% in 1999 and 5.9% in 1998 (see Table VII.9). Indeed, the deficit was 0.3 of a percentage point lower than budgeted. This development was entirely due to the increased yield of ordinary budget revenue. By contrast, both ordinary budget and public investment budget expenditure overshot budgeted levels, while public investment budget revenue fell short of initial forecasts.

Despite the overrun in primary expenditure, the substantial overrun in ordinary budget revenue led to a further increase in the primary surplus to 3.9% of GDP, compared with 3.6% in 1999 and 3.1% in 1998. At the same time, the primary surplus exceeded the budgeted amount by 0.9 of a percentage point.

Revenue

For the third consecutive year, ordinary budget revenue greatly exceeded the budgeted amounts and determined fiscal developments in 2000. More specifically, ordinary budget revenue rose by 10.1% (11.5% in 1999), reaching 11,660 billion drachmas (see Table VII.4). This development suggests a 1.40 income elasticity.

In greater detail, revenue exceeded ordinary budget forecasts by 705 billion drachmas.¹ This development is almost exclusively attributable to corporate income tax (664 bil-



lion drachmas) and personal income tax (340 billion drachmas). Furthermore, VAT revenue from both domestic goods and imports was 230 billion drachmas higher than forecast, and the same applied to revenue from car classification fees (61 billion drachmas). By contrast, revenue from stock exchange transactions and non-tax revenue showed a shortfall of 220 and 360 billion drachmas respectively. These developments reflect the high profitability of enterprises in 1999, the considerable increase in car sales in 2000, the

¹ The actual amount is 805 billion drachmas, but an amount of 100 billion drachmas was transferred to 2001.

growth of imports and the drop in the volume of transactions on the Athens Stock Exchange in 2000.

Direct tax revenue rose by 15.2% in 2000 (1999: 12.6%) and stood at 4,657 billion drachmas, compared with a forecast decline of 8.6%. This high growth rate, which was more than double the GDP growth rate (7.2%), led to an increase in the share of direct tax revenue in total tax revenue (42.3% in 2000, compared with 40.9% in 1999 and 36.4% in 1997). In other words, the share of direct tax revenue in total tax revenue rose by 6 percentage points in three years, thus approaching the corresponding share of other EU countries.

Revenue from corporate income tax rose by 50.9% (11.6% in 1999), and reached 1,715.2 billion drachmas, overshooting budget forecasts by about 63%. This positive development was due to the particularly high profitability of sociétés anonymes in 1999 as well as to the policy of disclosing higher profits, as many of them were preparing to enter the stock exchange. Besides, due to the upward course of the stock exchange, many securities companies, mutual funds etc. enjoyed considerable financial gains.

Revenue from personal income tax rose only marginally compared with 1999 (1999: 15.0%, 2000: 0.8%), but overshot the budgeted amount by 340 billion drachmas. This limited rise is attributable to the indexation of the tax scale and the increase in certain tax allowances, which affected revenue from the clearing of tax returns in 2000 (“main tax” and “advance payment”).

For the second consecutive year, revenue from the taxation of interest income (government paper, bank deposits etc.) dropped by 36.8% compared with the corresponding revenue in 1999. This development was mainly due to the significant decline in interest rates on government paper and deposits, as well as to the shift of larger amounts than in 1999 to repos, whose yields are tax-free. Non-residents, who are exempt from this tax, hold a considerable amount of government paper.

Revenue from taxes on inheritances, gifts and parental donations grew by 30.0%, compared with a 7.6% decrease in 1999, and reached 121.3 billion drachmas, i.e. they exceeded the budgeted amount by 12.6 billion drachmas. This development is mainly attributable to the speeding up of gifts and parental donations in autumn 2000, after the government had announced that “objective prices” of real estate would be raised as from 1 January 2001 (this increase actually occurred on 5 March 2001).

Revenue from “direct tax arrears” rose by 24.6%, compared with 37.9% in 1999, and stood at 256.2 billion drachmas. This was due to the measures taken in November 1998 for the collection of overdue payments, which were later extended to cover the period up to 2000 (indeed, a further extension was given until the first months of 2001). At the same time, the computerisation of Ministry of Finance services (through the TAXIS system) has facilitated the collection of this revenue.

Revenue from indirect taxes rose by 8.4%, compared with 11.5% in 1999, and stood at 6,343.1 billion drachmas, exceeding the budgeted amount by 97.1 billion drachmas. This overrun was mainly due to revenue from VAT (on domestic goods and

TABLE VII.4
ORDINARY BUDGET REVENUE
(Billion drachmas)

	Annual aggregates				Percentage changes		
	1997	1998	1999	2000*	1998/97	1999/98	2000*/99
I. DIRECT TAXES	2,767.1	3,591.4	4,043.5	4,657.2	29.8	12.6	15.2
1. Income tax	2,300.3	3,054.8	3,446.4	3,953.4	32.8	12.8	14.7
– Personal	1,297.5	1,587.0	1,825.3	1,840.4	22.3	15.0	0.8
– Corporate	641.8	1,018.3	1,136.7	1,715.2	58.7	11.6	50.9
– Special categories of income tax (tax on shipping)	361.0	449.5	484.4	397.8	24.5	7.8	–17.9
(tax on interest income from bonds, deposits etc.)	(4.2)	(7.2)	(6.9)	(7.0)	(71.4)	(–4.2)	(1.4)
(305.6)	(379.5)	(358.6)	(226.7)	(24.2)	(–5.5)	(–36.8)	
2. Wealth taxes	123.8	133.4	126.6	157.3	7.8	–5.1	24.2
3. Direct taxes collected on behalf of third parties	1.4	1.8	2.8	1.7	28.6	55.6	–39.3
4. Tax arrears	120.0	149.2	205.7	256.2	24.3	37.9	24.6
5. Extraordinary and other direct taxes	221.6	252.2	262.0	288.6	13.8	3.9	10.2
II. INDIRECT TAXES	4,833.9	5,248.4	5,853.9	6,343.1	8.6	11.5	8.4
1. Customs duties and special contributions on imports-exports	58.8	65.7	69.6	75.6	11.7	5.9	8.6
2. Consumption taxes on imports	439.3	503.8	618.8	670.6	14.7	22.8	8.4
– VAT (non-EU imports)	302.5	326.4	358.7	446.6	7.9	9.9	24.5
– Cars	123.5	164.6	243.9	211.2	33.3	48.2	–13.4
– Special consumption tax	11.4	11.5	16.0	12.7	0.9	39.1	–20.6
– Other taxes on imports	1.9	1.3	0.2	0.1	–31.6	–84.6	–50.0
3. Consumption taxes on domestic products	3,776.2	4,075.6	4,277.8	4,636.9	7.9	5.0	8.4
– Turnover tax	39.9	45.0	36.6	54.0	12.8	–18.7	47.5
– VAT	2,146.0	2,397.0	2,628.8	2,983.6	11.7	9.7	13.5
– Fuel	849.0	844.8	795.5	747.5	–0.5	–5.8	–6.0
– Tobacco	458.6	513.0	557.9	599.0	11.9	8.8	7.4
– Road duties	97.8	90.8	126.9	112.1	–7.2	39.8	–11.7
– Special levies and contributions on cars	77.3	78.6	17.3	18.2	1.7	–78.0	5.2
– Other ¹	107.6	106.4	114.8	122.5	–1.1	7.9	6.7
4. Transaction taxes	475.1	527.7	791.1	836.9	11.1	49.9	5.8
– Capital transfers	163.0	172.9	422.4	482.6	6.1	144.3	14.3
– Stamp duties	259.1	300.6	299.3	290.2	16.0	–0.4	–3.0
– Banking transactions	47.7	46.5	62.8	55.0	–2.5	35.1	–12.4
– Licence fees for gambling	5.3	7.7	6.6	9.1	45.3	–14.3	37.9
5. Other indirect taxes	84.5	75.6	96.6	123.1	–10.5	27.8	27.4
III. TOTAL TAX REVENUE	7,601.0	8,839.8	9,897.4	11,000.3	16.3	12.0	11.1
Non-tax revenue	866.4	658.7	695.6	659.7	–24.0	5.6	–5.2
IV. TOTAL ORDINARY BUDGET REVENUE	8,467.4	9,498.5	10,593.0	11,660.0	12.2	11.5	10.1

1 Including the special consumption tax on domestic products.

* Estimates.

Source: State General Accounting Office.

imports), which overshot the budgeted amount by 230 billion drachmas, and, to a lesser degree, to the overrun in revenue from car classification fees (79 billion drachmas) and tobacco tax (69 billion drachmas). By contrast, all other indirect taxes fell short of budgeted amounts.

As regards individual categories, revenue from VAT on imports from third (non-EU) countries rose by 24.5% (1999: 9.9%), and overshot the budgeted amount by about 68 billion drachmas. This development is attributable to the considerable increase (19.9%) in the drachma value of imports, except fuel, from third countries.

Revenue from car classification fees (the former “special consumption tax”) dropped by 13.4% compared with 1999, but overshot the budgeted amounts by 79 billion drachmas. This revenue was affected negatively by the reduction of about 30% in tax rates on 3 September 1999 (Law 2743/99) and positively by the 12.7% increase in car sales in the course of 2000 (46.8% in 1999).

Revenue from VAT on domestic goods and services (including imports from EU countries) grew by 13.5% in 2000, against 9.7% in 1999, and reached 2,983.6 billion drachmas. This acceleration is mainly attributable to the increase in the price of liquid fuel in the world market, which yielded in an additional 100 billion drachmas of VAT revenue. If this amount is deducted, the rate of increase falls to 1999 levels (9.7%). VAT revenue was also favourably affected by the introduction of a new, “objective” way of calculating VAT payments by firms to the Ministry of Finance, as well as by the acceleration of economic activity growth. By contrast, the decrease in the special consumption tax on liquid fuel and car classification fees in autumn 1999 had a negative impact on VAT revenue in the course of 2000.

Revenue from the special consumption tax on liquid fuel dropped by 6.0% compared with 1999, due to the reduction of tax rates in September 1999. (It should be noted that this tax is levied “per unit” and was not therefore affected by the rise in world prices, as was the case with VAT).

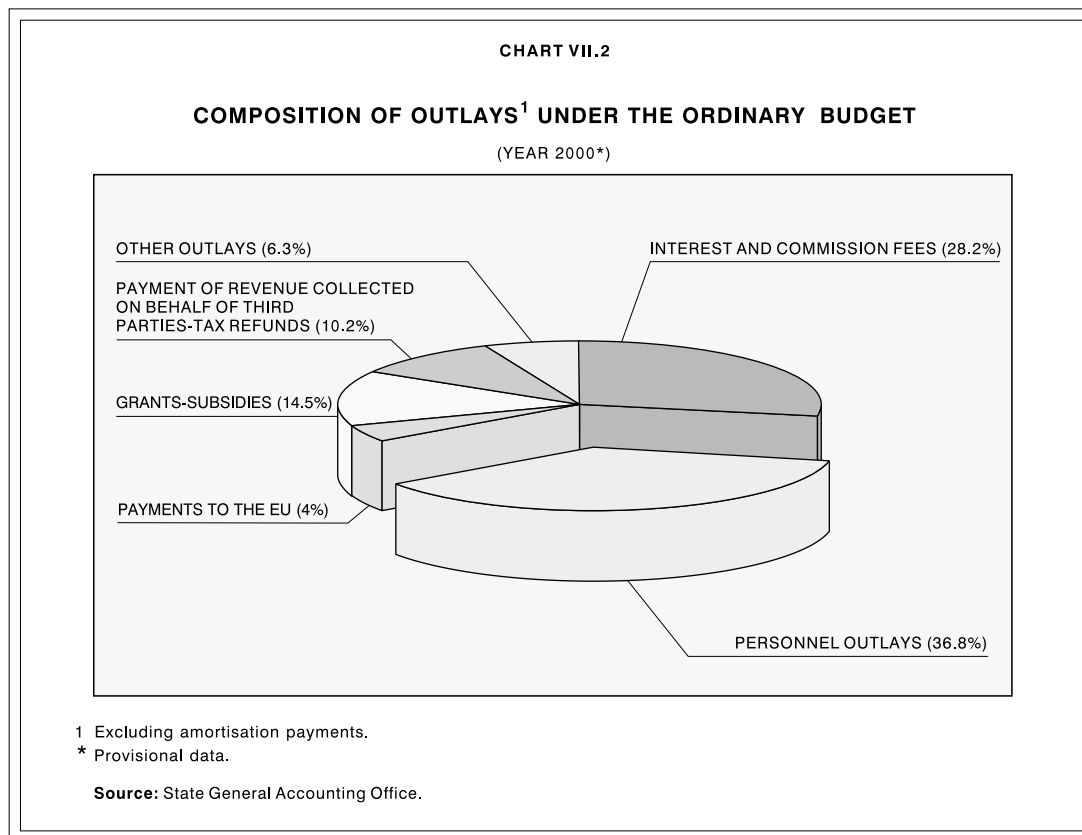
Revenue from tobacco tax grew by 7.4% relative to 1999 and overshot the budget forecast by about 69 billion drachmas. This positive development stemmed from the increase in cigarette consumption (1.6%) and the second increase in the price of cigarettes in autumn 2000, beyond the usual increase every January.

Revenue from the taxation of stock exchange transactions increased by 13.9% against 1999, owing to the doubling of the tax rate (in October 1999) from 0.3% to 0.6%. By contrast, stock market developments in the course of 2000 had a negative impact on this type of revenue, which, for this reason – and despite its increase relative to 1999 – fell short of the budget forecast by about 220 billion drachmas.

Lastly, non-tax revenue dropped by 5.2% compared with 1999 and stood at 659.7 billion drachmas, well below the budgeted amount of 1,019 billion drachmas. Of this shortfall, 72% is attributable to revenue from the State’s business activity, while the remainder concerns extraordinary non-tax revenue and receipts from the European Social Fund.

Expenditure

Ordinary budget expenditure rose by 7.5% in 2000, compared with a 7.9% increase in 1999 (see Table VII.5). The growth rate of expenditure, despite its slight deceleration, overshot the respective budget forecast (of only 4.2%) for 2000. This overrun (447 billion drachmas) was mainly due to ordinary budget expenditure (356 billion drachmas) and, to a lesser degree, to public investment budget expenditure (91 billion drachmas). Following these developments, ordinary budget expenditure as a percentage of GDP rose slightly to



35.6%, from 35.5% in 1999 and 35% in 1998. As mentioned above, the overrun was more than offset by the strong performance of revenue.

About half of the overrun in ordinary budget expenditure concerned primary expenditure and the remainder interest payments. Thus, primary expenditure rose by 8.2% (forecast: 5.9%) and interest payments rose by 2.6% (initial forecast: 2.5% decline).

As regards individual categories of expenditure, personnel outlays rose by 7.4%, compared with 7.1% in 1999 and a 3.9% budget forecast. Thus, personnel outlays reached 4,417.8 billion drachmas (overshooting the budget forecast by 145.4 billion drachmas), or 36.8% of total ordinary budget expenditure, compared with 36.5% in 1999 and 36.0% in

T A B L E VII.5
OUTLAYS UNDER THE ORDINARY BUDGET AND THE PUBLIC INVESTMENT BUDGET
(Billion drachmas)

	Annual aggregates				Percentage changes		
	1997	1998	1999	2000*	1998/97	1999/98	2000*/99
I. OUTLAYS UNDER THE ORDINARY BUDGET ¹	10,064.3	10,661.0	11,276.4	12,016.0	5.9	5.8	6.6
1. Personnel outlays	3,512.8	3,840.0	4,112.7	4,417.8	9.3	7.1	7.4
2. Interest payments ² (interest payments related to the national defence debt) ³	3,216.2 (109.7)	3,233.7 (102.0)	3,303.4 (102.4)	3,390.0 (125.0)	0.5 (-7.0)	2.2 (0.4)	2.6 (22.0)
3. Payments to the European Union	376.8	452.0	435.1	477.0	20.0	-3.7	9.6
4. Payment of revenue collected on behalf of third parties ⁴	585.0	740.2	830.5	930.5	26.5	12.2	12.0
5. Tax refunds	291.1	270.5	299.6	293.4	-7.1	10.8	-2.1
6. Interest rate subsidies	20.4	2.7	0.3	0.0	-86.7	-89.1	-100.0
7. Subsidies to farmers	126.1	99.5	96.9	115.0	-21.0	-2.6	18.7
8. Grants ⁵	1,368.6	1,424.1	1,508.2	1,630.7	4.1	5.9	8.1
9. Guarantees and foreign exchange valuation differences	1.1	1.4	1.3	1.5	22.9	-9.8	18.6
10. Other ⁶	566.2	596.9	688.4	760.1	5.4	15.3	10.4
II. OUTLAYS UNDER THE PUBLIC INVESTMENT BUDGET ⁷	1,626.5	1,877.5	2,250.0	2,531.0	15.4	19.8	12.5
1. Project implementation	664.0	865.0	795.2	...	30.3	-8.1	...
2. Grants	953.0	1,004.1	1,447.7	...	5.4	44.2	...
3. Administration	10.0	8.4	7.1	...	-16.0	-15.9	...
III. TOTAL I + II	11,690.8	12,538.5	13,526.4	14,547.0	7.3	7.9	7.5
Primary expenditure under the government budget	8,474.6	9,304.7	10,223.0	11,157.0	9.8	9.9	9.1
Primary expenditure under the ordinary budget	6,848.1	7,427.3	7,973.0	8,626.0	8.5	7.3	8.2
Amortisation payments (amortisation payments related to the national defence debt) ³	3,589.4 (124.0)	3,536.4 (229.2)	3,406.3 (215.0)	4,622.8 (225.0)	-1.5 (84.8)	-3.7 (-6.2)	35.7 (4.7)

1 Excluding amortisation payments.

2 Including "other expenditure" related to public debt servicing.

3 This category includes only interest and amortisation payments effected by the Ministry of National Defence. Interest and amortisation payments related to the national defence debt and taken over by the Ministry of Finance are included in the main categories of the corresponding items.

4 For the sake of comparability, this amount includes 76.8 billion drachmas for 1997 and 94.6 billion drachmas for 1998, which were granted to prefectures. From 1999 onwards, such grants are recorded under payment of revenue collected on behalf of third parties. The figure for 1999 also includes a 60 billion drachma grant to the Farmers' Insurance Fund (OGA).

5 Including social security subsidies.

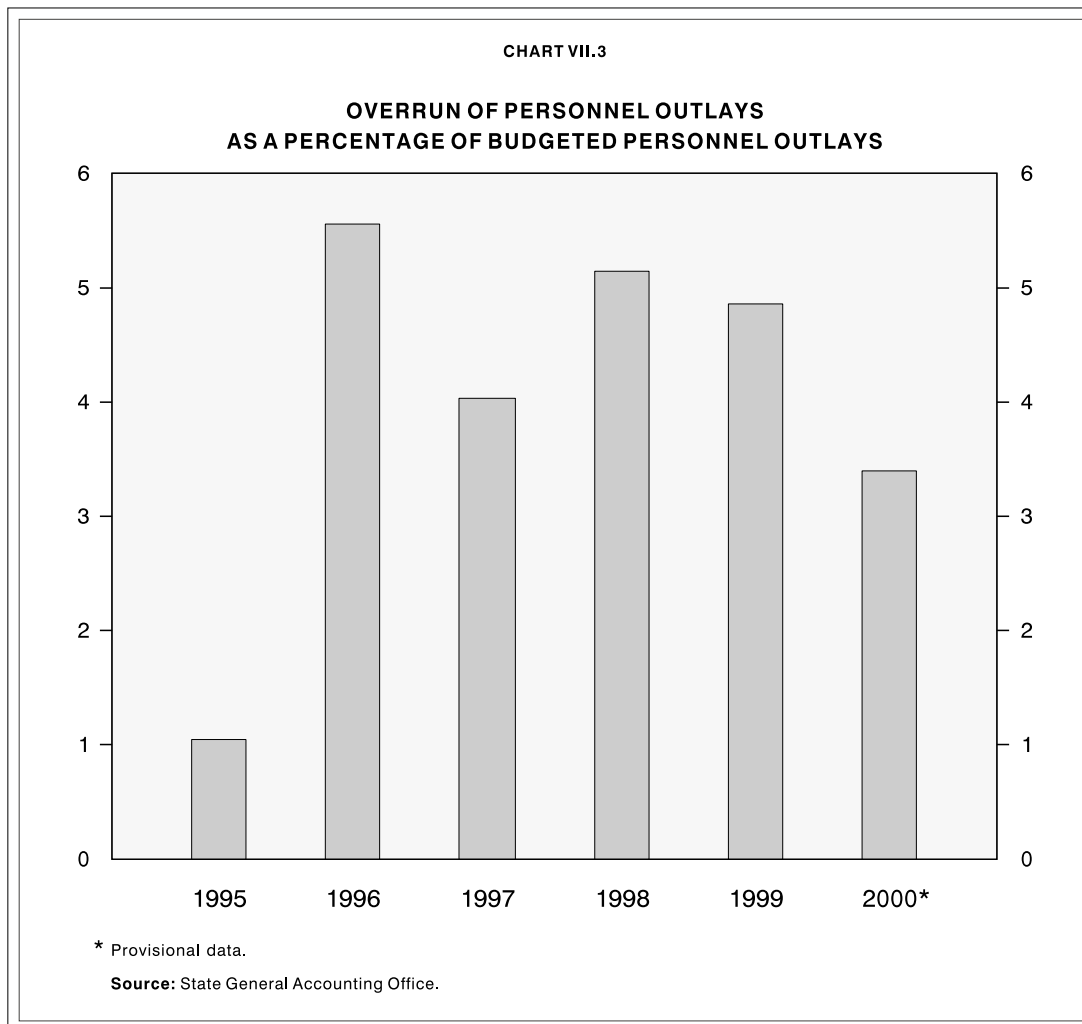
6 Including expenditure incurred in 2000 (31 billion drachmas) for persons hit by the September 1999 earthquake.

7 Including expenditure for persons hit by the 1999 earthquake, amounting to 30 billion drachmas in 1999 and 88 billion drachmas in 2000, as well as expenditure for the acquisition of assets.

* Provisional data.

Source: State General Accounting Office.

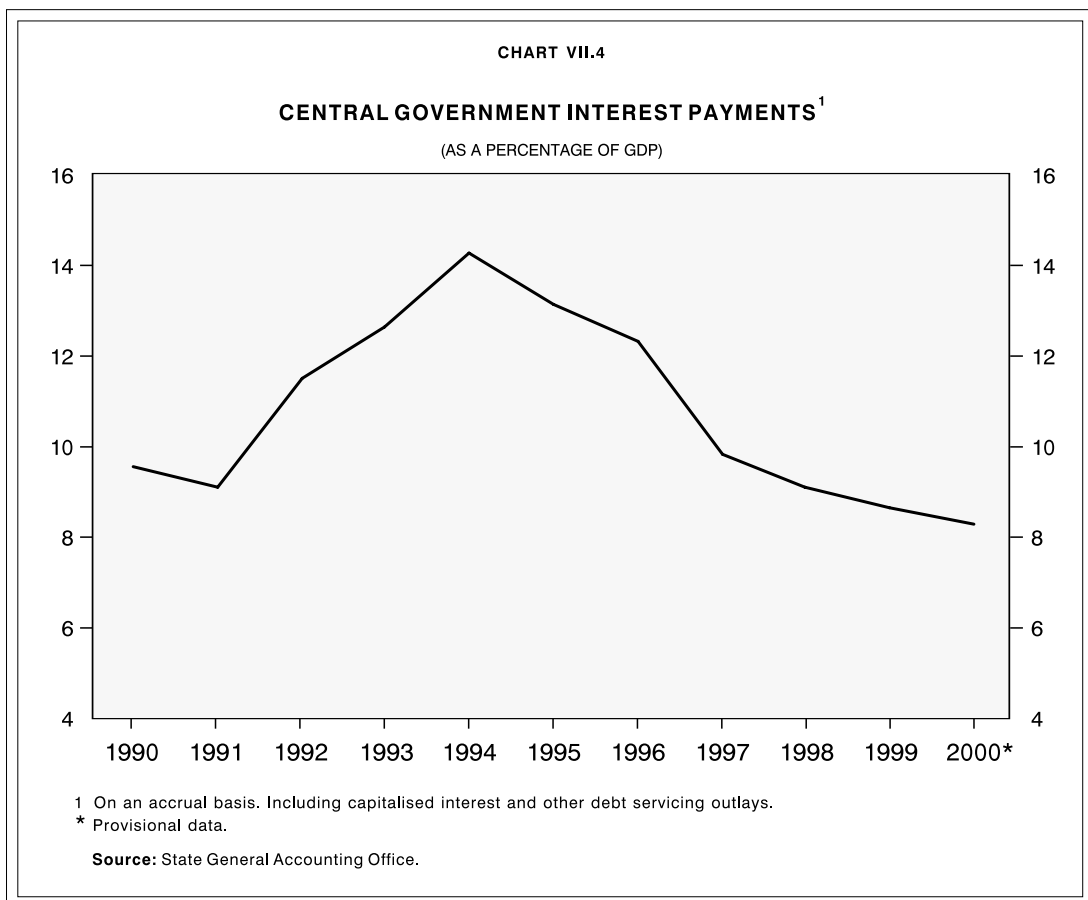
1998. It should be noted that this category has exhibited considerable overruns in recent years (see Chart VII.3). As regards 2000, this development is attributable to the recruitment of personnel in hospitals, the Ministry of Education and the Ministry of Public Order, to the retroactive increase in the remuneration of members of Parliament, as well as to outlays for pensions and medical care of civil servants, partly because medical care liabilities outstanding from previous years were settled in 2000.



Interest payments rose by 2.6% (about the same as in 1999) and came to 3,390 billion drachmas, overshooting the budget forecast by 170 billion drachmas. As a percentage of GDP, interest payments dropped further to 8.3%, from 8.7% in 1999 and 9.1% in 1998 (see Chart VII.4). Interest payments have increased owing to the appreciation of the US dollar and the Japanese yen, but have decreased because of cuts in interest rates on public debt. It should be noted that interest on public debt has not been capitalised since 1999 (see Table VII.2).

Payments to the European Union rose by 9.6% compared with a drop of 3.7% in 1999. The increase is attributable to the revision of Greece's contributions, calculated on the basis of GDP and the VAT base. Initially, these contributions were to be lower than in 1999, but eventually both categories showed a small increase, and the budgeted amount was overshot by 37 billion drachmas.

Payment of revenue collected on behalf of third parties grew by 12.0%, compared with 12.2% in 1999 and 26.5% in 1998. The high annual rates of increase in these outlays



(in the past three years, the average annual rate of increase was about 17%) are mainly due to the payment of revenue to local authorities of the first and the second degree (municipalities and prefectures). Especially for 2000, however, payments of revenue to the local authorities remained at almost 1999 levels, while payments to the Farmers' Insurance Fund (OGA) rose considerably. Outlays for tax refunds dropped by 2.1% and were maintained at 1999 levels (2000: 293.4 billion drachmas, 1999: 299.6 billion drachmas), despite the increase in the rates applicable to VAT refunds to farmers who are subject to the special VAT regime as regards sales of agricultural products and the supply of farming services.

Outlays for subsidies to the agricultural sector rose by 18.7%, after consecutive decreases in the previous three years. It is noted that, as from 1997, all agricultural sector subsidies regarding investment programmes are included in the public investment budget. Furthermore, as from 1999, outlays for interest rate subsidies ceased to burden the ordinary budget and are now covered by the contribution under Law 128/75, which has been adjusted and extended to loans in foreign currency.

Outlays for grants, the third largest category of expenditure, rose by 8.1% in 2000, compared with 5.9% in 1999 and 4.1% in 1998. This acceleration of the growth rate was partly stipulated in the budget and was due to the increase, as from 1 January 2000, in farmers' pensions and the social solidarity allowance, as well as to the payment of the first instalment of the heating allowance and the social security contributions of minimum-wage earners.¹

Finally, "other outlays" grew by 10.4%, compared with 15.3% in 1999, and stood at 760.1 billion drachmas. This category includes 31 billion drachmas, which is part of the outlays to meet the needs of those hit by the earthquake of 7 September 1999 in Athens.

Expenditure under the public investment budget increased by 12.5% (19.8% in 1999) and reached 2,531 billion drachmas. This expenditure includes "capital transfers" to public enterprises (600 billion drachmas), as well as a part of the expenditure for the relief of the 1999 earthquake victims (88 billion drachmas for 2000).

2.2 Social security and welfare funds

According to accrual data from the Introductory Report on the Budget for 2001, the provisional financial results of the seven major social security and welfare funds for 2000 worsened slightly compared with the corresponding 1999 results (see Table VII.6).

In greater detail, the total revenue of these funds increased by 8.4% in 2000 (1999: 10.7%, 1998: 22.1%) and amounted to 3,136.9 billion drachmas. This deceleration is attributable to the limited increase in Social Insurance Fund (IKA) and OGA revenue (4.5% and 4.3% respectively), which constitutes about 81% of total revenue. By contrast, Manpower Employment Agency (OAED) and Workers' Housing Organisation (OEK) revenue recorded a large increase. Total expenditure (on both the operating and the capital accounts) of the seven major social security and welfare funds rose by 13.5% (1999: 12.2%, 1998: 6.7%) and reached 4,397.4 billion drachmas. The slightly faster increase in expenditure is attributable to investment expenditure, which grew by 25.6%. Operating account expenditure showed a small deceleration.

As a result, the total deficit of the consolidated operating and capital account of the seven major social security and welfare funds rose to 1,173.5 billion drachmas, from

¹ In the latter case, the relevant expenditure for 2000 is low, as the measure was first applied in September 2000. For the January-August 2000 period, persons entitled to this grant will receive the corresponding amounts with the clearing of income tax, in spring 2001.

TABLE VII.6
FINANCIAL RESULTS OF SOCIAL SECURITY FUNDS¹
AND THEIR FINANCING
(Billion drachmas)

	1998	1999	2000*	Budget for 2001	Percentage changes		
					1999/98	2000*/99	2001/00*
A' Operating account							
1. Revenue	2,614.4	2,894.5	3,136.9	3,382.9	10.7	8.4	7.8
2. Expenditure	3,329.4	3,751.0	4,203.6	4,521.3	12.7	12.1	7.6
3. Result (1 - 2)	<u>-715.0</u>	<u>-856.5</u>	<u>-1,066.7</u>	<u>-1,138.4</u>	<u>19.8</u>	<u>24.5</u>	<u>6.7</u>
B' Capital account							
4. Revenue	0.0	0.0	0.0	0.0	-	-	-
5. Expenditure	121.8	121.7	193.8	176.8	-0.1	59.2	-8.8
(Investment)	(108.0)	(112.4)	(141.2)	(139.3)	(4.1)	(25.6)	(-1.3)
(Working capital)	(13.8)	(9.3)	(52.6)	(37.5)	(-32.6)	(465.6)	(-28.7)
(Other)	(0.0)	(0.0)	(0.0)	(0.0)	(-)	(-)	(-)
6. Result (4 - 5)	<u>-121.8</u>	<u>-121.7</u>	<u>-193.8</u>	<u>-176.8</u>	<u>-0.1</u>	<u>59.2</u>	<u>-8.8</u>
7. Special resources	<u>44.3</u>	<u>80.0</u>	<u>87.0</u>	<u>2.6</u>	<u>80.6</u>	<u>8.8</u>	<u>-97.0</u>
TOTAL RESULT (3+6+7)	<u><u>-792.5</u></u>	<u><u>-898.2</u></u>	<u><u>-1,173.5</u></u>	<u><u>-1,312.6</u></u>	<u><u>13.3</u></u>	<u><u>30.7</u></u>	<u><u>11.9</u></u>
FINANCING							
8. Grants	<u>853.1</u>	<u>935.3</u>	<u>1,074.1</u>	<u>1,100.6</u>	<u>9.6</u>	<u>14.8</u>	<u>2.5</u>
(Ordinary budget)	(741.5)	(771.3)	(854.4)	(884.5)	(4.0)	(10.8)	(3.5)
(Public investment budget)	(5.1)	(34.0)	(50.7)	(41.0)	(566.7)	(49.1)	(-19.1)
(European Union etc.)	(106.5)	(130.0)	(169.0)	(175.1)	(22.1)	(30.0)	(3.6)
9. Depreciation	<u>0.4</u>	<u>0.3</u>	<u>0.4</u>	<u>0.4</u>	<u>-25.0</u>	<u>33.3</u>	<u>0.0</u>
10. Net borrowing requirement	<u>-61.0</u>	<u>-37.4</u>	<u>99.0</u>	<u>211.6</u>	<u>-38.7</u>	<u>-364.7</u>	<u>113.7</u>
TOTAL FINANCING	<u><u>792.5</u></u>	<u><u>898.2</u></u>	<u><u>1,173.5</u></u>	<u><u>1,312.6</u></u>	<u><u>13.3</u></u>	<u><u>30.7</u></u>	<u><u>11.9</u></u>
11. Amortisation payments	4.7	36.7	95.2	6.2	680.9	159.4	-93.5
12. Gross borrowing requirement (10+11)	-56.3	-0.7	194.2	217.8	-98.8	-	12.2

1 Including 7 social security funds [Social Insurance Fund (IKA), Seamen's Pension Fund (NAT), Farmers' Insurance Fund (OGA), Manpower Employment Agency (OAED), Workers' Housing Organisation (OEK), Workers' Fund (EE) and National Welfare Organisation (EOP)].

* Estimates.

Source: Ministry of National Economy.

898.2 billion drachmas in 1999. As a percentage of GDP, the total deficit recorded a limited increase, from 2.4% in 1999 to 2.9% in 2000.

Increased grants out of the state budget covered about 77% of this deficit. More specifically, ordinary budget grants reached 854.4 billion drachmas in 2000 (IKA: 207 billion drachmas, OGA: 483 billion drachmas and Seamen's Insurance Fund – NAT: 145 billion drachmas), compared with 771.3 billion drachmas in 1999. Public investment budget grants rose to 50.7 billion drachmas, compared with 34 billion in 1999.

Despite increased grants, the widening of the total deficit led to higher net borrowing requirements¹ of 99 billion drachmas, compared with a net surplus of 37.4 billion in 1999.

According to the Introductory Report on the Budget for 2001, the rate of increase in IKA's revenue decelerated in the 1998-2000 period (1998: 20.8%, 1999: 7.2%, 2000: 4.5%), while the rate of increase in its expenditure accelerated (1998: 8.2%, 1999: 10.7%, 2000: 8.7%). Thus, its operating deficit rose from 442.7 billion drachmas in 1999 to 562.8 billion in 2000. The slowdown of the growth rate of revenue, despite the increase in the number of persons insured and the measures taken under Law 2676/1999 to settle overdue debts, as well as the introduction of other measures to ensure payment of contributions, may have been related to structural weaknesses which will have to be dealt with. On the other hand, the upward trend observed in operating expenditure is attributable to the higher pensions and the greater number of pensioners (especially in 2000) as well as the increase in medical care outlays (especially in 1999).

The operating deficit of OGA rose to 387.7 billion drachmas in 2000, from 287.9 billion in 1999. This was exclusively due to a 23.1% increase in outlays for pensions, following a 30% rise in pensions as from 1 January 2000. Outlays for pharmaceuticals and hospitalisation fees showed no change.

Finally, the operating deficit of NAT remained at 1999 levels, as operating expenditure remained unchanged, while revenue recorded a small increase.

2.3 Public enterprises

According to data from the Ministry of National Economy and the Introductory Report on the Budget for 2001, the consolidated deficit of the operating and the capital accounts of public enterprises recorded a small increase (2.4%) in 2000, rising to 1,382.8 billion drachmas, from 1,350.2 billion in 1999. As a percentage of GDP, however, the consolidated deficit fell to 3.4%, from 3.5% in 1999.

The containment of the deficit is attributable to the good performance of operating account revenue, which grew by 27.9% compared with last year's revenue.² By contrast, neither expenditure (under the operating and the capital account) of public enter-

¹ On an accrual basis – not to be confused with the net borrowing requirements depicted in Table VII.2.

² The capital account offers no revenue.

TABLE VII.7
FINANCIAL RESULTS OF PUBLIC ENTERPRISES¹ AND THEIR FINANCING
(Billion drachmas)

	1998	1999	2000*	Budget for 2001	Percentage changes		
					1999/98	2000*/99	2001/00*
A' Operating account							
1. Revenue	3,915.7	4,262.3	5,449.8	5,862.7	8.9	27.9	7.6
2. Expenditure	3,727.9	4,037.7	5,131.2	5,434.2	8.3	27.1	5.9
3. Result (1 – 2)	187.8	224.6	318.6	428.5	19.6	41.9	34.5
B' Capital account							
4. Revenue	0.0	0.0	0.0	0.0	–	–	–
5. Expenditure	1,885.0	2,375.2	2,436.1	2,699.7	26.0	2.6	10.8
(Investment)	(1,574.8)	(1,648.0)	(1,933.3)	(2,382.9)	(4.6)	(17.3)	(23.3)
(Working capital)	(4.1)	(398.3)	(187.3)	(–29.1)	(–)	(–53.0)	(–115.5)
(Other)	(306.1)	(328.9)	(315.5)	(345.9)	(7.4)	(–4.1)	(9.6)
6. Result (4 – 5)	–1,885.0	–2,375.2	–2,436.1	–2,699.7	26.0	2.6	10.8
7. Special resources ²	738.1	800.4	734.7	805.1	8.4	–8.2	9.6
TOTAL RESULT (3+6+7)	–959.1	–1,350.2	–1,382.8	–1,466.1	40.8	2.4	6.0
FINANCING							
8. Grants	388.5	483.1	609.4	825.0	24.4	26.1	35.4
(Ordinary budget) ³	(–14.7)	(28.2)	(–27.0)	(34.0)	291.8	–195.7	225.9
(Public investment budget)	(348.9)	(418.7)	(585.7)	(748.6)	(20.0)	(39.9)	(27.8)
(European Union etc.)	(54.3)	(36.2)	(50.7)	(42.4)	(–33.3)	(40.1)	(–16.4)
9. Depreciation	393.4	445.0	468.0	584.6	13.1	5.2	24.9
10. Net borrowing requirement	177.2	422.1	305.4	56.5	138.2	–27.6	–81.5
TOTAL FINANCING	959.1	1,350.2	1,382.8	1,466.1	40.8	2.4	6.0
11. Amortisation payments ⁴	315.9	337.0	605.3	316.3	6.7	79.6	–47.7
12. Repayment of credit ⁴	12.2	13.0	23.3	12.2	6.6	79.2	–47.6
13. New suppliers' credit	68.6	264.6	77.4	12.3	285.7	–70.7	–84.1
14. Gross borrowing requirement (10+11+12–13)	436.7	507.5	856.6	372.7	16.2	68.8	–56.5

1 Including those public enterprises mentioned in the Introductory Report on the 2001 Budget.

2 Comprising advances and participations by Public Power Corporation consumers, lump-sum payments by Hellenic Telecommunications Organisation subscribers, participation of individuals in Water Supply and Sewerage Company projects, and own assets (from surpluses) of certain public enterprises.

3 Grants from the ordinary budget to those public enterprises which ran a deficit, minus collection of the surpluses of certain public enterprises (Soccer Pools Organisation, Duty Free Shops and Greek Horse Races Organisation).

4 Owing to a lack of data, these amounts are distributed over the above-mentioned periods according to estimates.

* Estimates.

Source: Ministry of National Economy.

prises (which rose by 18% in 2000 and 14.3% in 1999), nor special resources (which dropped by 8.2%) helped to contain the deficit.

The acceleration of the growth rate of total expenditure (operating and capital accounts) in 2000 is mainly attributable to the increase in operating account expenditure (27.1% compared with 8.3% in 1999) and, more specifically, to primary expenditure, which rose by 33.6%. By contrast, interest payments decreased by 23.3%, while expenditure under the capital account rose slightly (by 2.6%). The increase in primary expenditure was mainly due to the rise in oil prices and the appreciation of the US dollar. The considerable growth of revenue stemmed from increased revenue of the Water Supply and Sewerage Company (EYDAP), the Hellenic Aerospace Industry (EAB) and another 35 smaller public enterprises, which account for about 50% of total receipts. Revenues of the Public Power Corporation (DEH) and the Hellenic Telecommunications Organisation (OTE) recorded only a small increase (6.2% and 10.8% respectively).

The consolidated (operating and capital accounts) deficit of public enterprises was covered by grants out of the public investment budget and European Union funds (46% in total) and depreciation allowances (33.8%). The containment of the consolidated deficit, in conjunction with the considerable increase in grants (26.1%), resulted in the reduction of public enterprises' net borrowing requirement to 305.4 billion drachmas, from 422.1 billion in 1999.

OTE revenue grew by 10.8% compared with 1999, owing to the increase in the rates charged for local telephone calls, from 6 to 7 drachmas per unit as from 22 November 1999 and again from 7 to 9 drachmas per unit as from 12 August 2000. DEH revenue showed a moderate increase (6.2%), because electricity rates for household use were reduced by 7.5% as from 1 December 1999. At the same time, electricity consumption rose by about 7% relative to 1999, while, as from 1 September 2000, DEH increased its rates (for almost all categories) by 3%. OSE revenue declined by 3.9%, compared with a 5% increase in the previous year.

Olympic Airways revenue rose by 3.7%, compared with a decrease in 1999, in an environment characterised by growing competition on domestic routes.

Finally, EYDAP revenue grew by 36%, compared with 5% in 1999, owing to the 10% increase in rates (especially for large consumption) as from 1 July 2000, and also to the increase in consumption in 2000 (9.7%).

The largest increases in primary expenditure (under the operating account) were recorded by EYDAP (44.3%), EAB (19.3%), Olympic Airways (16%) and DEH (17%). In the last two cases, the increase in operating expenditure was due to a rise in fuel prices in the world market.

2.4 Public debt

According to available provisional data, the consolidated debt of general government fell, for the fourth consecutive year, to 103.9% of GDP from 104.6% of GDP in 1999 (see Table VII.8). This decrease occurred despite the depreciation of the drachma

towards its central parity to the euro and the appreciation of the US dollar, which led to an increase of 3 percentage points in the debt-to-GDP ratio.

The considerable decrease (7.4 percentage points) in the debt-to-GDP ratio in the 1996-2000 period resulted from the continuous improvement in the main determinants of the debt ratio (interest rates, primary surpluses, GDP growth rate), as well as in other factors causing a direct increase in debt (forfeiture of guarantees, assumption of the debt of entities not belonging to general government, interest capitalisation etc.).

More specifically, the continuous drop in interest rates on government borrowing, the existence of primary surpluses in the general government budget for seven consecu-

TABLE VII.8
CONSOLIDATED DEBT OF GENERAL GOVERNMENT*
(Billion drachmas)

	1996	1997	1998	1999	2000**
Treasury bills and short-term bonds	7,229	4,823	3,566	1,544	602
Medium-term and long-term bonds	20,188	24,697	28,281	31,150	33,803
Other medium-term and long-term loans	5,906	6,322	5,987	7,209	8,108
Total	33,323	35,842	37,834	39,903	42,513
Percentage of GDP	111.3	108.3	105.5	104.6	103.9
– domestic debt ¹	26,087	27,512	28,685	29,709	31,056
(of which: debt to the Bank of Greece)	(3,987)	(4,056)	(4,133)	(4,188)	(4,250)
– external debt	7,236	8,330	9,149	10,194	11,457

1 Including drachma-denominated securities held by non-residents, as well as Bank of Greece loans with a foreign currency clause.

* According to the definition in the Maastricht Treaty.

** Provisional data.

Sources: State General Accounting Office and Bank of Greece.

tive years, and faster economic growth since 1994 led to a weakening of debt dynamics and, eventually, to the decline of the debt-to-GDP ratio.

The direct increase in debt caused by factors other than the annual deficit (e.g. interest capitalisation, assumption of the debt of entities not belonging to general government and forfeiture of guarantees) has been considerably reduced, contributing to a drop in the debt-to-GDP ratio.

The exchange rate policy pursued in the 1994-1997 period has also helped reduce this ratio. However, the adjustment of the exchange rate of the drachma in March 1998, the depreciation of the euro against the US dollar and the Japanese yen in 1999 and the depreciation of the drachma against the euro and of the euro against the US dollar in 2000 had negative effect on the debt-to-GDP ratio.

Furthermore, an 840 billion drachma debt prepayment was effected in 2000 (1999: 1,070 billion drachmas, 1998: 667 billion drachmas), which was financed by the Public Portfolio Management Company (DEKA S.A.) and by proceeds from the securitisation of future non-tax revenue.

As in previous years, the debt structure changed a lot in 2000, as the policy aiming at lengthening the average debt maturity continued through the substitution of long-term bonds for Treasury bills and the issue, for the first time, of 20-year bonds. Thus, the average weighted maturity of new domestic debt rose to 8.4 years in 2000, from 6.1 years in 1999.

On 31 December 2000, 65.7% of the debt was denominated in drachmas and 34.3% in foreign currencies.¹ It is also estimated that about 80% of the debt consisted of negotiable government securities, while the remainder was made up of loans which are not directly negotiable in the secondary market.

As regards the term structure of the debt, at end-2000 1.4% represented short-term liabilities (of one year or less), 79.5% medium- and long-term liabilities in bonds, and the remaining 19.1% medium- and long-term loans and other liabilities.

Finally, on 31 December 2000, all Greek government securities in book-entry form were converted into euro using the bottom-up method. As from 1 January 2001, all book-entry government securities are expressed, issued and negotiable in euro. Besides, with the entry of Greece into the euro area, part of the foreign-currency-denominated debt has been converted into domestic debt.

3. THE BUDGET FOR 2001

3.1 *The central government budget*

The participation of Greece in the euro area as from 1 January 2001 changed the way in which economic policy is pursued. From the beginning of the year, monetary policy is conducted by the European Central Bank, while the role of fiscal policy, which is still conducted at the national level, has been upgraded and expanded. In this new environment, fiscal policy should not only satisfy the Stability and Growth Pact target for a budgetary position which is close to balance or in surplus, but should also deal with any inflationary pressures or other asymmetries that could affect the Greek economy. Meanwhile, steps should be taken to ensure that the debt-to-GDP ratio will continue to drop.

In this context, fiscal policy in 2001 is still restrictive. In particular, the government budget provides for a further reduction in the deficit, on an accrual basis, from 4.4% of GDP in 2000 to 3.3% in 2001 (see Table VII.9). Furthermore, for the first time after 1977, the ordinary budget is expected to be in balance. If outlays for the acquisition of assets (i.e.

¹ Including the part of Bank of Greece loans with a foreign currency clause, amounting to 3,131 billion drachmas. By contrast, in Table VII.8, this amount is included in domestic debt.

TABLE VIII.9
REVENUE, EXPENDITURE AND DEFICIT UNDER THE OVERALL GOVERNMENT BUDGET
(Billion drachmas)

	Budget for					Percentage changes				
	1997	1998	1999	2000*	Budget for 2001	1998/97	1999/98	2000*/99	Budget for 2001/00*	
Revenue										
1. Ordinary budget	9,185.4	10,412.5	11,603.0	12,760.0	13,905.0	13.4	11.4	10.0	9.0	
— Direct taxes	8,467.4	9,498.5	10,593.0	11,660.0	12,600.0	12.2	11.5	10.1	8.1	
— Indirect taxes	(2,767.1)	(3,591.4)	(4,043.5)	(4,657.2)	(4,879.0)	(29.8)	(12.6)	(15.2)	(4.8)	
— Other revenue	(866.4)	(658.7)	(695.6)	(659.7)	(830.7)	(8.6)	(11.5)	(8.4)	(8.6)	
2. Public investment budget	718.0	914.0	1,010.0	1,100.0	1,305.0	(-24.0)	(5.6)	(-5.2)	(25.9)	
Expenditure										
1.1 Ordinary budget ¹	11,690.8	12,538.5	13,526.4	14,547.0	15,380.0	7.3	7.9	7.5	5.7	
Interest payments ²	10,064.3	10,661.0	11,276.4	12,016.0 ³	12,600.0 ³	5.9	5.8	6.6	4.9	
1.2 Primary ordinary budget expenditure	(3,216.2)	(3,233.7)	(3,303.4)	(3,390.0)	(3,310.0)	(0.5)	(2.2)	(2.6)	(-2.4)	
2. Public investment budget ⁴	6,848.1	7,427.3	7,973.0	8,626.0 ⁵	9,290.0 ⁵	8.5	7.3	8.2	7.7	
Net deficit (-)/surplus (+)	1,626.5	1,877.5	2,250.0 ⁵	2,531.0 ⁵	2,780.0	15.4	19.8	12.5	9.8	
Percentage of GDP										
1. Ordinary budget	-2,505.4	-2,126.0	-1,923.4	-1,787.0	-1,475.0	-15.1	-9.5	-7.1	-17.5	
2. Public investment budget	-7.6	-5.9	-5.0	-4.4	-3.3					
Primary deficit (-)/surplus (+)⁴	-1,596.9	-1,162.5	-683.4	-356.0	0.0					
Percentage of GDP	-908.5	-963.5	-1,240.0	-1,431.0	-1,475.0					
ELEGEF (Revenue = Expenditure)	710.8	1,107.7	1,380.0	1,603.0	1,835.0					
Amortisation payments ²	2.1	3.1	3.6	3.9	4.2					
	819.0	793.0	806.1	822.2	930.0	-3.2	1.7	2.0	13.1	
	3,589.4	3,536.4	3,406.0	4,622.8	3,806.0	-1.5	-3.7	21.9	-8.3	

1 Excluding amortisation payments.

2 Including, respectively, interest and amortisation payments related to the national defence debt.

3 Including expenditure for the support of persons hit by the 1999 earthquake, amounting to 31 billion drachmas in 2000 and 20 billion drachmas in 2001.

4 Expenditure for 1997, 1998, 1999, 2000 and 2001 includes 420, 482, 480, 600 and 630 billion drachmas respectively, which concern capital transfers for the acquisition of assets. If these amounts, along with those granted in 1999, 2000 and 2001 to support persons hit by the 1999 earthquake, are deducted, the primary surplus for 1997, 1998, 1999, 2000 and 2001 rises to 3.4%, 4.4%, 5.0%, 5.7%, and 5.6% of GDP respectively.

5 Including expenditure for the support of persons hit by the 1999 earthquake, amounting to 30 billion drachmas in 1999 and 88 billion drachmas in 2000.

* Provisional data.

Source: State General Accounting Office.

public enterprises' shares) and extraordinary expenditure for earthquake victims are deducted, the budget deficit drops to 1.9% of GDP, compared with 2.6% in 2000. The latter aggregate, on a national accounts basis and at general government level, corresponds to a 0.5% surplus for 2001, compared with a 0.9% deficit in 2000. Thus, already from its first year in the euro area, Greece is expected to satisfy the Stability and Growth Pact target for a budgetary position which is close to balance or in surplus.

The abolition of, or cuts in, certain taxes, as well as the faster reduction of public debt (decrease of 5% of GDP in 2001), are further positive elements of the new budget. For the first time, the budget provides for tax cuts (e.g. abolition of the special tax on banking transactions (EFTE), reduction of corporate income tax rates etc.), which aim at strengthening the competitiveness of the Greek economy.

Despite tax cuts, fiscal adjustment in 2001 is based, as in previous years, more on the increase in revenue than on the containment of expenditure. Government budget revenue, despite its large growth in previous years (1999: 11.4%, 2000: 10.0%), is expected to increase by another 9.0% in 2001, while the rate of increase in government budget expenditure is expected to slow down, to 5.7% from 7.5% in 2000. This containment will come mainly from the decrease in interest payments, which are expected to fall by 2.4% in 2001, compared with a rise of 2.6% in 2000. By contrast, primary expenditure under the government budget is expected to increase by 8.2% in 2001 (2000: 9.1%). This high rate is mainly attributable to the large increase expected in public investment outlays.

Ordinary budget revenue is forecast to increase by 8.1% and reach 12,600 billion drachmas. This increase will stem mainly from the expected growth of real GDP (5%), the new settlement of outstanding income and capital tax cases, as well as from increased revenue from the taxation of stock exchange transactions. The attainment of this target will not be easy, especially since some measures were taken after the budget was compiled (e.g. the reduction in the tax rate on stock exchange transactions).

Ordinary budget expenditure is expected to rise by 4.9% in 2001, compared with 6.6% in 2000, and reach 12,600 billion drachmas. However, primary expenditure will rise faster (7.7%), as interest payments are expected to drop by 2.4%. In general, as in the previous years, budget expenditure in 2001 is considerably reduced. On the basis of past experience, it is estimated that it will be difficult to maintain expenditure at budgeted levels. This view is supported by the fact that many claims have accumulated (e.g. granting, after a court decision, of the children allowance to both spouses if both of them are civil servants), which could exert upward pressure on personnel outlays, while there are expectations for additional social benefits.

Public investment budget expenditure is to grow by 9.8% in 2001, compared with 12.5% in 2000, and reach 2,780 billion drachmas. This includes capital transfers to public enterprises totalling 630 billion drachmas. The increase reflects the effort to complete, within 2001, projects that have been included in the 2nd Community Support Framework (CSF), as well to promote projects included in the 3rd CSF. This expenditure also includes credit for projects connected with the Athens 2004 Olympic Games. Out of total outlays

T A B L E VII.10
FINANCIAL ACCOUNT OF GREECE WITH THE EUROPEAN UNION
 (Billion drachmas)

	Annual aggregates					Percentage changes				Budget for 2001/00*
	1997	1998	1999	2000*	Budget for 2001	1998/97	1999/98	2000*/99	2001/00*	
A. Receipts from the European Union	<u>1,671.7</u>	<u>1,832.2</u>	<u>1,981.9</u>	<u>2,023.0</u>	<u>2,263.1</u>	<u>9.6</u>	<u>8.2</u>	<u>2.1</u>	<u>11.9</u>	
1. Refund to cover cost of collecting the Union's "own resources" (10% per cent of collected resources)	5.6	6.1	6.8	7.5	7.4	8.9	11.5	10.3	-1.3	
2. Social Fund	89.5	128.5	211.4	217.1	157.2	43.6	64.5	2.7	-27.6	
3. EAGGF - Guidance Section	105.1	108.4	109.4	141.0	133.0	3.1	0.9	28.9	-5.7	
4. Regional Fund	475.1	605.3	653.2	699.0	739.0	27.4	7.9	7.0	5.7	
5. EAGGF - Guarantee Section	838.6	814.2	838.2	858.0	979.5	-2.9	2.9	2.4	14.2	
6. Other receipts	5.1	4.2	3.9	2.5	2.0	-17.6	-7.1	-35.9	-20.0	
7. Cohesion Fund	144.1	155.7	143.5	82.0	240.0	8.0	-7.8	-42.9	192.7	
8. Receipts from EFTA countries	2.8	2.4	3.3	2.9	-	-14.3	37.5	-12.1	-	
9. Fisheries Fund	5.8	7.4	12.2	13.0	5.0	27.6	64.9	6.6	-61.5	
B. Payments to the European Union	<u>375.2</u>	<u>455.2</u>	<u>434.7</u>	<u>463.9</u>	<u>538.0</u>	<u>21.3</u>	<u>-4.5</u>	<u>6.7</u>	<u>16.0</u>	
1. Agricultural levies and duties	3.2	2.9	3.5	3.0	3.7	-9.4	20.7	-14.3	23.3	
2. Sugar levies	3.1	4.1	3.9	3.7	3.5	32.3	-4.9	-5.1	-5.4	
3. Customs duties under the Common External Tariffs provision	49.9	53.8	60.6	68.7	66.6	7.8	12.6	13.4	-3.1	
4. Contribution on the basis of revenue from VAT	177.8	188.0	191.8	194.0	220.0	5.7	2.0	1.1	13.4	
5. Contribution on the basis of GDP	123.5	172.6	173.6	185.0	213.2	39.8	0.6	6.6	15.2	
6. Other contributions	12.7	19.9	1.3	1.9	18.0	56.7	-93.5	46.2	847.4	
7. Contribution to the European Development Fund	4.5	9.8	-	7.6	10.0	117.8	-	-	31.6	
8. Payments due to unrealised projects	0.5	4.1	-	-	1.0	720.0	-	-	-	
9. Contribution to the food aid programme	-	-	-	-	2.0	-	-	-	-	
Net receipts from the European Union (A-B)	<u>1,296.5</u>	<u>1,377.0</u>	<u>1,547.2</u>	<u>1,559.1</u>	<u>1,725.1</u>	<u>6.2</u>	<u>12.4</u>	<u>0.8</u>	<u>10.6</u>	

* Ministry of Finance estimates.

Source: State General Accounting Office.

for public investment, 75.5% will be used for projects co-financed by EU structural funds, while the rest will be used for projects financed solely through national resources. The rate of increase in public investment budget revenue is expected to accelerate to 18.6% in 2001, from 8.9% in 2000, leading to the containment of the public investment budget deficit, on an accrual basis, from 3.5% of GDP in 2000 to 3.3% in 2001.

Finally, net receipts from the EU in 2001 are expected to increase by 10.6% to 1,725.1 billion drachmas, against a mere 0.8% rise in 2000 (see Table VII.10). This development is attributable to the large shortfall of receipts (400 billion drachmas) in 2000. As a result, budgeted receipts for 2001 show an 11.9% increase instead of a small decrease. Furthermore, payments to the European Union recorded a 16% increase over 2000, due to the increase in contributions on the basis of GDP (15.2%) and the VAT base (13.4%).

3.2 The budget of public enterprises and social security and welfare funds

According to the Introductory Report on the Budget for 2001, the financial results of the seven major social security and welfare funds are expected to register only a marginal deterioration in 2001 (see Table VII.6), as reflected in their overall deficit and their net borrowing requirement.

The consolidated deficit of the operating and the capital account is expected to increase by 139 billion drachmas (2000: 1,173.5 billion drachmas, 2001: 1,312.6 billion drachmas). As a percentage of GDP, it is expected to record a marginal rise from 2.9% to 3.0%. The net borrowing requirement, however, is expected to double, both in absolute terms and as a percentage of GDP.

Revenue under the operating account is expected to rise by 7.8%, while operating expenditure is budgeted to increase by 7.6% in 2001. Since expenditure exceeds revenue by about 1 trillion drachmas, the increase in both revenue and expenditure, at about the same rate, leads to a further rise of roughly 72 billion drachmas in the consolidated deficit relative to 2000. The rest of this increase is attributable to the sharp drop in special resources, from 87 billion drachmas in 2000 to 2.6 billion in 2001. By contrast, investment outlays and working capital requirements are expected to decrease compared with 2000 and thus help contain the increase in the consolidated deficit (see Table VII.6). According to the Introductory Report, the increase in operating expenditure is mainly due to the rise in pensions and other health and welfare benefits, which had been announced in 2000 and took effect as from 1 January 2001.

Despite the increase in social benefits, grants to social security and welfare funds out of the ordinary budget and the European Union increased only moderately (3.5% and 3.6% respectively). At the same time, grants out of the public investment budget are expected to be lower than in 2000. The widening of the consolidated deficit, combined with the moderate increase in grants (2.5% in total), is expected to lead to an increase in the net borrowing requirement from 99 billion drachmas in 2000 to 211.6 billion in 2001.

As a percentage of GDP, net borrowing requirement is expected to double, from 0.24% in 2000 to 0.48% in 2001.

According to the Introductory Report on the Budget for 2001, the consolidated deficit of public enterprises is expected to drop marginally from 3.4% of GDP in 2000 to 3.3% in 2001 (see Table VII.7). Net borrowing requirement is expected to show a steep decline, as it will also be affected by the budgeted large increase in grants (35.4%).

The operating account is expected to leave an increased surplus of 428.5 billion drachmas in 2001, compared with 318.6 billion in 2000. This 34.5% rise in the surplus will stem from operating revenue, which will grow faster (7.6%) than expenditure (5.9%). By contrast, the capital account deficit is expected to rise by 10.8%, mainly owing to the 23.3% increase in investment outlays. The budgeted increase in the operating account surplus and the larger capital account deficit will lead to a limited rise, in absolute terms, in the consolidated deficit, from 1,382.8 billion drachmas in 2000 to 1,466.1 in 2001. As a percentage of GDP however, the consolidated deficit drops from 3.4% to 3.3% in 2001.

These developments, combined with the budgeted increase in grants (35.4%), will lead to a sharp fall in public enterprises' net borrowing requirement, from 305.4 billion drachmas in 2000 to 56.5 billion in 2001. Total grants for 2001 are projected to reach 825 billion drachmas, 90.7% of which comes from the public investment budget, while the rest comes from various EU funds (5.1%) and the ordinary budget (4.1%).

APPENDIX TO CHAPTER VII

TAX POLICY MEASURES

As was also the case in the previous year, 2000 has been a year of significant and extensive tax reforms, while laws that had been enacted in the past were put into effect. These reforms had many goals, such as the simplification of the tax system, the widespread use of personal computers and Internet access, the increase in tax revenue, the further curbing of tax evasion and the more equitable distribution of the tax burden among tax-payers. For the first time, one of the goals was to enhance the competitiveness of the Greek economy in the world market.

Under Law 2842/2000 “Adoption of additional measures for the implementation of Regulations (EC) 1103/97, 974/98 and 2866/98 of the Council, as amended, on the introduction of the euro”, expenses incurred by enterprises for the introduction of the single currency are equated with establishment expenses and are depreciated in five equal annual instalments or in a one-off payment.

Most provisions were enacted under Law 2873/2000 “Tax simplification and other provisions”, which provides for the indexation of the income tax scale, the decrease in certain tax rates, the abolition of certain taxes, and other changes in direct and indirect taxation. More specifically, in personal income tax, the personal allowance for wage-earners and pensioners is increased from 2.3 to 2.4 million drachmas for income earned in 2001. For other tax-payers, the tax-free amount rises from 2.0 to 2.1 million drachmas for 2001 income. For 2001 income, the tax brackets are indexed by 5% and the highest marginal tax rate is cut from 45% to 42.5% for 2001 income and to 40% for 2002 income. The deduction for taxpayers with three children is increased to 70,000 drachmas per child, while for taxpayers with four children to 80,000 drachmas per child. For tax-payers with more children, the deduction rises by 10,000 drachmas for each child after the fourth. Expenses for the purchase of personal computers, training software and Internet access are deducted from 2001 taxable income. For the calculation of imputed income for taxpayers with at least three children, the criterion of ownership of a passenger car with an engine displacement of 2000 cm³ is abolished.

Furthermore, for the calculation of imputed income from owner-occupied dwellings, the tax-free limit of 150 square metres for main (and secondary) residence is raised by 20 square meters for each of the first two children and by another 30 square metres for each child after the second.

As regards corporate income tax, the tax rate for sociétés anonymes not listed on the Athens Stock Exchange is reduced from 40% to 37.5% for 2001 income and to 35% for 2002 income.

For capital taxation, the tax deduction for the purchase of the first residence in one’s lifetime, as calculated on the basis of a ceiling on the dwelling’s total area, increases from 15 to 25 square metres for the third child. Additionally, the tax deduction for the

purchase of the first residence rises by 5,750,000 drachmas for each of the first two children and by 10 million drachmas for each child after the second. Furthermore, the same law provides for an increase in the tax deduction for the transfer of agricultural real estate.

The Special Tax on Banking Transactions is abolished as from 1 January 2001, while the circulation dues for public use vehicles are cut by 50% as from 2001. Additionally, 58 taxes collected on behalf of third parties are abolished, as their yield is insignificant, and the same applies to 1,000 cases of fixed stamp duties. Additionally, as from 28 December 2000: (a) the rate on the special consumption tax on gasoline for the category up to 96.5 octanes rises from 98,000 to 101,000 drachmas per kilolitre, while for the category above 96.5 octanes it remains unchanged at 108,000 drachmas per kilolitre, and (b) the rate on the special consumption tax on a type of unleaded gasoline which can be used by conventional cars using leaded gasoline is fixed at 111,000 drachmas.

Finally, as from 2001, tax-payers may submit their tax returns through the Internet, and they are no longer obliged to submit, together with their tax returns, documents justifying their expenses (although they have to keep them for five years). Additionally, the auditing services of the Ministry of Finance are restructured to become more efficient.

Under Law 2874/2000 "Promotion of employment and other provisions", the tax rate on stock exchange transactions is cut from 0.6% to 0.3%, as from 1 January 2001. The same law stipulates that enterprises keeping accounting books of category C may, for the financial year 2000, deduct from their gross revenue (in five equal annual instalments) any loss incurred from the sale or valuation of shares listed on the Athens Stock Exchange. Such losses are deducted to the amount that they exceed the reserves of such enterprises.

Law 2892/2001 "Reliefs in capital taxation and other provisions" provides for decreases in capital taxation. More specifically, the tax-free amounts on donations, inheritances and parental gifts are increased by about 20%. Furthermore, tax rates on the transfer of real estate are cut by 2 percentage points, while tax-free amounts for the purchase of the first residence rise by 20%. As regards the taxation of large real estate, the tax-free amount is increased, as from 1 January 2002, from 69 to 83 million drachmas. Furthermore, the deadline for the settlement of pending capital tax cases is extended to 31 October 2001.

The same law provides for a limited increase, as from 9 March 2001, of the special consumption tax on liquid fuel. Specifically, (a) the rate of the special consumption tax on high-compression leaded gasoline is increased from 114,000 to 114,500 drachmas per kilolitre and (b) the rate of the special consumption tax on the type of unleaded gasoline which can be used by conventional cars using leaded gasoline is raised from 111,000 to 114,500 drachmas per kilolitre. This way, these rates are harmonised with the ones applying in other EU countries. Furthermore, the taxable value of slightly used (for less than a year) imported cars, as well as of those which have been circulating for more than 10 years, is reduced. This arrangement was necessary to achieve harmonisation with other EU countries.

Finally, the "objective values" of real estate in all regions of the country are increased as from 5 March 2001. The increases differ from one region to another and, in some cases, come to 100%.

VIII. BALANCE OF PAYMENTS

1. INTRODUCTION

The current account deficit increased by €3,571 million in 2000 compared with that of 1999 and came to €8,371 million. This increase came as a result of a rise in the trade deficit (the net oil bill in particular), lower EU transfers due to delays, and a deteri-

TABLE VIII.1
BALANCE OF PAYMENTS

	January – December (million ECU/euro) ¹			Percentage changes		January – December (billion drachmas)			Percentage changes	
	1998	1999	2000*	1999/98	2000/99	1998	1999	2000*	1999/98	2000/99
Current account										
balance	-3,286.5	-4,800.5	-8,371.5	46.1	74.4	-1,144.3	-1,567.4	-2,820.1	37.0	79.9
(% of GDP)	(3.2)	(4.1)	(6.9)			(3.2)	(4.1)	(6.9)		
Trade balance	-14,823.4	-16,888.7	-21,927.5	13.9	29.8	-4,937.2	-5,505.9	-7,382.9	11.5	34.1
(% of GDP)	(13.8)	(14.4)	(18.1)			(13.8)	(14.4)	(18.1)		
Goods exports	5,922.9	8,030.3	11,098.6			1,962.4	2,617.1	3,739.6		
Goods imports	20,746.3	24,919.0	33,026.1			6,899.6	8,123.0	11,122.5		
Non-oil trade balance	-13,659.4	-15,450.7	-18,940.8	13.1	22.6	-4,553.8	-5,036.5	-6,376.9	10.6	26.6
Oil trade balance	-1,164.0	-1,438.0	-2,986.7	23.5	107.7	-383.3	-469.4	-1,006.1	22.4	114.3
Services balance	6,072.6	6,846.5	8,711.1	12.7	27.2	2,006.4	2,231.0	2,938.0	11.2	31.7
Exports	9,968.3	15,575.5	20,977.0			3,301.6	5,078.0	7,070.1		
Imports	3,895.7	8,729.0	12,266.0			1,295.1	2,847.0	4,132.1		
Income balance	-1,381.8	-626.5	-955.1	-54.7	52.5	-458.0	-203.8	-321.2	-55.5	57.7
Receipts	1,362.0	2,414.1	3,039.2			451.4	786.4	1,023.4		
Payments	2,743.8	3,040.6	3,994.3			909.4	990.1	1,344.6		
Transfers										
balance	6,846.1	5,868.2	5,800.1	-14.3	-1.2	2,244.5	1,911.3	1,946.0	-14.8	1.8
Receipts	7,276.4	6,795.2	6,767.3			2,388.6	2,213.9	2,271.5		
Payments	430.3	927.0	967.2			144.1	302.6	325.6		
Financial account										
balance	3,394.6	4,748.1	8,906.3			1,012.3	1,557.5	2,996.9		
Errors and omissions	-108.1	52.3	-534.8			-1,418.8	-128.0	1,942.2		
Reserve assets										
(end of period)	15,576.2	18,836.9	14,520.0			5,140.3	6,222.8	4,948.0		

1 ECU for 1998; euro for 1999 and 2000.

* Provisional data.

Source: Bank of Greece, NSSG and Ministry of National Economy.

oration in the income deficit. By contrast, the surplus of services increased significantly. As a percentage of GDP, the current account deficit rose from 4.1% in 1999 to 6.9% in 2000. Almost half of this change (1.3 percentage point out of a total of 2.8 percentage points) is attributed to net oil imports, while the remainder is related to the fact that in recent years the Greek economy has grown at faster rates than its trading partners, hence a rise in imports and high trade deficits were to be expected. Concerning the evolution of

the trade deficit, what matters most is whether the remaining components of the current account can cover part of the trade deficit with the remaining part being financed by investment capital inflows, rather than by excess borrowing. Over the medium term, increased imports, as long as they do not regard consumer goods, will contribute to the improvement of competitiveness of the export sectors of the economy, including services. At the same time, an additional important contribution to further economic growth should come from foreign capital inflows, which will accelerate the growth rate of investment and, in combination with the introduction of the appropriate know-how, will lead to higher productivity and, ultimately, to faster real economic convergence.

With Greece's entry into the euro area as from 1 January 2001, the financing of the current account deficit no longer constitutes – to the same degree as in the past – a constraint directly affecting the conduct of economic policy. However, the evolution of the current account balance remains a useful indicator of the competitiveness of the economy. Any increase in the current account deficit would generally suggest that investment increases faster than savings. The crucial issue is whether higher investment will bring about an increase in output and allow the repayment of debt assumed or whether, instead, any increase in consumer goods imports and foreign borrowing will finally lead to an adjustment of the economy with negative repercussions on the nation's standard of living.

Concerning the financial account, in the course of 2000 portfolio investment recorded a net inflow of €9,107.5 million, while direct investment and, most notably, "other investment" recorded a net outflow. The combined result of these developments, including general government borrowing, was that the country's foreign exchange reserves came to \$13.5 billion at end-2000.

International investment position (IIP), on which data (referring to end-1999 and end-2000) are first published this year, provides an overall picture of the country's external assets and liabilities (see Box VIII.1). For a country with high rates of investment and economic growth, a liability IIP is expected to increase year-on-year as a percentage of GDP.

2. CURRENT ACCOUNT

In 2000 the current account deficit – on the basis of provisional data compiled and processed by the Bank of Greece – came to €8,371 million, namely €3,571 million higher than in 1999. This deterioration is attributed to (i) an increase in the trade deficit (in particular the oil deficit), (ii) lower EU transfers owing to delays, although an increase had been expected,¹ hence a smaller surplus on transfers, and (iii) an increase in the income deficit. By contrast, the surplus of services increased substantially.

1 It should be recalled that any differences in EU transfers figures between the balance of payments data of the Bank of Greece and those of the Ministry of Finance are due to the fact that the former are calculated on a cash basis and the latter on a fiscal basis.

A high percentage (43.4%) of the increase in the current account deficit and a considerable part (30.7%) of the widening of the trade deficit reflect increased net oil imports (imports minus exports). This development was mainly associated with the sharp increase in world crude oil prices (in dollar terms) and the appreciation of the dollar vis-à-vis the euro and the drachma, but also with the considerable increase in the volume of imports.¹ Both non-oil exports and imports grew at fast rates (25% and 23.3% respectively, in euro terms), and as a result the non-oil deficit increased by €3,490 million (given that the value of Greek imports is more than triple that of exports).

The increase in exports is associated with an improvement in price competitiveness during 2000,² which offset the small losses of 1999 and continued the trend observed since 1998. It is also related to developments in the “new markets”. Indeed, as suggested by NSSG data for the ten-month period between January and October 2000, the increase in Greek exports to Balkan countries, the countries of Middle East and the Mediterranean, as well as

TABLE VIII.2
OIL IMPORTS AND EXPORTS

	Million USD			Percentage change	
	1998	1999	2000*	1999/98	2000/99
Imports	2,024.3	2,674.0	4,968.9	32.1	85.8
Exports	726.7	1,148.4	2,221.2	58.0	93.4
Oil balance	-1,297.6	-1,525.6	-2,747.7	17.6	80.1
Crude oil price (USD/barrel)	12.7	17.9	28.4	40.3	59.0
Import volume (million barrels)	158.9	149.6	174.8	-5.8	16.8

* Provisional data.

Source: Bank of Greece.

to the countries of Central Europe and the former USSR, was faster than the increase in exports to EU countries and more generally to the more developed OECD countries, in comparison with the respective period of 1999. This led to an increase in the share of exports to the former group at the expense of the latter group of countries. It should be noted, in this respect, that the share of exports to Balkan countries in total exports rose from 11% in the January-October 1999 period to 14.6% in the respective period of 2000.

1 In 2000 the average price of Brent crude oil increased by 59%. Consequently, the rise in the oil import bill implies an increase in the volume of imports (by 16.8% in 2000). This development is associated with the need to stockpiling in the early 2000, after a considerable reduction in stocks in the previous year.

2 Price competitiveness, as measured by the real effective exchange rate of the drachma in terms of unit labour cost in manufacturing, the Consumer Price Index and Wholesale Price Index, is estimated to have improved on average by 4.2%, 5.2% and 2.3% respectively in 2000. It should be reminded that an improvement of competitiveness corresponds to a reduction in the real effective exchange rate.

On the other hand, the large increase in the import bill stemmed primarily from certain categories of products. It should be noted that, although the imports of two categories of products, namely a) fixed and mobile telephony and b) computers and their accessories, rose at exceptionally high rates, their contribution in the increase of the total import bill was relatively limited (6.5% and 4.4% respectively). By contrast, the strong growth of industrial production and investment activity boosted the imports of raw materials, semi-finished products and capital goods, together accounting for 31.8% of the import bill. At the same time, the acceleration of the growth rate of disposable income, in conjunction with increased liquidity, led to a large increase in imports of consumer goods, mainly passenger cars. It should be noted, however, that, as certain categories of consumer goods are characterised by sharp changes in demand and are influenced by expected yields on the capital market, a weakening or even a decline in the imports categories concerned may be anticipated. By contrast, it is estimated that the imports of those capital goods that relate to public or private investment aimed at improving the infrastructure and the productivity of the economy will continue to increase.

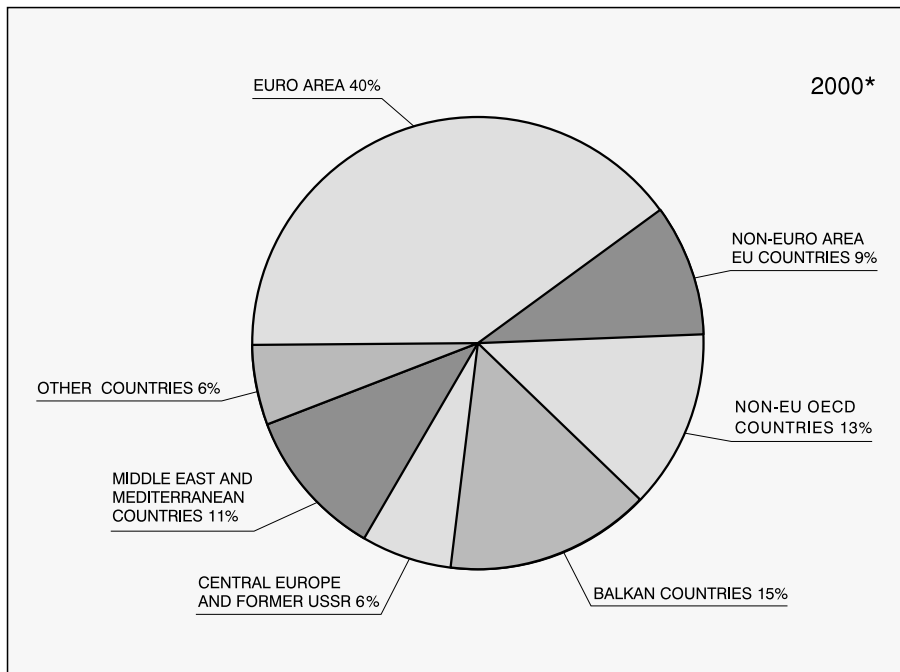
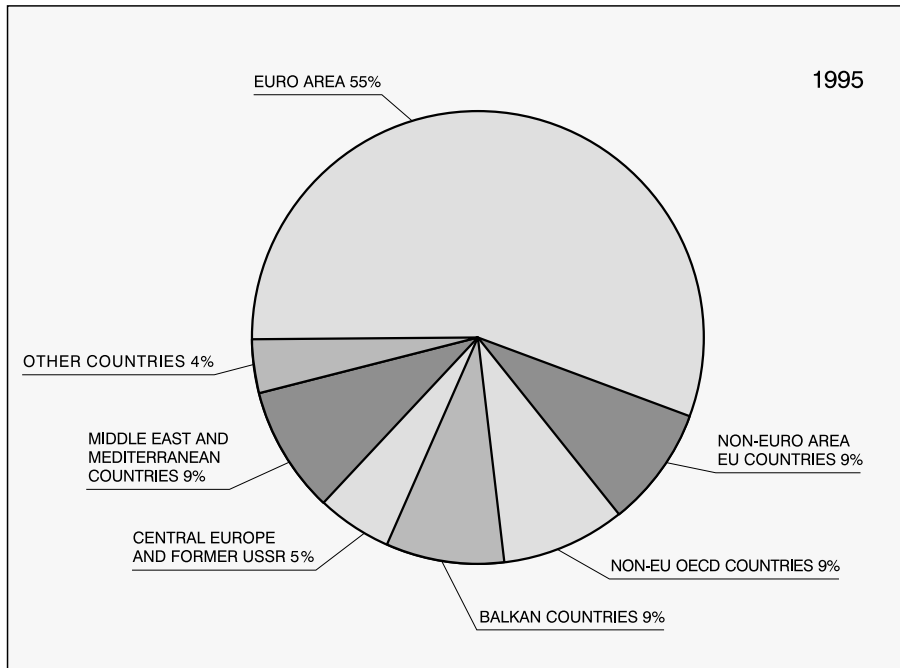
Given that the services sector accounts for the largest part of the Greek GDP, an analysis of developments in the external transactions of this sector is of particular interest. Specifically, in 2000 the surplus of services rose by €1,864 million to €8,711 million, thus offsetting 37% of the increase in the total trade deficit. This improvement in the services surplus is due to higher net receipts (receipts minus payments) from travel and – chiefly – transport services (up 12.7% and 52.9 % respectively).

Gross travel receipts rose by 21.3%, reflecting not only the increased number of tourists that visited Greece,¹ but also an increase in *per capita* expenditure, according to balance of payments statistics. This can be explained by a change in the composition of tourists (with an increased share for higher income tourists), as well as by the improvement of the data quality referring to tourists' total expenditure in Greece. The large increase in travel receipts is also associated with the improved competitiveness of Greek tourist services. The high importance of travel receipts (8.3% of GDP in 2000, compared with 7.1% of GDP for non-oil exports) highlights the need to formulate a strategy for the further development of tourist services in the direction of quality improvement rather than quantity increase. This would help to keep the tourist sector in line with the overall economic growth and ensure environment protection; it will also prolong the tourist period, with beneficiary effects on growth and employment. The effort to improve tourist services must be continuous and encompass both traditional and modern services (combining e.g. cultural, sports and training activities, health services etc), particularly in view of the Olympic Games of 2004, aimed at new target groups.

1 Even though the latest available NSSG data on charter arrivals in the major airports of the country (referring to the tourist period of April-October 2000) indicate an increase of a mere 1.9% (in relation to the respective period of 1999), it is estimated that the growth rate of total tourist arrivals is much higher, given that tourists increasingly travel using "regular" flights, following the establishment of many private airlines and the increased competition.

CHART VIII.1

GREEK EXPORTS BY DESTINATION (EXCLUDING FUEL)



* Provisional data. January-October.

Source: NSSG.

Travel payments grew substantially (by 31.6%, in euro terms), reflecting a strong increase in households' disposable income, and the larger share of education and health care in these payments, following the abolition of foreign exchange controls.

Both receipts and payments for transportation services rose at very high rates (77.4% and 96.8% respectively), partly reflecting the increasingly better recording of actual transportation activity, thanks to the introduction of the new method for balance of payments compilation. In addition, the increase in receipts is associated with the continued growth of the Greek-owned commercial fleet¹ and the strong recovery of freights,² while the increase in payments is largely related to the improved recording of shipping enter-

TABLE VIII.3
BREAKDOWN OF THE INCREASE (2000*/1999) IN THE NON-OIL IMPORT BILL
IN EURO, BY PRODUCT CATEGORY

Categories of products	Percentage change	Percentage share in the import bill increase
Raw materials and semi-finished products	29.1	18.3
Capital goods	18.4	13.5
Computers and accessories	34.2	4.4
Fixed and mobile telephony	61.9	6.5
Consumer durables	22.9	9.2
Passenger cars	30.8	17.6
Food, beverages, tobacco	11.5	9.1
Consumer non-durables	17.6	24.2
Other	-43.2	-2.8
Total	20.9	100.0

* Provisional data.

Source: Bank of Greece.

prises' total expenditure. It seems that the transportation industry, mainly sea transportation, will continue to be a key source of income for the Greek economy.

The income deficit increased by 329 million euro in 2000, stemming entirely from increased payments for interest, dividends and profits (up €342 million). Specifically, interest payments increased to €3.289 million in 2000 from €2.628 million in 1999. These payments, which regard public and private debt, include interest on Greek government bonds and deposits held by non-residents. Payments for dividends and profits grew considerably (although they account for a small share in total income outflows), reflecting an

1 The Greek-owned fleet, which ranks first on a global level in terms of tonnage (GRT) and represents about 17% of the world fleet, at end-2000 amounts to 3,584 ships (of over 1,000 tons each), compared with 2,426 ships in 1990 and 3,204 in 1997 (Hellenic Chamber of Shipping data).

2 According to Bloomberg data, the general freight index "BDIY" (in dollar terms), has been constantly rising over the last two years and stood at about 1,760 points in early November 2000, compared with 780 points in mid-January 1999.

increase in non-residents' assets/claims coming under direct or equity portfolio investment. At the same time, of course, the respective receipts rose too, owing to higher outward investment.¹

T A B L E VIII.4
BALANCE ON SERVICES, INCOME AND TRANSFERS
(Million ECU/euro)¹

	1998	1999	2000*
Services balance	6,072.6	6,846.5	8,711.1
Exports	9,968.3	15,575.5	20,977.0
Travel	5,513.8	8,296.2	10,061.2
Transport	1,931.7	4,871.5	8,640.6
Other services	2,522.8	2,407.8	2,275.2
Imports	3,895.7	8,729.0	12,266.0
Travel	1,557.5	3,760.8	4,948.9
Transport	429.4	2,265.5	4,458.3
Other services	1,908.8	2,702.6	2,858.8
Income balance	-1,381.8	-626.5	-955.1
Receipts	1,362.0	2,414.1	3,039.2
Wages, salaries	335.1	576.5	631.0
Interest, dividends, profits	1,026.8	1,837.6	2,408.3
Payments	2,743.8	3,040.6	3,994.3
Wages, salaries	323.2	231.2	272.0
Interest, dividends, profits	2,420.5	2,809.4	3,722.4
Transfers balance	6,846.1	5,868.2	5,800.1
Receipts	7,276.4	6,795.2	6,767.3
General government (net EU transfers)	4,327.4	4,250.1	3,972.1
Other sectors (emigrants' remittances etc.)	2,949.0	2,545.1	2,795.2
Payments	430.3	927.0	967.2
General government	10.7	190.1	208.5
Other sectors	419.6	736.9	758.8

¹ ECU for 1998; euro for 1999 and 2000.

* Provisional data.

Source: Bank of Greece.

Developments in the balance of transfers were largely determined by delays in EU transfers, bringing net EU transfers (receipts minus payments) down to €3,972 million in 2000, from €4,250 million in 1999. Receipts from the Guarantees Section of the European Agricultural Guidance and Guarantees Fund (EAGGF) remained broadly at the levels of

¹ Consequently, a forecast on the course of the balance of income, requires an assessment of future developments in the country's net international investment position (residents' investment abroad minus non-residents' investment in Greece)

the previous year, while the growth rate of inflows from Structural Funds declined. This development is mainly attributed to the fact that the expected advance payments under the 3rd Community Support Framework (CSF) had not been received by the end of 2000,¹ as the relevant programmes were approved by the European Commission in February 2001.² The advance payments under the 3rd CSF, which have already started, the first payments regarding the implementation of programmes under the 3rd Community Support Framework and the final payments concerning programmes under the 2nd CSF³ will secure increased net transfers from the EU in the current year.

Emigrants' remittances, which are included in the "other sectors" category, increased by €181 billion, mainly due to the appreciation of the dollar, since the number of Greek emigrants has declined in recent years.

3. FINANCIAL ACCOUNT

In 2000, total net investment (inflows minus outflows), comprising direct investment, portfolio investment and "other" investment, amounted to €3,135 million, compared with €5,197 million in 1999. Specifically, "direct investment" recorded a net outflow of €1,116 million, compared with an almost zero net inflow (€9 million) in 1999. This development is due to the fact that residents' investment abroad rose substantially in comparison with the previous year (from €518 million to €2,319 million in 2000), together with an increase in foreign investment in Greece. Direct investment inflows include an amount of €1,685 million for the full acquisition of the British-based company Coca Cola Beverages by the Hellenic Bottling Company. It should be noted, however, that before the acquisition the Greek company had proceeded to a capital increase, which was entirely covered by the stockholders of the British company. This is reflected in an equivalent inflow under portfolio investment. Consequently, that transaction, although not affecting the financial balance, led to a substantial change in each of the two components. Besides, as in the previous years, the year 2000 witnessed the penetration of Greek enterprises in the Balkan countries. Greek investment in these countries took mainly the form of acquisitions of local enterprises and was primarily directed to Albania and the FYROM. The

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- 1 The way in which advance payments of the programmes under the 3rd CSF are effected is determined on the basis of Council Regulation 1260/99 concerning Structural Funds, according to which (article 32), in the first commitment of appropriation the European Commission pays, in the form of "advance payment", 7% of total community participation, which, depending on the funds available under the community budget, is given in parts in the first two years of the period for which the programmes are being drawn up (3.5% in 2000 and 3.5% in 2001).
 - 2 The 3rd CSF is subject to new management, monitoring and control regulations, which were put into force by Law 2860/2000, Government Gazette A 251/14 November 2000.
 - 3 In the 1994-2000 period Greece absorbed from the EU budget more than 90% of the amount allocated to the country by the Structural Funds, as provided for in the 2nd CSF, while according to the fiscal rules governing the completion of these programmes, 100% of the resources must have been absorbed by 31 December 2001.

most noteworthy of these investments was the take-over by COSMOTE of the Albanian mobile telephony company for €48 million.

Concerning direct foreign investment in Greece, two major capital inflows were recorded in June and December 2000. The former regards Portuguese participation (amounting to €361 million) in the capital of Nova Bank and the latter the purchase of shares (worth €278 million) of the Commercial Bank of Greece by Crédit Agricole. These two investments accounted for about half of foreign direct investment in 2000.

Net inflows of portfolio investment (i.e. investment in bonds and shares) increased considerably, reflecting, on one hand, the partial reversal of foreign investors' tendency to liquidate shares and, on the other, the broadly sustained inflow of funds for the purchase

TABLE VIII.5
FINANCIAL ACCOUNT BALANCE

	Million euro ¹			Billion drachmas*		
	1998	1999	2000*	1998	1999	2000
Financial account balance (I+II+III+IV)	3,394.6	4,748.1	8,906.3	1,012.3	1,557.5	2,996.9
I. Direct investment	309.2	9.2	-1,116.2	102.6	1.4	-375.0
II. Portfolio investment	10,700.0	5,706.0	9,107.5	3,490.8	1,847.9	3,063.0
III. Other investment	-3,219.7	-518.2	-4,856.8	-1,162.2	-163.8	-1,633.3
Assets	-5,693.6	-4,457.1	-1,060.6	-1,928.5	-1,460.5	-358.6
Liabilities	2,473.8	3,938.9	-3,796.2	766.3	1,296.7	-1,274.7
(General government borrowing)	(2,174.1)	(604.3)	(-437.7)	(688.3)	(196.1)	(-156.5)
IV. Reserve asset changes	-4,394.9	-448.9	5,771.7	-1,418.8	-128.0	1,942.2
Errors and omissions	-108.1	52.3	-534.8	132.0	9.9	-176.8

1 ECU for 1998; euro for 1999 and 2000.

* Provisional data.

Source: Bank of Greece.

of Greek bonds, despite lower yield differentials between Greek and German bonds. Besides, as was the case also in 1999, investment outflows concerned not only the purchase of bonds, but also – and mainly – the purchase of shares, a fact related to developments in the Greek capital market. Finally, the “other” investment item recorded a net outflow, which in fact was very high, as residents' foreign borrowing was negative (outflow of €3.8 billion), while in 1999 it was positive (inflow of €2.6 billion). As concerns deposits, it should be noted that, while the outflow of residents' deposits abroad (mostly by corporate depositors, in particular banks) declined (from €4.1 billion in 1999 to €1.6 billion in 2000), non-residents' deposits in Greece were reversed from an inflow of €1.7 billion in 1999 to an outflow of €3.5 billion in 2000. Thus, the total “other investment” item was negatively affected. As regards general government borrowing, repayments were €438 million higher than new borrowing, compared with a net borrowing of €604 million in 1999.

Owing to the above developments in the current account and the capital account, Greece's foreign exchange reserves declined by \$5,413 million in the course of 2000 and stood at \$13.5 billion at end-December 2000.

4. INTERNATIONAL INVESTMENT POSITION

International investment position changed from €–43.9 billion at end-1999 to €–51.2 billion at end-2000. As a percentage of GDP, it increased from 38% to 42.7% over the same period. Specifically, direct investment abroad grew considerably, by €2.2 billion, while foreign direct investment rose by a mere €0.6 billion, leading to an improvement in the country's direct investment position. Portfolio investment had a negative contribution to the change of the international investment position, as the country's assets under this item increased by €1.1 billion only, while the respective liabilities grew by €3.2 billion. Besides, the considerable increase in liabilities under the "other" investment category resulted in the deterioration of the international investment position by €2.5 billion. However, it should be noted that, given the high deficit of the current account, attributed

BOX VIII.1

International investment position: definition and calculation

Following International Monetary Fund instructions,¹ the framework governing statistical information on the external sector of an economy includes in addition to external transactions – i.e. flows between residents and non-residents – the international investment position, namely the net balance between external financial assets and the respective liabilities. The international investment position is a useful indicator for assessing the performance of an economy and is directly related to the evolution of external transactions in previous years, as reflected in the analysis of the balance of payments.

Greece's international investment position provides a picture of financial assets and liabilities of residents vis-à-vis non-residents, which lends itself to an analysis of financial transactions in an international context. Thus, commentary is not any more one-sided, i.e. in terms of liabilities (e.g. foreign borrowing) only, but the respective assets are also considered. With particular regard to short-term "other investment" (loans, deposits), the category of liabilities is now of limited analytical interest unless it is correlated with the category of assets.

The international investment position compiled for Greece includes the main items of the financial account according to the IMF's conceptual framework for the balance of payments, namely: (1) direct investment (a) abroad and (b) home, (2) portfolio investment (a) assets and (b) liabilities, (3) other "investment" (a) assets and (b) liabilities, (4) financial derivatives and (5) reserve assets. →

¹ IMF, *Balance of Payments Manual*, 5th edition, 1993 (BPM5).

→ Adjustment to the new IMF conceptual framework will shortly be completed by the units of the Bank of Greece. The data, which are published for the first time, refer to estimates of the country's international investment position at end-1999 and provisional data/estimates for the end of 2000.

Apart from statistical reporting on the balance of payments, additional sources have been used for the compilation of the international investment position:

1. Data on the stocks of direct investment (defined as a participation of more than 10% in the equity capital) were calculated on the basis of the results of a sample survey conducted for this purpose. Specifically, a questionnaire was sent to a sample of about 800 Greek-based businesses which had received direct investment from abroad, as well as to a sample of about 150 businesses with operations abroad. Data on direct investment abroad are not considered to

INTERNATIONAL INVESTMENT POSITION
(Million euro)

	1999	2000 ¹
1. Direct investment	-11,898	-10,271
Abroad	3,916	6,163
Home	15,814	16,434
2. Portfolio investment	-50,471	-52,531
Assets	2,117	3,228
Liabilities	52,587	55,759
3. Financial derivatives	14	18
4. Other investment	-418	-2,935
Assets	35,300	36,684
Liabilities	35,719	39,618
5. Reserve assets	18,837	14,520
International investment position	-43,936	-51,199
(Memo item: GDP)²	115,475	120,029
% of GDP	-38.0	-42.7

1 Provisional estimates.

2 On the basis of exchange rates as at 31 December.

Source: Bank of Greece.

be fully reliable, as they do not include investment abroad by Greek shipping enterprises, by small enterprises in the Balkans, or Greek investment in real estate abroad.

2. Data on portfolio investment liabilities have been provided by custodians (credit institutions, Securities Companies) operating in Greece. It should be noted, however, that data on assets are incomplete, as the coverage of household investment is inadequate.

3. Assets/liabilities of resident credit institutions have been compiled on the basis of data from the "Monthly Financial Statement of Banks".

4. For general government liabilities, data from the State General Accounting Office and the Bank of Greece have been used.

5. For external borrowing liabilities (bond issues, bank loans) of the enterprises of "the other sectors of the economy", data have been derived from a survey which covered about →

→ 1,000 enterprises, along with responses to a questionnaire addressed to public enterprises and entities.

6. Assets of the “other sectors of economy” were calculated from BIS data on Greek residents’ deposits with banks abroad.

It should be noted that the survey, based on annual questionnaires (direct investment, debt of the “other sectors”), has not been completed for 2000, as most enterprises included in the samples have not yet published their balance sheets. The international investment position as at the end of 2000 has been estimated on the basis of flow data from the balance of payments and, in the case of portfolio investment, information provided by credit institutions and custodians. The picture derived is provisional and will be finalised in September 2001, when data from specific surveys are to be collected.

mainly to the economic environment, the international investment position as it turned out was rather expected. At the same time, it is fair to assume that the rate of increase in the observed net liability position could decelerate or stabilise in the following years, once the necessary structural reforms are introduced. Such reforms will both attract more direct investment from abroad and, more generally, enhance the economy’s productivity and competitiveness over the medium term.

IX. THE BANKING SYSTEM AND ITS SUPERVISION

1. INTERNATIONAL TRENDS

The recent years have been a period of restructuring and reorientation for the credit system worldwide. Advances in information systems and telecommunications have made access to geographically remote areas feasible and cost-effective. European banks are faced with an additional challenge, as a result of European unification and the adoption of the single currency in the context of EMU. The introduction of the euro is acting as a catalyst in further stimulating competition and speeding up structural changes, which have become necessary also because of the ongoing disintermediation process.

Banks are under pressure both on the side of assets and on the side of liabilities. The growth of capital markets and the relatively easy access to them, at least by large enterprises, have led to an increase in fund-raising directly from the market, to some extent at the expense of bank lending. On the liabilities side, where the heaviest pressure is exerted, the increasing role of institutional investors – mutual funds, investment companies, pension funds – has made it more difficult for banks to attract deposits. These developments have squeezed bank profits and have led banks to search for additional sources of income and for ways of reducing their operating costs.

Banks' response is characterised by efforts to further expand in the field of retail banking, where their competitive advantage is upheld by technological developments that allow the efficient management of an increased volume of information. Their response is also manifested in a shift to investment banking, insurance services, financial derivatives, asset management and, more generally, in the integration of institutional investors into larger banking groups that follow a single development strategy. These adjustments have had a direct impact on the structure of banks' results, with an increase in non-interest income which is associated with on-balance and off-balance sheet items; the latter items, in particular, have grown substantially in recent years. For instance, in the five years from 1995 to 1999 Greek commercial banks' assets grew by 129%, while off-balance-sheet items increased by about 400%.

Concerns about these changes are twofold: on the one hand, they refer to profitability; on the other, to the monitoring and control of risks associated with credit institutions' activities that are increased and diversified relative to the past.

Bank profitability reflects the combined performance of their net interest and non-interest income and operating expenses.

– Banks' net interest income is a function of the volume of their interest-bearing operations, in particular credit operations, and the difference between lending and deposit rates, i.e. banks' interest rate margins. Although in recent years the evolution of bank loans as a percentage of bank assets has exhibited diverging patterns in Europe and worldwide, a downward trend in banks' net interest income (as a proportion of their total assets) can be

observed (see Table IX.1), which is generally attributable to a narrowing in banks' interest rate margins, as pointed out in a relevant study by the European Central Bank (ECB).¹ Banks' margins are determined by a number of factors, such as competitive pressures, the level and fluctuations of market interest rates, the extent to which credits are backed by collateral or can be securitised, operating costs, taxation etc. The ECB study concludes that increased competition in Europe in recent years has squeezed banks' margins. In the context of the gradual convergence of interest rates in the European Union, the largest

TABLE IX.1
COMMERCIAL BANK LOANS AND NET INTEREST INCOME
(% of assets)

Country	Loans		Net interest income	
	1995	1999	1995	1999
Austria ^{1,2}	50.9	49.5	1.72	1.36
Belgium ¹	32.7	33.4	1.22	1.09
Canada	66.5	61.3	2.56	1.88
Finland ²	48.4	56.4	1.44	1.57
France	34.0	29.4	0.80	0.49
Germany	57.4	50.3	1.98	1.43
Greece ³	28.1	36.6	2.09	2.70
Italy ¹	42.4	44.3	2.85	2.23
Japan	66.8	66.0	1.45	1.40
Netherlands ¹	60.5	60.7	1.87	1.70
Portugal	33.3	47.7	2.28	2.05
Spain	41.1	47.3	2.34	1.85
Sweden	43.6	37.6	2.68	1.23
Switzerland ¹	56.2	41.5	1.33	1.08
United Kingdom	52.1	54.3	2.32	2.05
United States	63.4	63.8	3.72	3.52

1 All banks.

2 1998 data.

3 Greek commercial banks.

Sources: Bank of Greece and OECD, *Bank Profitability*, 2000.

declines, as was to be expected, were observed in those countries which at the start of Stage Two of EMU had witnessed the highest banks' margins.

— The development of activities other than those generating interest income is a strategic choice of credit institutions in their effort to compensate for loss of income or to increase revenue in order to deal with stronger pressure from competition, in general, and from disintermediation in particular. The increased share of non-interest income in the total income of European banks over the last decade is confirmed by another ECB study²

1 European Central Bank, *EU Banks' Margins and Credit Standards*, December 2000.

2 European Central Bank, *EU Banks' Income Structure*, April 2000.

and is attributed both to the dynamism of that specific category of income and to the reduction in interest income as a percentage of banks' assets.¹

— The control of operating costs is of vital importance to banks. Technological developments enable banks to use advanced information systems and to adopt more efficient corporate structures; they also enable them to develop alternative distribution channels for their products, to limit extensive and costly branch networks and to create small, more flexible units unburdened of support operations, since such operations can now be carried out by head offices. However, in view of the high costs entailed by the acquisition (and continuous upgrading) of modern information systems and electronic marketing media, banks need to formulate a very cautious strategy, so as to become or remain competitive and, at the same time, absorb those costs. Such a strategy could involve mergers, cooperation with other banks and restructuring of banking groups, with a view to taking advantage of any existing synergies and achieving economies of scale.

Developments in the financial environment have also affected the risks faced by credit institutions. Specifically, the creation of EMU and the resulting conditions of macroeconomic stability have reduced foreign-exchange and credit risks, as well as liquidity and interest-rate risks. However, as the more financially sound enterprises increasingly have recourse to the capital market, the less solvent enterprises may come to represent a larger share in banks' loan portfolios. Furthermore, efforts to expand and spread operations to new — and typically more complex — products and to new markets involve additional risks, the monitoring of which requires more training and specialisation and burdens credit institutions with increased control and coordination tasks. It is also important that banks, when pricing their products or accepting collateral, take into account cyclical factors and possible future price developments in securities and real estate markets. However, it is estimated that the continuous enhancement of supervision regulations worldwide and the upgrading of banks' internal control systems, which has been attained to a considerable extent in recent years, create conditions conducive to the smooth operation of the credit industry in the euro area.

2. THE GREEK BANKING SYSTEM

The year 2000 was very important for Greek banks, as it was the last before Greece's entry into the euro area. Following the marked consolidation activity in the previous years, particularly in 1998 and the first half of 1999, a number of banks focused on the integration of their new acquisitions and the functional unification of their operations

¹ In several EU countries there seems to be a reverse relationship between interest income and income from other operations, which implies that fluctuations in the income of one category may, to a certain extent, be offset by fluctuations in the income of the other. These indications, however, should be assessed with caution, given both the changes brought about in the composition of income from other operations and the effect that differentiations in banks' pricing policy and their customers-approach policy, in general, have upon this composition.

so as to reap the benefits of consolidation in terms of lower costs and centralised coordination.¹ Other notable developments during 2000 were the cooperation agreement between the Commercial Bank and the French bank Credit Agricole, the continuing expansion of Greek banks' presence in the Balkans with selective acquisitions of credit institutions, as well as the recent (March 2001) agreement for the buy-out of "Telesis Investment-Bank" by EFG Eurobank Ergasias. In 2000, three new entrants joined the Greek banking market,² with activities that seem to concentrate on specific segments of the market, such as investment banking and consumer credit.

Regarding the activity of foreign banks in Greece, two basic trends can be observed, depending on the policy of their parent banks: some of them are expanding their activities and enlarging their branch networks, while others place emphasis on specific segments, where they enjoy a competitive advantage due to their expertise and/or presence in international financial markets. There are also some individual cases of foreign credit institutions that, in the context of broader strategies, have chosen to withdraw from the Greek market, as for instance Barclays Bank, which sold its network to HSBC. On the other hand, in late 2000 and early 2001 two EU banks began operations in Greece. In the last five-year period, foreign banks' business in Greece recorded a relatively small increase and their share in the total assets of the domestic credit system³ fell to 13.7% at end-2000 from 15.4% at end-1995.

In general, credit institutions operating in Greece have developed considerably in recent years, with their assets in 1999 accounting for about 126% of GDP. Still, this percentage is one of the lowest in Europe and it is about half the corresponding percentages of countries such as Austria, France, Germany and Ireland (see Table IX.2). This suggests that there is room for the further development of the Greek financial market.

The size of Greek credit institutions, in spite of recent mergers and acquisitions, remains small by European standards. On the basis of total assets at end-1999, only two Greek banks rank among the 100 largest European banks, with the first of these two in the rather low 74th position,⁴ alongside 4 Spanish, 4 Portuguese, 8 French, 12 from the United Kingdom, 12 Italian and 22 German banks. Against this background, at least the largest Greek banks are trying to stand out as strong regional players, mainly in the Balkans and the Southeastern Mediterranean in general, relying primarily on their substantial share in the domestic retail banking market, as well as on their presence in international financial centres and on their cooperation and strategic alliances with foreign institutions of a European-wide calibre.

Greek banks' lending as a percentage of their total assets is relatively low compared with other countries (see Table IX.1). The comparison of balance sheets across commercial banks in various European countries in 1999 shows that Greece has one of the

1 We should characteristically note the integration of Alpha Credit Bank, Macedonia-Thrace Bank and Chios Bank into the Bank of Piraeus and of Ergobank into Eurobank.

2 Nova Bank, Unit Bank and the Investment Bank of Greece.

3 Excluding the Postal Savings Bank and the Loans and Deposits Fund, which have a special status.

4 *The Banker*, Top 500 Europeans, September 2000.

lowest ratios of banks' outstanding claims from credit relative to total assets (36.6%), with only France and Belgium featuring lower in the list. The corresponding ratios of other countries ranged between 37.6% (Sweden) to 60.7% (the Netherlands). The divergence is even more pronounced when one compares with non-European countries: the corresponding figures for the United States, Japan and Canada, for instance, exceed 60%.

However, the banks' published balance sheets for 2000 show that the above percentage has exceeded 40%. This is due to the fact that a number of constraints on the expansion of bank lending no longer apply or are losing in importance. These include the restrictions that until the early '90s applied to certain types of lending, as well as banks' heavy investment in Greek government securities, high reserve ratios and the relatively

TABLE IX.2
TOTAL ASSETS OF CREDIT INSTITUTIONS IN 1999
(% of GDP)

Country	%
Austria ¹	246.5
Belgium	333.1
Denmark ²	130.1
Finland ¹	97.2
France	277.2
Germany	240.6
Greece	126.1
Ireland	251.5
Italy	135.2
Norway	97.7
Spain	162.9
Sweden	124.8
Switzerland	543.3

1 1998 data.

2 Data on banks whose assets exceed 250 million DKK.

Sources: Bank of Greece, Sveriges Riksbank, OECD, *Main Economic Indicators*, December 2000, and OECD, *Bank Profitability*, 2000.

high lending rates (mainly in the context of the anti-inflationary monetary policy pursued at that time). Greek bank rates have now for the most part converged with the lower level of their European counterparts. Also, since mid-2000 credit institutions' reserve requirements have been fully harmonised with those applied by the Eurosystem, in terms of both the reserve base and the reserve ratio (which is now 2%, compared with 12% previously applicable in Greece). Following this adjustment, banks will be able to freely manage funds totalling €4.7 billion, which were released by the central bank in the first quarter of 2001, while additional funds totalling €2.9 billion and €4.9 billion are to be released in the second half of 2001 and the first half of 2002 respectively.

Among individual types of lending, the largest increases have been recorded in loans to trade, housing and consumer loans, i.e. those types that were subject to restric-

tions until a few years ago. In the 1998-2000 three-year period, credit to trade increased at an average annual rate of about 22% and accounted for 22.4% of total lending to the private sector at the end of 2000, compared with 20.8% at the end of 1997. This development partly reflected an increase in the retail sales volume, which was facilitated by the deregulation of consumer loans, the promotion of the use of credit cards (which more than doubled in the 1998-2000 period) and an increase in sales on credit. Over the same period, housing loans grew at an annual rate of 26% and consumer loans at an annual rate of 37%, thus representing 20.4% and 10% respectively of total lending to the private sector at end-2000, compared with 17.3% and 6.7% at end-1997. In spite of this considerable increase, bank lending to households in Greece as a percentage of GDP remains lower than in other EU countries. In December 1999, total bank lending to households (i.e. consumer and housing loans together) corresponded to 11.3% of GDP in Italy, 30.7% in Spain, 32.5% in France and 50.8% in Portugal, compared with 11.1% in Greece (14% in December 2000).

The rapid growth of housing and consumer loans is attributable to the high potential of the market for such banking products, mainly due to the abolition of past restrictions. Moreover, retail banking is considered less vulnerable to international competition and, given the closer relationship between banks and retail customers, there are conditions that favour more permanent cooperations and consequently more stable income flows for credit institutions. Thus, banks have strong incentives to expand their retail operations, but they have to be very cautious when assessing and monitoring such loans, so as to avoid their customers' overindebtedness and their own exposure to excessive risks.

Unlike lending, deposits with Greek banks, as a percentage of their total assets, are among the highest worldwide (see Table IX.3). As shown by data from commercial banks' balance sheets for 1999 in the EU countries, deposits as a percentage of assets varied between 22.7% (France) to 55.2% (Finland). The corresponding percentage for Greek commercial banks was 67.7%, which becomes 77% including repos, which recorded a very large increase in 1999 and 2000 owing to their favourable tax treatment. However, the decline in interest rates and the gradual shift of investors from deposits to other financial products have induced Greek banks to offer new products, in an effort to maintain their deposit base. These products are of an investment nature and take the form of time deposits with maturities of up to 5 years, in which the bank guarantees the total principal and, in certain cases, a minimum return. As a rule, however, the returns on such investments are not guaranteed but are usually linked to stock exchange indices, mostly of foreign capital markets, or to exchange rate projections.

The deregulation of the Greek financial market and banks' effort to expand to new types of lending has enhanced competition and considerably reduced the difference between lending and deposit rates, particularly in recent years. For instance, the difference between the interest rate on short-term lending to enterprises and the interest rate on savings deposits narrowed by about 3.5 percentage points to 6.6% in January 2001, from 10% in January 1998.

The profitability of Greek banks in recent years has been satisfactory. However, the results for 2000 point to weaker performance relative to 1999. This development had been anticipated, for two main reasons. First, the results for 1999 were particularly positive due to extraordinary factors, such as the favourable conditions prevailing in the Athens Stock Exchange, which generated high profits from sales of securities and commissions from stock exchange transactions and management of bond issues. Second, the financial results of certain banking groups in 2000 have been burdened with the costs of past mergers and acquisitions. These costs concerned the unification of information systems, the rationalisation of branch networks, the integration of staff into the new corpo-

TABLE IX.3
DEPOSITS WITH COMMERCIAL BANKS IN 1999
(% of assets)

Country	%
Austria ^{1,2}	40.1
Belgium ¹	37.4
Canada	59.4
Finland ²	55.2
France	22.7
Germany	42.8
Greece ³	67.7
Italy ¹	29.6
Japan	77.9
Netherlands ¹	46.6
Portugal	46.8
Spain	43.8
Sweden	40.0
Switzerland ¹	44.2
United Kingdom	51.2
United States	66.2

1 All banks.

2 1998 data.

3 Greek commercial banks.

Sources: Bank of Greece and OECD, *Bank Profitability*, 2000.

rate structure, the redesigning of operations and the formulation of a single strategy. On the other hand, benefits from mergers will take some time to reap, as operating costs will be gradually reduced through economies of scale and higher productivity.

In spite of increased pressure from international competition in the banking sector, Greek banks can, on certain conditions, maintain their profitability at satisfactory levels in the future. One major reason underlying this assessment is that, according to estimates, demand for financial services will rise faster in Greece than in other European countries. Indeed, as already mentioned, banks' assets/GDP ratio is lower than that in other European countries. Furthermore, the fact that certain segments of the credit market, such as consumer and housing loans, are on an upward trend and are less mature than

other markets confirms that the Greek financial sector has a potential for further expansion. Finally, comparisons across EU countries show that there is considerable room for development in the insurance market,¹ especially life insurance, which explains why credit institutions are increasingly interested in this market.

3. DEVELOPMENTS IN THE INSTITUTIONAL FRAMEWORK OF BANKING SUPERVISION

Discussions at the EU level this year continue to focus on two major issues: (i) the revision of the framework for the supervision of credit institutions' and investment firms' capital adequacy with respect to credit and operational risks and (ii) the establishment of a framework for the supervision of financial conglomerates, in particular those which, apart from credit institutions and investment firms, include insurance companies.

Regarding the revision of the capital adequacy framework, the European Commission's work is coordinated with that of the Basle Committee on Banking Supervision. A second round of consultations is already under way, both at European and at international level, based on reviewed and detailed proposals, and will be completed by the end of May 2001. Also, with the participation of credit institutions from all states concerned, a survey is being conducted on the quantitative impact that the new revised framework will have on banks' capital position. The results of this survey will be submitted to an *ad hoc* committee in June 2001, which will report to the Basle Committee and the European Commission providing them with reliable evidence on the matter, before the finalisation of the new institutional framework, which will be adopted by the end of 2001 and start to be implemented in 2004.

Regarding the prudential supervision of financial conglomerates, the European Commission has already elaborated a proposal for a Directive, based on a report of the Mixed Technical Group of Experts, aimed at addressing the complementary supervision of financial conglomerates, as defined in the Directive, and amending, where necessary, the sectoral directives that govern the supervision of credit institutions, investment firms and insurance companies. The Directive proposal is mainly focused on the determination of capital adequacy at a conglomerate-wide level, the monitoring and control of risk concentration and of the transactions within the same conglomerate, as well as on cooperation between sectoral supervisors. Specifically, the proposal provides for the appointment of a coordinator-supervisor for the conglomerate and sets forth his responsibilities. The Directive concerning the complementary supervision of financial conglomerates will be adopted in 2001 and for the initial identification of its scope, Member States have been requested to submit a list of financial conglomerates falling into the definition of the Directive.

In 2000 the ECOFIN Council adopted a Common Position on a Directive concerning the re-organisation and winding down of credit institutions and a Directive supplementing the Directive on the prevention and suppression of money laundering. During

¹ According to data compiled by the Association of Hellenic Insurance Companies, in 1999 the amount of insurance premia, as a percentage of GDP, was only 2.1% for Greece, compared with 8.1% for the EU.

the same year, Directive 2000/46/EC on the taking-up, pursuit of, and prudential supervision of, the business of electronic money institutions, as well as Directive 2000/31/EC on electronic commerce were adopted.

Regarding the Greek supervisory framework, the Bank of Greece has recently increased by about 50% the minimum initial capital requirement of credit institutions, whether sociétés anonymes or credit cooperatives. This increase was warranted by credit institutions' higher risks, as well as by their need to undertake substantial investment in infrastructure to respond to the existing competitive conditions. It should be noted that the latest adjustment of the minimum initial capital was decided eight years ago. Besides, a Bank of Greece Governor's Act amending Bank of Greece Governor's Act 2054/1992 on the solvency ratio of credit institutions will soon be issued, so that the relevant provisions of Directives 98/32/EC and 98/33/EC will be transposed into Greek law.

4. KEY INDICATORS OF CAPITAL ADEQUACY FOR COMMERCIAL AND COOPERATIVE BANKS

According to data reported by banks to the Bank of Greece in the context of the central bank's responsibilities for prudential supervision, commercial banks' prudential own funds, on a non-consolidated basis, increased by 35% to 3,755.1 billion drachmas between 30 June 1999 and 30 June 2000. The main components of own funds (capital, reserves, results brought forward) cover almost entirely Greek commercial banks' prudential own funds. On the other hand, total risk-weighted assets and off-balance-sheet items on a non-consolidated basis, including the notional assets corresponding to capital requirements against market risks, rose by 21% in the same period and stood at 22,770.1 billion drachmas at end-June 2000.

Thus, the capital adequacy ratio of Greek commercial banks on a non-consolidated basis increased from 14.7% at end-June 1999 to 16.5% at end-June 2000. Calculated on a consolidated basis, this ratio came from 11.8% to 15.7% in the same period. However, if the shortage of provisions for bad debts against the minimum provisions required under Bank of Greece Governor's Act 2442/1999 is taken into account, the above ratio falls by about 1.3 percentage points at end-June 2000.

The capital adequacy ratio of the total of cooperative banks also increased slightly between the end of June 1999 and the end of June 2000 (from 38.6% to 51.7%).

5. OTHER SUPERVISORY ISSUES

5.1 Credit institutions' changeover to the euro

The Bank of Greece, through its Banking Supervision Department, oversees credit institutions' response to the demands implied by the introduction of the single currency, with emphasis on the adaptation of their information systems. By a document communi-

cated to all credit institutions in May 2000, the Bank specified the necessary adjustments of information systems and the other actions that credit institutions have to take in this field so as to cope with the requirements of the transitional period (1 January 2001 to 31 December 2001). In that document, the Bank pointed out that credit institutions should prepare in time for the cash changeover to the euro, by adapting their ATMs, banknote sorting equipment and support applications, and reminded these institutions of the key parameters of the changeover project, with a view to ensuring the smooth introduction of euro banknotes and coins and avoiding bottlenecks towards the end of 2001. It also recommended that each credit institution set up a committee for the coordination of the changeover project and draw up a comprehensive plan and requested credit institutions to report the name of their project manager, their basic strategic options and an implementation timetable.

Judging from the data submitted in this context and from the monitoring of the project so far, the state of credit institutions' preparedness is quite satisfactory. The project is proceeding smoothly and on schedule. The Bank of Greece, through its Banking Supervision Department, will continue to oversee the development of this major project during the remainder of the transitional period and after the launch of the euro banknotes and coins and will cooperate with all domestic and international bodies and authorities involved in the project, in accordance with the relevant guidelines of the European Central Bank.

5.2 Prevention and suppression of money laundering

In 2000, the Bank of Greece, within its field of competence,¹ continued to issue circulars and guidelines aimed at adjusting to the requirements of the international community the regulatory framework for the prevention and suppression of money laundering.

The monitoring of compliance with such circulars and guidelines is an important part of the on-site inspections carried out by Bank of Greece supervisors, and sanctions are imposed whenever cases of non-compliance are detected. However, money laundering cannot be effectively combatted without the active involvement of the financial system. Credit institutions and financial organisations must step up their efforts to implement Law 2331/95 re: "Prevention and suppression of money laundering" and the relevant circulars of the Bank of Greece, among other things by adopting "Get to know your customer" procedures or by ensuring adequate training and awareness of their staff, so that they can identify any transaction that is likely to be linked to money laundering and report it to the competent authority. However, both on-site inspections and the uneven distribution among banks of reports on suspicious transactions to the competent authority show that some Greek banks have not yet met satisfactorily their obligations.

¹ As defined in Law 2331/95 re: "Prevention and suppression of money laundering".

The Bank of Greece attaches particular importance to the effective implementation of the above law and the relevant circulars it has issued. The cooperation of credit institutions in this field is taken seriously into account in the assessment of their administrative organisation and internal control procedures.

APPENDIX TO CHAPTER IX

CHRONOLOGY OF MAIN MEASURES CONCERNING THE ESTABLISHMENT AND OPERATION OF CREDIT INSTITUTIONS AND THE SUPERVISION OF THE FINANCIAL SYSTEM

17 March 2000

- The absorption of the Ionian and Popular Bank by Alpha Credit Bank is approved.
- The Piraeus Bank is authorised to take over the Romanian bank “Banca de Credit Pater S.A.”.

30 March 2000

- The National Bank of Greece is authorised to acquire 65% of the share capital of the Skopje-based “Stopanska Bank A.D.-Skopje”.
- A new bank under the name of “Novabank S.A.” is authorised to operate in Greece.
- The change in the name of “Autofin Bank S.A.” into “Unitbank S.A.” is approved.

5 April 2000

With a view to establishing a level playing field for all banks operating in Greece, the supervision carried out by the competent authorities of a third (non-EU) country, in which a credit institution operating a branch in Greece is established, is considered as equivalent to that carried out by the supervisory authorities of EU Member States, provided that compliance with the internationally acceptable rules on capital adequacy and spread of risks is ensured.

8 May 2000

The absorption of the Macedonia-Thrace Bank and Xiosbank by the Piraeus Bank is approved.

8 June 2000

The National Bank of Greece is authorised to acquire 89.9% (plus another 10% after two years) of the share capital of the Sofia-based United Bulgarian Bank.

13 June 2000

The ceilings up to which no Bank of Greece approval is required for the acquisition by credit institutions of equity holdings in financial sector enterprises are raised as follows:

1. from 100 to 500 million drachmas for the acquisition of a “qualifying holding”, and
2. from 700 million to 2 billion drachmas for the increase in an existing “qualifying holding”. The alternative ceiling of 5 percentage points is abolished.

No prior approval by the Bank of Greece is required if credit institutions’ indirect holdings of financial sector enterprises’ share capital are acquired through investment firms which are subsidiaries of such credit institutions.

12 July 2000

The absorption of “Ergobank S.A.” by “EFG Eurobank S.A.” is approved. The name of the new bank is “EFG Eurobank Ergasias S.A.”

29 August 2000

The provisions concerning credit institutions’ equity holdings in financial sector enterprises are codified and the procedures for the increase in credit institutions’ holdings of their subsidiaries’ share capital are simplified.

11 September 2000

EFG Eurobank Ergasias S.A. is authorised to acquire 19.25% of the share capital of the Romania-based bank “Bank Post S.A.”

20 September 2000

– The Kozani Credit and Development Cooperative Ltd is authorised to establish and operate a credit institution under the name “Cooperative Bank of Kozani Ltd”.

– The maximum amount a cooperative bank is allowed to raise from the interbank drachma and foreign exchange markets is set at 15% of its own funds, compared with a prior ceiling of 10% and 5% of its own funds, respectively.

30 October 2000

A new bank under the name “Omega Bank S.A” is authorised to operate in Greece.

23 November 2000

Egnatia Bank is authorised to acquire 99% of the share capital of the Romanian bank BNP-Dresdner (Romania) S.A.

10 April 2001

– The minimum initial share capital of credit institutions is increased and set as follows per credit institution:

1. Banks in the form of a société anonyme: €18 million (6,133.5 million drachmas, against a previous limit of 4,000 million drachmas).
2. Cooperative banks which engage in business:
 - a) within the prefecture of the city where their head office is located: €6 million (2,044.5 million drachmas, against a previous limit of 1,200 million drachmas).
 - b) in bordering prefectures or in the administrative region of their head office: €10 million (3,407.5 million drachmas, against a previous limit of 2,500 million drachmas).
 - c) In the region of Attica, in the Thesaloniki prefecture or in the whole country: €18 million (6,133.5 million drachmas, against a previous limit of 4,000 million drachmas).
3. Branches of credit institutions having their head office in a non-EU country:
 - a) for the first and up to 4 branches: €9 million (3,066.75 million drachmas, against a previous limit of 2,000 million drachmas).
 - b) for more than 4 branches: €18 million (6,133.5 million drachmas, against a previous limit of 4,000 million drachmas).

For the smooth adjustment, especially of small banks, to the new higher limits of minimum share capital, a transitional period is provided for until the end of 2002. This provision also applies to leasing and factoring firms, the minimum capital of which is determined as a percentage of the minimum share capital required for the establishment of a credit institution.

– The minimum share capital of firms acting as intermediaries in the interbank money and foreign exchange markets is increased to €0.3 million (102.2 million drachmas, against a previous minimum of 100 million drachmas). Own funds must have been adjusted to the new level by the end of 2001.

– The minimum share capital of bureaux de change belonging to sociétés anonymes other than credit institutions is increased to €0.25 million (85.2 million drachmas, against a previous minimum of 80 million drachmas). Own funds must have been adjusted to the new level by the end of 2001.

X. PREPARATION BY THE BANK OF GREECE FOR THE CHANGEOVER TO THE SINGLE CURRENCY

1. FRAMEWORK AND INSTRUMENTS FOR THE CONDUCT OF MONETARY POLICY

In 2000 the framework and the technical parameters of the instruments for the conduct of monetary policy were fully adapted to those of the Eurosystem. Taking into account that this project had to be completed by the end of 2000, the Bank opted for a strategy of gradual adjustments in order to maintain normal conditions in the money, foreign exchange and capital markets.

Changes in the operating framework which did not directly affect monetary conditions were implemented in early 2000 (Monetary Policy Council Act –MPCA– 32/7 March 2000), to enable credit institutions to adjust their internal procedures accordingly and participate in monetary policy operations. This category comprises changes in the following monetary policy instruments and the techniques supporting them:

a) Open market operations, which constitute the major instrument for (i) striking a balance in liquidity conditions and (ii) signalling the stance of monetary policy. In March 2000, fine-tuning operations and outright operations for the purchase or sale of securities were instituted. The other open-market operations employed by the Eurosystem had already been incorporated in the operating framework of the Bank of Greece.

b) Standing facilities for provision or absorption of overnight liquidity. The interest rates of standing facilities signal the maxima and minima of overnight interbank interest rates. In March 2000 the quantitative ceiling of the standing facility for marginal lending against collateral of government securities was abolished and each credit institution is allowed to use this facility up to an amount determined by the value of securities pre-deposited with the Bank of Greece as collateral.

c) The valuation of securities used as collateral in monetary policy operations. In March 2000, a new valuation method was adopted, using the current instead of the nominal price and applying haircuts on the value of the security depending on its remaining maturity, instead of the standard curtailment of 20% applied until then. With the new valuation method the central bank is more effectively secured against market risks arising from the fluctuation of interest rates and the securities market is strengthened owing to the reduction of the opportunity cost of credit institutions through the employment of such securities.

d) The required reserves system. In February 2000, the interest-bearing part of required reserves was unified with the non-interest-bearing part.

Some other adjustments of the operating framework, although they had no direct impact on money market conditions, could not be implemented before the end of the year, as the Eurosystem proceeded, in the course of 2000, to modifications of the operating framework, which were made official in November. Thus, the harmonisation of the instru-

ments and the procedures of monetary policy conduct with those of the Eurosystem was completed in December 2000. The relevant provisions were codified into a single text by MPCA 45/19 December 2000.

Finally, as regards certain changes in the operating framework which would affect money market conditions either directly (by increasing interbank liquidity) or indirectly (by signalling the increase in interest rates), the Bank had to pick the time and the method of harmonisation, so that negative side-effects would be avoided. Such adjustments encompass:

a) The unification of the two tiers of the standing facility for the acceptance of deposits. The second tier of this standing facility was maintained in the first half of 2000, because premature unification of the tiers could lead to large fluctuations in the interbank market rates, given that significant autonomous changes in interbank liquidity had appeared in the same period. The tiers were unified in June, when excess liquidity in the interbank money market had been absorbed and the second tier had become inoperative.

b) The harmonisation, to a large extent, of the system of required reserves with that of the Eurosystem in June 2000, to enable credit institutions to familiarise themselves with the new framework for a period of six months before Greece's entry in the euro area. The new system provides for a 2% required reserve ratio instead of the previous 12%, while the reserve base is now the same as that adopted by the European Central Bank (ECB). The major differences with the previous base are that repos are not subject to required reserves and the possibility of deducting claims on non-residents in foreign currency from liabilities to non-residents in foreign currency is abolished. Moreover, credit institutions may draw, on a daily basis, the total amount of their required reserves (compared with the 15% ceiling previously applicable), provided they meet reserve requirements on an average monthly basis. Credit institutions used this possibility extensively, in an environment characterised by expectations that Bank of Greece interest rates would be reduced.

In order to achieve a smooth and controlled increase in liquidity, the Bank of Greece decided to gradually release the amount in excess in required reserves caused by the reduction of the ratio. It was decided that the release would be effected in four six-month instalments, within a period of 18 months (to be completed on 3 July 2002). As from 1 January 2001 and until their release, the relevant amounts will be remunerated at a market rate (specifically, the ECB's main refinancing rate), while the interest rate applicable until end-2000 was lower. The amounts to be released were allocated in such a way as to prevent a sharp change in liquidity conditions in the interbank money market. At the same time, special care was taken to ensure adequate liquidity, especially in the early period following the entry of Greece into the euro area. The first instalment, amounting to €646 million was released on 3 January 2001.

In December 2000 (MPCA 43/5 December 2000) credit institutions' redeposits with the Bank of Greece (specific categories of deposits in foreign currency by sailors, workers and others) were adapted to the Eurosystem's required reserves. These categories were subject to an obligation of redepositing with the Bank of Greece up to about 60%. Deposits of this category are now subject, without special treatment, to the unified system

of minimum reserves of the Eurosystem. For the same reasons that dictated the gradual release of required reserves in drachmas, a schedule of phased release was defined – also in the case of these deposits – for the difference arising from the reduction of the ratio. This schedule provides two instalments for deposits in euro or in currencies of the Member States of the euro area and four instalments for other deposits. The release will take place within 15 months (it will be completed in March 2002). Already, on 28 March 2001 the release of deposits in euro (or the national denominations of euro), amounting to €2.2 billion was completed. Following the reduction of ratios and the adjustment of the calculation base of required reserves in drachmas and foreign currency, about €12.5 billion euro will be released, to be freely managed by banks. By the end of March 2001, the equivalent of €4.7 billion had been released.

The above strategy of the Bank of Greece was a success, as proved by developments in the interbank money market before and after 1 January 2001. Gradual convergence of market interest rates in 2000 proceeded alongside the adjustments of the operating framework, without being negatively affected by them. As from 1 January 2001 Greece's credit institutions have participated smoothly in the single interbank market of the euro area and the monetary policy operations of the Eurosystem. Credit institutions utilised effectively the adequate liquidity they possess, mainly generated by the aforementioned gradual release of reserves, and to date they have submitted a rather limited number of bids at regular main refinancing tendering. At the same time, they are trying to become familiarised with the procedures involved in the conduct of the Eurosystem's monetary policy. In the interbank market of the euro area the presence of the six major Greek banks is significant.

Moreover, as expected, the harmonisation of domestic money market rates with the respective interest rates in the euro area had structural implications for the interbank market. Specifically, as mentioned below in the Section on "Payment Systems", the decline in activity in this market is attributable to:

- the containment of the need for financing in drachmas foreign banks' investments in securities,
- the containment of speculation opportunities caused by the decline in the level of interest rates and in the margin spread, and
- the restricted activity of foreign banks' branches in the domestic market, as their moves and their needs in liquidity are financed in the context of the management of their reserves, mainly through their head office in another country of the euro area.

A key element in the conduct of monetary policy by the Eurosystem is the decentralised character of money-market operations and standing facilities. Credit institutions in the euro area participate in open-market operations as counterparties of the national central bank of the country in which they are located. Thus, credit institutions located in Greece participate in Eurosystem operations through the Bank of Greece only. This obligation necessitated, among other things, the upgrading of computer applications in various sectors of the Bank's activities (Monetary Policy and Banking Department, Foreign

Exchange Department, Government Financial Operations and Accounts Department, Accounts Department). Specifically:

a) In order to decide on the amount it will allocate in every regular tender, the ECB takes into account liquidity changes at euro area level. For this calculation, each national central bank is required, on a daily basis, to send financial statement data. For the fulfilment of the obligation, as is described in detail in the relevant section below, the accounting system of the Bank of Greece was harmonised with that of the Eurosystem and the required computer links were completed to facilitate swift processing of data. The dispatch of the daily financial statement and of the relevant forecast to the ECB is being carried out smoothly as from 1 January 2001.

b) A computer application was developed in the Bank's Dealing Room for the faster receipt and processing of credit institutions' bids in the Eurosystem's tenders. The application functioned without problems in all tenders conducted in 2001.

c) A data base containing Greek government securities has been created. This base is connected with the Electronic Secondary Securities Market (HDAT) and employs the values of the latter for the calculation of the current value of collateral accepted by credit institutions against monetary policy operations and the provision of overnight credit. The computer application calculates on a case-by-case basis haircuts on the value of securities and feeds the HERMES payment system. In this way, the daily per bank financing ceiling is determined.

Finally, it should be noted that technical and operational adjustments for the conduct of the single monetary policy were completed between 30 December 2000 and 1 January 2001. They concerned: First, the payment by the Bank of Greece of its remaining contribution to the ECB subscription capital and its share in ECB reserves, as well as the transfer to the ECB of the required part of foreign exchange reserves. Second, the conversion into euro of the drachma balances of accounts held with the Bank of Greece, destined for monetary policy operations and credit facilities. Third, the successful completion of the procedures for the migration of Bank of Greece accounting systems to the euro environment. Fourth, the operation, in the new environment, of Bank of Greece systems of communication with the ECB. Fifth, the successful dispatch on 1 January 2001 of the financial statement of the Bank of Greece to the ECB, to be included in the aggregated financial statement of the Eurosystem. Sixth, the smooth and successful completion of the conversion of the nominal value of Greek government securities from drachmas to euro. In this way, all book-entry securities may be incorporated in the first tier of Eurosystem securities eligible for the provision of liquidity and overnight credit to banks as from 2 January 2001.

After entry in the euro area, the Bank of Greece has been participating in all committees and working groups of the Eurosystem. Committees concerned with the operating framework for the conduct of monetary policy are constantly monitoring market developments in order to suggest possible amendments to the framework, and assess the efficiency of measures by taking into account the decentralised character of the single monetary policy.

2. FOREIGN EXCHANGE SECTOR

In the foreign exchange sector, preparatory work for the adoption of the euro moved in two directions:

The first direction was associated, on the one hand, with the establishment of a new regulatory framework for the operation of the domestic foreign exchange market and, on the other hand, with the acquisition of the proper infrastructure (workforce and technical equipment) for the transition to the new organisational environment of the Eurosystem.

Specifically, the Bank of Greece contributed actively to the formulation of the new institutional framework for the operation of the domestic foreign exchange market, given that as from 1 January 2001 (Law 2842/2000) the institution of “fixing” (determination of the official exchange rates of the drachma vis-à-vis major foreign currencies) was to be abolished and replaced by the announcement, by the ECB, of reference exchange rates of the euro vis-à-vis the above currencies. Along with the issuance of the relevant acts, the Bank of Greece informed domestic credit institutions on forthcoming changes and market operating rules following Greece’s entry in the euro area.

The Bank of Greece adjusted the organisational framework for the operation of the Foreign Exchange Department, to correspond to the specifications and directives of the ECB. Besides, its connection with the operating systems BI-FOREX, ENSD and FINANCE KIT of the Eurosystem was timely and successful.

With the introduction of an integrated computer application, the systems supporting the management of foreign exchange reserves and foreign exchange operations in general were fully computerised. Emphasis was placed particularly on risk management methods. Moreover, these systems were connected with the relevant accounts provided for in the new accounting scheme implemented by the Bank of Greece after the adoption of the euro as the national currency. As mentioned above, the framework of credit institutions’ required foreign currency deposits was fully adapted to that of the Eurosystem.

The second direction of preparatory work in the foreign exchange sector was associated with the fulfilment by the Bank of Greece of its financial obligations to the ECB. Specifically, it concerned the payment of the Bank’s share in the equity capital and reserves of the ECB as well as the transfer of reserve assets and gold to the ECB.

In particular, the Bank of Greece took the necessary measures and obtained the amounts of foreign currency and gold required for the timely fulfilment of its foregoing obligations. Furthermore, it created the proper organisational and technical infrastructure for the management of part of the ECB’s reserve assets.

3. STATISTICAL DATA AND STANDARDS

In the course of 2000 the procedures for the smooth integration of Greece’s monetary and banking statistics in those of the euro area were completed. Specifically, Bank of Greece Governor’s Act 2458/1 March 2000 put into effect a revised form of the finan-

cial statement, which is submitted monthly to the Bank of Greece by credit institutions and serves two purposes: First, it allows the determination of the base adopted by the ECB for the calculation of credit institutions' required reserves with the central bank. Second, it enables the concentration of all monetary statistics required for the conduct of the single monetary policy and, according to ECB regulations, must be made available by all EMU Member States. Following Greece's entry in the euro area, on 1 January 2001, the Bank of Greece assumed the obligation to send to the ECB, within 15 working days of the end of the month, detailed data from credit institutions' financial statements. The first data were dispatched without problems in January 2001 and concerned December 2000. Moreover, from the beginning of 2001 the Bank of Greece sends on a daily basis to the ECB its financial statement for the conduct of the single monetary policy.

Meanwhile, the Bank of Greece proceeded to calculate the series of all monetary and credit aggregates for the period March 1998-December 2000, on the basis of the definitions adopted by the European System of Central Banks (ESCB). The enrichment of the ECB database with these historical (Greek) data enables economic analysts to properly interpret the monetary aggregates in the euro area, following its enlargement in January 2001.

In addition to the above, the Bank of Greece sends to the ECB on a monthly basis a series of other statistical data concerning money and capital markets, such as bank rates, securities yields, stock prices and issues of securities in the Greek capital market.

As to statistical information on the external sector of economy, apart from the production of balance of payments data, the Bank of Greece proceeded to calculate Greece's international investment position, which records claims and liabilities in financial instruments of Greek residents vis-à-vis non-residents at the end of each calendar year. The international investment position was estimated on the basis of data drawn from the Bank's special surveys concerning the amount of direct investment, external positions in securities, outstanding balances of loans concluded by Greek residents with foreign banks, as well as on the basis of data from the Bank for International Settlements.

The estimate of Greece's international investment position and the production of balance of payments data using the new methodology completed our adaptation to the conceptual framework of the International Monetary Fund.¹ In this context, the performance of the foreign sector is assessed on the basis of the flows from and to foreign countries (balance of payments), in conjunction with changes in the country's international investment position.

In 2000, the Bank started sending to the ECB monthly balance of payments data and monthly data on Greece's international investment position, according to the relevant schedule. Also, from the beginning of 2001 these data, as well as monthly data on foreign exchange reserves, are submitted to the ECB on the basis of the specifications valid for EMU Member States, so that they can be included in the aggregate amounts calculated for the Monetary Union.

¹ See "*Balance of Payments Manual*", IMF, 5th edition, 1995.

In 2000 the Bank of Greece started compiling a unified database, which will be completed by the end of 2001. The term “database” denotes a system for the storage and management of statistical information. This unified database will comprise the most important statistics managed by the Bank and all interested users will have access to it via the electronic network already developed at the Bank.

The database will serve multiple purposes. First of all, direct access to the base will ensure that users receive valid and the most up-to-date information. Second, the base will facilitate the transfer of data from and to the ECB and their availability to the users. The data sent by the ECB to ESCB members will be stored in the base and thus be available within very short time. Third, the base will further automate the printing of information bulletins issued by the Bank, such as the Bulletin of Conjunctural Indicators. Fourth, the base will be connected with the Internet, so that external users may draw on the Bank’s historical statistics in a directly processible form.

The software package adopted for operating the base is “Forecasting Analytical Modelling Environment” (FAME). FAME is a data storage and management package, with special functions for time series and with capabilities for calculating statistical models and compiling concise tables and charts. Because of these capabilities, FAME is employed by many central banks, as well as the ECB.

The nomenclature of statistical series and explanatory comments complies with the model developed by the ECB. Explanatory comments concern the series as a whole (title, measurement units, base year, source), as well as isolated observations (whether the observation is final or temporary or if it is an estimate, or if it is available to all or confidential).

4. PAYMENT SYSTEMS

4.1. *The HERMES payment system*

The operation of a safe and reliable payment system in real time is inseparably linked to the mechanisms for the conduct of the Eurosystem’s monetary policy, because all monetary policy operations are effected solely through the national payment system and the crossborder TARGET payment system.¹ The operation of a payment system in real time reduces settlement risks and the systemic risk during the clearing of interbank transactions of large amounts, because it secures their final settlement during the day according to prescribed procedures.

In order to be connected with TARGET, the Bank of Greece started to operate from the beginning of 1999 the EURO-HERMES payment system,² while it also developed in a

1 Trans-European Automated Real-time Gross settlement Express Transfer system, which comprises the respective national systems of the countries participating in the euro area. These systems are interconnected to allow same-day cross-border capital transfers.

2 This is the Greek name of “HERMES” which is the acronym of the Hellenic Real-time Money transfer Express System.

timely manner the HERMES national drachma-payment system, which started operating in March 2000. With the operation of the HERMES system in drachmas, the required infrastructure for the real-time settlement of payments in the domestic money and capital market was completed. Moreover, all the Bank's regional information subsystems were interconnected and same-day collection and computerisation of banks' transactions at country level was attained. At the same time, useful experience in this sector was acquired before Greece's entry in the euro area. Thus, by the time of Greece's entry, the Bank of Greece had started to operate and manage two systems, which for the purpose of entry had to be merged into a single payment system. This project was completed successfully in 2000.

The new HERMES payment system has been operating smoothly from the beginning of 2001 as an integral part of the trans-European TARGET system, via which both

TABLE X.1
TRANSACTIONS THROUGH THE HERMES SYSTEM

Payment orders	1999 ¹		2000 ²	
	Number	Value (million euro)	Number	Value (million euro)
1. Domestic	7,856	5,245	875,735	3,736,549
– Customers	4,739	231	309,195	132,261
– Interbank	3,117	5,014	566,540	3,604,288
2. Cross-border	23,262	327,807	85,690	210,451
– Customers	7,246	346	68,353	1,831
– Interbank	16,016	327,461	17,337	208,620
Total	31,118	333,052	961,425	3,947,000

1 Data regard exclusively transactions in euro as a foreign currency.

2 Data include transactions in euro as a foreign currency and transactions in drachmas, the value of which was converted into euro on the basis of current exchange rates.

Source: Bank of Greece.

domestic and cross-border payment orders are now settled in euro. This system facilitated the substantial and smooth integration of the domestic money and capital markets in the single European market and the more efficient management of member banks through a single settlement account for both domestic and cross-border payments.

The HERMES payment system contributed to the further dematerialisation of transactions and proved, mainly owing to its functional features, attractive to credit institutions, which optionally settle through it a large volume of their clients' payment orders.

According to Table X.1, which shows the value and number of transactions effected via the HERMES payment system in 1999 and 2000, the share of clients' orders in the year 2000 amounted to 39.3% of total transactions and 3.4% of the total annual value. In the first two months of 2001 there was a further small increase in these orders as a percentage of the total number of transactions and the value of payments. During the same period there was a

BOX X.1**The HERMES payment system**

With the operation of the new HERMES payment system, credit institutions are afforded an effective mechanism for the settlement of their cross-border and domestic payments in euro. At the same time, they can participate in the operations of the single monetary policy of the Eurosystem, since for this participation they are required to be members of the national system of payments settlement in real time.

All credit institutions operating in Greece, as well as those located in a country of the European Economic Area, can become members of the HERMES system. Payments are settled without a trough. Payments related to operations of the single monetary policy and the balances of the clearing systems operating in Greece are compulsorily settled through the system.

One of the main features of the new system is the provision to credit institutions-members of non-interest-bearing intraday financing against collateral, which is not subject to a ceiling beyond that determined by the valuation of collateral pre-deposited for this purpose.

The HERMES system operates on the basis of the new Operating Regulation, which was put in force on 1 January 2001 by Act 46/21 December 2000 of the Monetary Policy Council and which is harmonised with the ECB Guideline on the Target System (Guideline of the European Central Bank of 3 October 2000 on a Trans-European Automated Real-time Gross settlement Express Transfer system "TARGET"). The HERMES system operates from 08.00 until 19.00 Greek time (07.00-18.00 central Europe time). Hermes system holidays are the same as those of TARGET, are decided upon by the ECB Governing Council and are announced through the press and the Bank of Greece and the ECB websites.

In the framework of the new regulation of the system, rules have been laid down concerning the reimbursement of credit institution-members in cases of malfunctions both in cross-border HERMES/TARGET payments and domestic payments. The reimbursement scheme covers the sending and/or the receiving members of the system, which as a result of a malfunction were forced to resort to the Eurosystem credit facility operations. The basic principle of the reimbursement rules is the prevention of unjust enrichment of the Eurosystem owing to any malfunctions of the payment systems constituting TARGET or participating in it.

The transfer of funds through the HERMES/TARGET system generates credit or debit balances in the transactions accounts of national central banks. In order to avoid the creation of large bilateral balances and thus enlargement of the national central banks' balance sheets, clearing of the above balances has been decided upon and implemented on a daily basis as from November 2000. Interest on net daily balances is computed on the basis of the each time applicable interest rate of the Eurosystem main refinancing operations.

reduction in the number and the value of interbank market transactions settled through the HERMES system. The smooth integration of the money market in the broader Eurosystem market reduced borrowing requirements, compared with those in national currency in 2000, and, thus, limited transactions through the system. Moreover, harmonisation of domestic money market rates with those of the euro area reduced opportunities for arbitrage.

It should be noted that in January-February 2001, the average daily number of orders was 4,030, worth 4,195 billion drachmas (€12.3 billion), which corresponds to about 10% of GDP, compared with 4,590 orders, worth 7,499 billion drachmas in the two-month period November-December 2000.

Standardisation of transactions

In the context of the role played by the Bank of Greece in payment systems and with a view to standardising transactions, the Bank issued a relevant circular, establishing a procedure whereby credit institutions are given and can use a Credit Institution Code Number (KAPI). The Greek banking system will thus be facilitated in implementing "IBAN", the international bank account number, for the fast, safe and automated handling of domestic and mainly cross-border payments in euro up to the final beneficiary.

Payment systems oversight

Payment systems oversight is one of the main tasks of the Eurosystem and aims at securing its smooth operation and reducing the systemic risk inherent in internationalised and interdependent markets. As stipulated in article 55 of its Statute, the Bank of Greece is responsible for the payment systems oversight, which is carried out on a decentralised basis as part of the common policy each time defined by the Eurosystem. This oversight covers all kinds of electronic money and means of payment, with a view to maintaining public confidence in them.

Oversight constitutes an operation distinct from supervision, as the latter focuses mainly on risks at a credit institution level. Given, however, that both oversight and supervision are aimed at credit system stability and the smooth operation and effectiveness of the markets, close cooperation between supervisors and exchange of information for the more effective performance of their tasks are imperative.

In order to carry out oversight, the Bank of Greece has set up a special department, which develops and specifies the general principles, methods and means for supervising payment systems which are already operating or about to start operating in Greece.

4.2 Securities settlement systems

Book-entry Securities Settlement System

The Book-entry Securities Settlement System of the Bank of Greece was the basis in 2000 for the conversion of the Greek government debt from drachmas into euro. This conversion was our country's obligation following its entry into the euro area and had to be done according to the rules and conditions defined in the relevant Community Directives.

Work to convert the Greek government debt into euro began in early 1999 and coincided with work aimed at modernising the applications of the Book-entry Securities Settlement System. In this context, the requisite debt conversion application was developed and incorporated in the mechanisms which constantly monitor the Electronic Secondary Securities Market (HDAT).

TABLE X.2
SECONDARY MARKET TRANSACTIONS* REGISTERED
IN THE BOOK-ENTRY SECURITIES SYSTEM

	1999		2000		Changes in the value of transactions (%)
	Number	Value (billion drachmas)	Number	Value (billion drachmas)	
January	8,461	10,124	11,464	25,469	151.6
February	8,825	10,579	10,357	19,584	85.1
March	11,108	12,001	11,153	25,631	113.6
April	9,484	9,559	8,608	17,757	85.8
May	9,786	11,944	11,165	25,758	115.7
June	9,533	10,920	11,157	29,994	174.7
July	8,727	10,485	9,149	22,985	119.2
August	9,118	10,506	8,999	23,918	127.7
September	10,326	13,840	10,519	30,799	122.5
October	8,797	13,614	11,751	31,135	128.7
November	10,447	18,374	13,844	42,984	133.9
December	9,406	17,854	15,963	56,550	216.7
Total	114,018	149,800	134,129	352,564	135.4
Daily average of transactions		432.0		508.0	
Average amount per transaction		1.3		2.6	
Average daily value of transactions		567.4		1,335.5	

* They concern sales and purchases of securities among participants, transactions of participants with their customers, repos among participants and monetary policy operations.

Source: Bank of Greece.

The new system was tested repeatedly in the euro environment, in accordance to the ECB's recommendations prior to coming on stream with the help of the Ministry of Finance, which issues the relevant securities. The conversion method chosen by the Ministry of Finance provided for a rounding of decimals arising from the conversion of drachmas into euro, at final investor level and by category of securities (bottom-up). Debt conversion entered successfully the stage of completion at the end of 2000. Furthermore, the new Book-entry Securities Settlement System application opted for by the Bank of Greece did not only fully respond to the euro environment, but it also abides by the secu-

rity and operation principles and regulations defined by the ECB in the context of the evaluation of systems for the settlement of transactions in securities in the euro area.

Along with the conversion of the debt into euro, the reception procedure for the settlement of cross-border transactions, which, as from the beginning of 2002, are conducted in Greek government securities via the trans-European electronic system of transactions trading (EuroMTS) has been completed. For the settlement of these transactions, special subaccounts were opened in the Book-entry Securities Settlement System and specifically in the accounts of the banks operating as depositories. These subaccounts refer to operators conducting transactions in this system in Greek government securities.

The Book-entry Securities Settlement System records all transactions in Greek government securities, irrespective of the way in which they are conducted, within HDAT or between banks or between banks and their clientele. Transactions are divided into purchases and sales, repos, monetary policy operations, swaps, loans in securities etc.

In 2000 the Book-entry Securities system settled 134,129 transactions, compared with 114,018 in 1999, i.e. the number of transactions increased by 17.6% (see Table X.2). The value of transactions settled amounted to 353 trillion drachmas, compared with 150 trillion drachmas in 1999 (an increase of 135%). Similar increases were also recorded in the average daily number of transactions (17.6%), the average value per transaction (101%) and the average value of transactions per day (135%). These developments reflect the vivid interest of investors in Greek government securities, leading to a spectacular increase in their marketability in 2000, which is continuing in 2001.

Electronic Secondary Securities Market (HDAT)

The Electronic Secondary Securities Market (HDAT), which is managed by the Bank of Greece, continued to operate smoothly in 2000, ensuring fully competitive conditions and transparency of transactions in Greek government securities.

The smooth operation of HDAT contributed decisively to the fulfilment by Greece of the long-term interest rate criterion in 2000, which was one of the prerequisites for Greece's entry in the euro area. Moreover, HDAT contributed substantially to the reduction of the borrowing cost of the Greek government, which is estimated to have exceeded 60 billion drachmas. The entry of the drachma in the Exchange Rate Mechanism in March 1998 signalled the beginning of the convergence of long-term government bond yields on those of the respective German reference bonds; the convergence continued at a faster pace after the start-up of HDAT. The difference in yields between the Greek 10-year government bond and the respective German bond fell from 114 basis points at end-1999 to 60 basis points at end-2000.

The changeover to the single currency developed smoothly and was successfully completed by the pre-determined deadline. Transactions agreed upon in drachmas in

HDAT until 29 December 2000 were automatically converted into euro on 1 January 2001 and since then they are being settled in this currency without problems.

A factor that contributed substantially to the positive development of the Greek bond market was the decision to allow, as from May 2000, international financial and credit institutions to participate in HDAT directly from their offices abroad, mainly from London, by means of remote access. Until 31 December 2000 they participated as Dealers and as from 1 January 2001 as Primary Dealers. At end-2000, HDAT numbered 17 Greek credit institutions, 12 foreign banks with branches in Greece and 5 international credit institutions with remote access. Of the Greek credit institutions and foreign banks with branches in Greece, 11 operated as Primary Dealers. As from 1 January 2001, following the joint decision of the Minister of Finance and the Governor of the Bank of Greece (No. 2/84367/0023A/8 December 2000) to grant the capacity of the Primary Dealer also to international financial and credit institutions, HDAT numbers 37 members. Of them 17 are Greek credit institutions (5 in the capacity of Primary Dealers), 9 are foreign banks with branches in Greece (one in the capacity of Primary Dealer) and 11 are international credit institutions with remote access (9 in the capacity of Primary Dealers).

Direct participation of international financial and credit institutions in HDAT from the second half of 2000 contributed to the enlargement of the domestic bond market and a considerable increase in liquidity. The average daily number of bids for the purchase/sale of securities in HDAT increased by 28.3% in the second half of 2000, compared with the first half, and the value of transactions by 12.4%. Total transactions in HDAT amounted to 21,675 billion drachmas in 2000, compared with 14,134 billion drachmas in 1999, while in the first two months of 2001 it reached 12,078 billion drachmas (€35,445 billion). This large increase in market liquidity was reflected in the rapid decrease of the spread between the purchase price and the sale price to 9.6 basis points on average in the first two months of 2001, from 24 basis points in the same two months of 2000.

5. EURO BANKNOTES AND COINS

The Bank of Greece continued in 2000, at a faster pace, its preparations for the production of euro banknotes and coins, the adoption of the single currency as from the beginning of 2002 and the parallel withdrawal of drachma banknotes and coins.

5.1 Euro banknote and coin production

The decision taken in June 2000 by the Council of National Economy and Finance Ministers concerning the entry of Greece into the euro area as from the beginning of 2001 gave the go-ahead to the Bank of Greece to proceed immediately to the completion of all

the procedures required for the fastest possible start-up of production of euro banknotes and coins. According to the Bank's estimates, the number of euro banknotes and coins that must be made available at end-2001 for the smooth replacement of drachma banknotes and coins are 597 million banknotes and 1,600 million coins, the production of which has been approved by the ECB.

Specifically, in July 2000 the Advisory Committee of Fine Arts,¹ completed its work. Its task was to submit to the Bank of Greece alternative proposals on the themes to be portrayed on the national side of euro coins. In the same month, the Minister of Finance made the final choice of these themes, following a relevant proposal by the Governor of the Bank of Greece.

At the same time, following the trial production of small quantities of euro banknotes and coins, all the tools – mould matrices and work matrices, offset and intaglio plaques and others – necessary for the production of euro banknotes and coins are being prepared. Also, the Bank's Printing Works (IETA) proceeded to the procurement of raw materials – paper and ink for the banknotes and metal discs for the coins – and the required machinery: a silk-printing machine for high-denomination banknotes and two additional coin-printing presses. Then, IETA drew up a monthly production schedule, which was submitted to the competent ECB committees.

Production of euro banknotes and coins began in October 2000, with very good results as regards the quality and quantity of currency produced. By the end of March 2001, a considerable quantity of €10 and €20 banknotes had been produced, corresponding to about 39% of the scheduled total banknote production, as well as a considerable amount of euro coins of all denominations, corresponding to about 20% of the scheduled total coin production. The production of banknotes and coins is continuing at a fast pace.

The ECB has laid down stringent technical specifications, both for banknotes and for coins, and has equipped them with numerous safety features to protect them from possible forgery. It has also prescribed specific features so that euro banknotes and coins can be easily recognised by people with impaired eyesight, as well as vending machines of various products and tickets.

IETA is in continuous contact with the competent ECB services for the production of high quality euro banknotes and coins and the achievement of the targets of the production schedule, so that there will be no problem in the replacement of drachma banknotes and coins with euro banknotes and coins. The reports submitted by ECB inspectors, who pay regular visits to IETA, show that the production of euro banknotes and coins is developing satisfactorily in terms of both quality and quantity.

¹ This Committee consisted of representatives of the Bank of Greece and the Ministry of Finance, an art historian, Professor of the School of Philosophy of the University of Athens, as well as representatives of the Chamber of Fine Arts, the Numismatic Museum and the Hellenic Numismatic Society.

5.2 Preparations for the circulation of the euro and the withdrawal of the drachma

Preparatory work continued in 2000 for the unimpeded supply of the market with euro banknotes and coins, which will begin on 1 January 2002. Starting on 15 January 2002, it is the aim of the Bank of Greece for the bulk of transactions across the country to be carried out in euro.

To achieve this aim, it has been deemed necessary to frontload the new currency on commercial banks and a number of enterprises, particularly those operating chain stores that do business mainly in cash. Specifically, the target set is for commercial banks to be supplied with euro banknotes and coins as from 1 October 2001. Then, as from 1 December 2001, banks will supply commercial enterprises with coins of all denominations as well as €5 and €10 euro notes. To this end, means and procedures have been recorded, in the context of ECB and European Commission decisions and directives, and a detailed programme is being drawn up. Measures are being taken, so that the transportation, storage and distribution of euro currency across the country will be performed safely and effectively. The bank is cooperating closely with the police, whose assistance in these matters is essential.

Furthermore, with a view to ensuring the timely adjustment of the banknote handling machines (for instance, ATMs, vending machines, banknote counting machines etc.), the ECB has recommended the establishment of testing centres on the premises of the national central banks which deem it necessary. Although such machines are not manufactured in Greece, the Bank of Greece, considering that our country is far from places in the euro area where such centres already operate, has decided to provide this facility to companies which want to check that their machines operate properly in the single currency. The centre for testing the adaptation of machines to euro banknotes will be installed in the Bank's headquarters and will start operating shortly.

With respect to the withdrawal of drachmas, it is estimated that most of the drachma banknotes and coins in circulation will be replaced with euro within the first two months of 2002, the period of parallel circulation of drachmas and euro. Consequently, both the head office and the branches of the Bank will have to be able to receive very large quantities of withdrawn banknotes and coins from the beginning of 2002. To this end, the supply of the branches of the Bank with sophisticated counting and authenticity-checking machines for euro and drachma banknotes has been launched and will be completed within the first half of 2001. In cooperation with the Ministry of Finance, the Bank is promoting the destruction of coins by special defacing machines to be installed in most of its branches so as to avoid bringing large quantities of coins to its head office, which would entail serious security problems and heavy costs. To increase efficiency at its branches, whose staff will bear the brunt of the whole transportation, storage and distribution programme for euro banknotes and coins, the Bank held a large number of one-day staff briefing sessions in 2000. It also established procedures for dealing effectively with shortages or weaknesses that might occur at any of its branches.

Furthermore, in close cooperation with the police, the Bank is preparing the infrastructure for the system that will monitor euro banknote and coin forgeries. Specifically, it is expected that at the beginning of the second half of 2001 the infrastructure of the national monitoring system, to be located in the Bank, as well as that of the banknotes and coins analysis centre will be ready. Responsibility for the operation of these centres will be entrusted to the police laboratory investigating forgeries and counterfeit money.

5.3 Information dissemination programme "EURO 2002"

As the information dissemination programme "EURO 2002" is under way, the Bank of Greece is promoting its implementation at a national level. In the year 2000, the Bank contacted over 150 organisations of the public and the private sector, to which it presented the cooperation programme and invited them to take action to disseminate information to the public. These organisations expressed their interest and it is estimated that, as soon as the relevant website of the "euro partners" programme is completed, there will be increased participation.

Particular importance has been attached to disseminating information to people in outlying regions, through the Bank's local branches. To this end, a number of employees have been trained, who have already got in touch with organisations in their respective regions, informing and mobilising them in this effort.

Meanwhile, a special programme is being drawn up to train the cashiers of banks and business firms in identifying forged euro banknotes and coins. Relevant preparations, including the creation of a team of employees-trainers from both the Bank's head office and its branches, are nearing completion. These employees will prepare new trainers at the above organisations, who, in turn, will train other cashiers at their firms after September 2001, when the security features of euro banknotes will be made public. Training will be supported by special material (manual, video, CD-ROM), fully adapted to the Greek needs.

6. REORGANISING THE BANK'S BOOK-KEEPING

In 2000 the Bank of Greece completed the modernisation of its book-keeping operations and as from 1 January 2001 its books are kept in euro. This task, which was performed within a very short period (about 7 months), includes:

1. Completion of the Bank's new accounting scheme, which takes under consideration not only the "Banks' Accounting Scheme" but mainly the ECB's need for information. Also, matching of the accounts of the new and the old accounting schemes was completed, while, for precautionary reasons, the old accounting office will continue to operate for as long as necessary.

2. Completion of the installation in the Bank's network of the new SAP/R3 software, which is one of the latest accounting packages worldwide (the same software has been installed by the ECB and other national central banks). The new application automates entries effected in real time and the Bank's financial statement is now available to the ECB at all times.

3. Timely completion of research on the use of the euro from 1 January 2001 as the key currency in the Bank's books.

4. Finally, extensive upgrading of the computers at the Bank's EDP Centre, so that the infrastructure can fully meet new needs.

As a result of these actions, the new accounting systems have been operating successfully as from 1 January 2001 and have ensured the daily and timely (by 9 a.m. of the following working day) dispatch of the financial statements required by the ECB. As mentioned previously, these statements are compiled by fully computerised means.

To integrate all accounting data produced by the Bank through the applications supporting its transactions (at the head office, branches and agencies), the "bridges" technique for the computerised data transfer was used.

Moreover, for the modernisation of computer applications supporting the Bank's operations, a software company has undertaken to design and develop a new application covering almost all business at the Bank's head office, branches and agencies. Under the contract with the software company, the new application was to be completed in two stages. The first stage, comprising major banking operations, was completed on schedule (31 December 2000) and is now being tested. To achieve economies of scale (installation and training) it was decided to extend the new application over the whole network after the completion of the second stage, comprising mainly foreign currency operations (excluding management). The second stage of the project will be completed by mid-2001 and the new integrated system of transactions will be fully operational by the end of the year.

To extend the new transactions system to all the Bank's branches, the communication network between the head office and the branches and agencies will be completed in April. The network will use new data-processing equipment and operate according to all modern management, security and reliability standards, as it will be based on state-of-the-art technology and on dual, high fidelity telecommunication lines of different channeling and technology.

GLOSSARY

Collateral: assets pledged as a guarantee for the repayment of the short-term liquidity loans which credit institutions receive from the central banks, as well as assets sold to central banks by credit institutions as a part of a repurchase agreement.

Community Support Framework (CSF): it is drafted by the Commission of the European Communities (European Commission) in cooperation with the EU Member State concerned and it is approved by the Commission. It includes the development strategy of the country, the action lines and the financing sources (community funding, national public expenditure, private funding).

Deposit facility: a standing facility of the Eurosystem, which counterparties may use to make overnight deposits with a national central bank and which are remunerated at a pre-specified interest rate.

Effective (nominal/real) exchange rates: nominal effective exchange rates constitute the weighted average of various bilateral exchange rates. Real effective exchange rates are nominal effective exchange rates deflated by a weighted average of prices or costs in the foreign country relative to domestic prices or costs. They are thus measures of a country's price and cost competitiveness.

EURIBOR (euro interbank offered rate): the interest rate at which a prime bank is willing to lend funds in euro to another prime bank. The EURIBOR is computed daily, for interbank deposits with a maturity of either one week or one to 12 months, as the average of the daily offered rates of a representative panel of prime banks, rounded to three decimal places.

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 comprises Belgium, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland.

European Central Bank (ECB): the ECB lies at the centre of the European System of Central Banks (ESCB) and the Eurosystem and has a legal personality under Community law. It ensures that the tasks conferred upon the Eurosystem and the ESCB are implemented either by the ECB's own activities pursuant to the Statute of the ESCB and of the ECB or through the national central banks.

European System of Central Banks (ESCB): it is composed by the ECB and the national central banks of all 15 Member States, i.e. it includes, in addition to the members of the Eurosystem, the national central banks of the EU Member States which have not yet adopted the euro. The ESCB is governed by the Governing Council and the Executive Board of the ECB and, as a third decision-making body of the ECB, by the General Council.

Eurosystem: it comprises the ECB and the national central banks of the Member States which 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 European Central Bank. 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 Member States which have adopted the euro.

General Council: one of the decision-making bodies of the European Central Bank (ECB). It comprises the President and the Vice-President of the ECB and the governors of all 15 EU national central banks.

General government: as defined in the European System of Accounts 1995 (ESA 95), it consists of central, state and local government and social security funds.

Governing Council: one of the decision-making bodies of the European Central Bank (ECB). It comprises all the members of the Executive Board of the ECB and the governors of the national central banks of the Member States which have adopted the euro.

Harmonised Index of Consumer Prices (HICP): the HICP is the measure of prices used by the Governing Council for the purpose of assessing price stability. The HICP was developed by the European Commission (Eurostat) in close cooperation with the national statistical institutes, the European Monetary Institute (EMI) and later the European Central Bank, in order to fulfil the Treaty requirement for a consumer price index constructed on a comparable basis, taking into account differences in national definitions.

Key ECB rates: the European Central Bank (ECB) interest rates which determine the stance of the monetary policy of the ECB. At present, the 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. Prior to the decision to conduct the main refinancing operations as variable-rate tenders, the rate on fixed-rate tenders had played the role of “key rate”. This role is currently performed by the minimum bid rate on the main refinancing operations of the ECB.

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.

Monetary aggregates: a monetary aggregate can be defined as the sum of currency in circulation plus outstanding amounts of certain liabilities of financial institutions that have a high degree of “moneyness” (or liquidity in a broad sense). The narrow monetary aggregate M1 has been defined by the Eurosystem as: currency in circulation plus euro area residents’ (other than central government) holdings of overnight deposits with euro area money-issuing institutions. The monetary aggregate M2 comprises M1 plus deposits with agreed maturity of up to two years and deposits redeemable at notice of up to three months. The broad monetary aggregate M3 includes M2 plus repurchase agreements, money market fund shares/units and money market paper, as well as debt securities with a maturity of up to two years. The Governing Council of the ECB has announced a reference value for the growth of M3.

Reserve base: the sum of the balance sheet items (more specifically: liabilities) which constitute the basis for calculating the minimum reserves that a credit institution is required to hold with the central bank.

Reverse transaction: an operation whereby the central bank buys or sells assets under a resale/repurchase agreement or conducts credit operations against collateral.

Standing facility: a 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.

TARGET System (Trans-European Automated Real-time Gross settlement Express Transfer system): a payment system composed of one Real-Time Gross Settlement (RTGS) system in each of the 15 EU Member States and the ECB payment mechanism. The domestic RTGS systems and the ECB payment mechanism are interconnected according to common procedures (Interlinking mechanism) to allow cross-border transfers throughout the EU to move from one system to another.

**ANNUAL ACCOUNTS
OF THE BANK OF GREECE**

BALANCE SHEET

AMOUNTS IN DRACHMAS

<u>ASSETS</u>	<u>2000</u>		<u>1999</u>	
GOLD AND FOREIGN CURRENCIES*				
1. Bank's holdings	4,831,409,216,818		6,085,026,037,745	
2. Reserve position in the IMF	109,119,856,385		128,179,870,177	
3. Special Drawing Rights in the IMF	16,136,236,884		15,860,372,198	
4. Contribution to the capital of the ECB	<u>1,751,795,837</u>	4,958,417,105,924	<u>1,698,329,411</u>	6,230,764,609,531
MISCELLANEOUS CLAIMS IN FOREIGN EXCHANGE		14,843,544,596		217,264,103,454
COIN		3,634,971,680		1,189,663,854
CLAIMS ON GOVERNMENT				
1. Treasury bills and government bonds	963,975,120,000		823,544,520,000	
2. Long-term loans in drachmas	825,558,687,296		892,876,478,968	
3. Loans for membership of the IMF	388,278,874,627		321,825,921,147	
4. Long-term loans in foreign exchange	693,458,929,684		1,029,407,132,121	
5. Long-term loans and securities with a foreign exchange clause	<u>3,130,510,492,755</u>	6,001,782,104,362	<u>3,013,513,111,811</u>	6,081,167,164,047
CLAIMS ON BANKS				
1. Advances	52,994,178,846		56,171,158,582	
2. Deposits	<u>247,200,000,000</u>	300,194,178,846	<u>23,989,750</u>	56,195,148,332
PREMISES AND EQUIPMENT				
1. Land	17,481,605,210		14,040,486,553	
2. Buildings and equipment	67,523,343,648		51,238,932,428	
Less depreciation:				
Up to 1999 (inclusive)	47,532,013,016			
In 2000	<u>4,021,950,262</u>	<u>51,553,963,278</u>	<u>40,282,516,366</u>	24,996,902,615
VALUE OF BANKNOTE PRINTING MATERIALS	17,412,616,035		16,518,773,232	
Less depreciation	<u>2,167,089,090</u>	15,245,526,945	<u>2,711,749,026</u>	13,807,024,206
OTHER ASSETS		161,964,062,017		108,789,565,251
INTERIM ACCOUNTS		<u>145,725,261,566</u>		<u>100,738,344,120</u>
T O T A L		<u>11,635,257,741,516</u>		<u>12,834,912,525,410</u>
OFF-BALANCE-SHEET ITEMS				
Investment in government securities on behalf of public entities**		<u>1,974,515,007,895</u>		<u>1,667,075,607,866</u>

* The Bank's holdings in gold and foreign currencies have been calculated on the basis of the drachma/US parity effective on 31st December 2000 (drs 365.620 per US dollar).
The value of gold in US dollars has been calculated on the basis of 65% of the average purchase price of gold in December 2000, i.e. US dollars 176.73 per ounce.

** Including legal persons in public law and Insurance Funds in public and private law.

AT 31 DECEMBER 2000

SEVENTY-THIRD YEAR

<u>LIABILITIES</u>	<u>2000</u>		<u>1999</u>	
CAPITAL		16,984,478,100		16,686,504,800
RESERVES				
1. Regular reserve	16,984,478,100		16,686,504,800	
2. Special reserve for foreign exchange valuation differences	<u>493,817,457,081</u>	510,801,935,181	<u>184,803,446,538</u>	201,489,951,338
PROVISIONS				
1. Provision according to Article 71 of the Statute	43,517,017,015		23,814,990,315	
2. Provision for personnel pensions	10,000,000,000		—	
3. Other provisions	<u>1,505,894,810</u>	55,022,911,825	<u>1,382,307,805</u>	25,197,298,120
DIFFERENCE FROM REVALUATION (LAW 2065/92)		3,681,502,132		—
BANKNOTES IN CIRCULATION		3,036,425,168,600		3,101,228,675,400
LIABILITIES IN DRACHMAS				
1. Central government cash management account	102,618,296,145		54,421,195,807	
2. Public entities' cash management accounts	84,142,626,900		168,898,755,670	
3. Deposits by banks	3,261,478,729,912		4,084,800,727,034	
4. Deposits by international institutions and foreign banks	312,492,855,887		228,895,321,978	
5. Other deposits	97,696,566,519		111,413,711,615	
6. Dividends for financial year	<u>8,939,199,000</u>	3,867,368,274,363	<u>6,257,439,300</u>	4,654,687,151,404
LIABILITIES IN FOREIGN EXCHANGE				
1. Central government deposits	54,857,495,005		326,192,971,500	
2. Redeposits by banks	2,379,148,550,331		2,355,551,013,570	
3. Other deposits	437,214,771,682		691,266,603,218	
4. Long-term loans in foreign exchange on behalf of the Greek State	606,012,499,986		1,014,995,575,120	
5. Other long-term liabilities in foreign exchange	—		157,294,597,255	
6. Allocation of Special Drawing Rights in the IMF	49,594,946,094		46,572,227,412	
7. Reserve position in the IMF	<u>109,119,856,385</u>	3,635,948,119,483	<u>128,179,870,177</u>	4,720,052,858,252
OTHER LIABILITIES		462,930,339,753		110,156,156,302
INTERIM ACCOUNTS		<u>46,095,012,079</u>		<u>5,413,929,794</u>
T O T A L		<u>11,635,257,741,516</u>		<u>12,834,912,525,410</u>
OFF-BALANCE-SHEET ITEMS				
Public entities' funds management account**		<u>1,974,515,007,895</u>		<u>1,667,075,607,866</u>

PROFIT AND LOSS ACCOUNT

AMOUNTS IN DRACHMAS

<u>DEBIT</u>	<u>2000</u>		<u>1999</u>	
PERSONNEL REMUNERATION - PENSIONS				
Wages and salaries	34,320,624,971		31,627,260,988	
Principal and supplementary pensions	13,199,461,339	47,520,086,310	11,858,813,998	43,486,074,986
CONTRIBUTIONS TO PERSONNEL INSURANCE FUNDS				
Pension funds	8,276,500,060		7,565,157,506	
Supplementary Pension Fund	3,360,815,646		3,246,740,425	
Self-insurance Fund	10,387,516		315,613,549	
Health Insurance Fund	2,758,289,610		2,548,408,000	
Bank of Greece employees solidarity partnership	36,442,656	14,442,435,488	—	13,675,919,480
CONTRIBUTIONS TO OTHER SOCIAL SECURITY FUNDS AND ENTITIES		2,160,229,759		2,324,041,325
OTHER ADMINISTRATIVE EXPENSES		7,362,644,771		6,847,282,818
DEPRECIATION				
Banknote printing materials	2,167,089,090		2,711,749,026	
Buildings and equipment (other than office equipment)	1,049,950,265		925,108,734	
Office equipment	2,971,999,997	6,189,039,352	2,076,663,758	5,713,521,518
PROVISIONS				
Provision according to Article 71 of the Statute	20,000,000,000		5,796,000,000	
Provision for personnel pensions	10,000,000,000		—	
Sundry provisions	78,000,000	30,078,000,000	78,000,000	5,874,000,000
		107,752,435,680		77,920,840,127
NET PROFIT		167,226,394,570		110,131,868,138
		<u>274,978,830,250</u>		<u>188,052,708,265</u>

FOR THE YEAR 2000

SEVENTY-THIRD YEAR

<u>CREDIT</u>	<u>2000</u>	<u>1999</u>
Interest, commission and other earnings	274,978,830,250	188,052,708,265
	<u>274,978,830,250</u>	<u>188,052,708,265</u>

DISTRIBUTION OF NET PROFIT OF DRACHMAS 167,226,394,570

(Article 71 of the Statute)

	<u>2000</u>	<u>1999</u>
Dividend on capital, i.e. drs 228 per share, on 8,939,199 shares	2,038,137,372	2,002,380,576
For the ordinary reserve	297,973,300	—
Additional dividend of drs 772 per share, on 8,939,199 shares	6,901,061,628	4,255,058,724
Tax payment (Law 2166/93 Article 18)	5,959,466,000	4,171,626,200
To the government	152,029,756,270	99,702,802,638
	<u>167,226,394,570</u>	<u>110,131,868,138</u>

Athens, 6th March 2001

LUCAS D. PAPADEMOS
GOVERNOR

DIMITRIOS E. MATSIMANIS
DIRECTOR, ACCOUNTS DEPARTMENT